frontiers in Education

ORIGINAL RESEARCH
published: 10 June 2021
doi: 10.3389/feduc.2021.651908

Swedish Youths as Listeners of Global Englishes Speakers With Diverse Accents: Listener Intelligibility, Listener Comprehensibility, Accentedness Perception, and Accentedness Acceptance

Hyeseung Jeong, Anna Elgemark and Bosse Thorén*

Department of Educational Sciences and Languages, Institution of Individuals and Society, University West, Trollhättan, Sweden

OPEN ACCESS

Edited by:
Rebecca Blum Martinez, University of New Mexico, United States

Reviewed by:
Nobuaki Minematsu, The University of Tokyo, Japan
Robert Mckenzie, Northumbria University, United Kingdom
Julia Forsberg, Stockholm University, Sweden
Elizabeth Peterson, University of Helsinki, Finland

****Correspondence:***
Hyeseung Jeong
hyeseung.jeong@hv.se

Specialty section:
This article was submitted to Language, Culture and Diversity, a section of the journal Frontiers in Education.

Received: *11 January 2021*
Accepted: *21 May 2021*
Published: *10 June 2021*

Citation:
Jeong H, Elgemark A and Thorén B (2021) Swedish Youths as Listeners of Global Englishes Speakers With Diverse Accents: Listener Intelligibility, Listener Comprehensibility, Accentedness Perception, and Accentedness Acceptance. Front. Educ. 6:651908. doi: 10.3389/feduc.2021.651908

As reflected in the concept of *Global Englishes*, English mediates global communication, where English speakers represent not merely those from English-speaking countries like United Kingdom or United States but also global people from a wide range of linguistic backgrounds, who speak the language with diverse accents. Thus, to communicate internationally, cultivating a maximized listening proficiency for and positive attitudes toward global Englishes speakers with diverse accents is ever more important. However, with their preference for American English and its popular culture, it is uncertain whether Swedish youth learners are developing these key linguistic qualities to be prepared for the globalized use of English. To address this, we randomly assigned 160 upper secondary students (mean age = 17.25) into six groups, where each group listened to one of six English speakers. The six speakers first languages were Mandarin, Russian/Ukrainian, Tamil, Lusoga/Luganda, American English, and British English. Through comparing the six student groups, we examined their *listener intelligibility* (actual understanding), *listener comprehensibility* (feeling of ease or difficulty), accentedness perception (perceiving an accent as native or foreign), and *accentedness acceptance* (showing a positive or negative attitude toward an accent) of diverse English accents. The results showed that the intelligibility scores and perception/attitude ratings of participants favored the two speakers with privileged accents–the American and British speakers. However, across all six groups, no correlation was detected between their actual understanding of the speakers and their perception/attitude ratings, which often had a strong correlation with their feelings of ease/difficulty regarding the speakers accents. Taken together, our results suggest that the current English education needs innovation to be more aligned with the national syllabus that promotes a global perspective. That is, students need to be guided to improve their actual understanding and sense of familiarity with Global English speakers besides the

Abbreviations: L1: First Language L2: Second Language GA: General American RP: Received Pronunciation LI: Listener Intelligibility LC: Listener Comprehensibility AP: Accentedness Perception AA: Accentedness Acceptance.

native accents that they prefer. Moreover, innovative pedagogical work should be undertaken to change Swedish youths' perceptions and attitudes and prepare them to become open-minded toward diverse English speakers.

Keywords: global englishes, swedish youth learners, listener intelligibility, listener comprehensibility, accentedness perception, accentedness acceptability, implications for language education

INTRODUCTION

In this globalization era, English is not only an official or *de facto* official language of more than 70 countries or territories (e.g., India, Nigeria, Singapore, Australia, United Kingdom, and United States), but it is also the most common contact language that mediates international communication among people from different linguistic and cultural backgrounds. Reflecting the vast plurality and diversity concerning where, and by whom around the globe the language is used, the concept of *Global Englishes* has been introduced (e.g., Jenkins, 2015; Galloway, 2017).

In view of the global state of English, as in many other countries, the language is a compulsory school subject from Grade 3 onwards in Sweden (Swedish National Agency for Education, 2018). Through the curriculum reforms introduced in 2001 and 2011, the English syllabus for upper secondary school, administered by the Swedish National Agency for Education (2011), has promoted a global perspective for teaching and learning the language (Hult, 2017). According to Hult (2017), the syllabus showcases a government policy that encourages a move "away from an English as a foreign language perspective" (p. 271) and an advancement "beyond the British and American perspectives that have traditionally held sway in Sweden" (p. 277). The syllabus is instead aligned "with a contemporary understanding of English in applied linguistics," that may include "highlighting global linguistic variations in English and attending to the use of English for intercultural communication" (p. 277).

The currency and timeliness of the syllabus is evident in view of recent debates on how traditional English language teaching that focuses only on British or American English is incapable of preparing learners for the current use of English as a global contact language, where speakers from different varieties vastly outnumber the two varieties focused by English teachers (see Bayyurt and Dewey, 2020; Rose and Galloway, 2019; Rose et al., 2020). In fact, the global perspective of this English syllabus is a response to the reality that, for Swedish citizens, English is primarily a contact language for international communication, both domestically and overseas, in different areas of society and private life (Björkman, 2011; Bolton and Meierkord, 2013; Hult, 2012; Kuteeva, 2014; Norrby, 2015). For example, by participating in the Bologna Process, Swedish universities have become increasingly internationalized, and English facilitates communication between international and Swedish lecturers and students (Björkman, 2018). Moreover, "English is used as an official language in a number of Swedish corporations in the private sector" (Sundqvist and Sylvén, 2014, p. 5).

By and large, the Swedish are known to be highly proficient in English (World Economic Forum, 2012). As of 2020, Sweden was ranked fourth only to the Netherlands, Denmark, and Finland by the EF English Proficiency Index (EF EPI, 2020) among 100 non-English L1-speaking countries, even ranking above countries where English is an official language, such as Singapore and South Africa. As a subgroup, Swedish youths have also received recognition for their English competence, as well as their strong motivation for learning the language (Henry and Cliffordson, 2015; Norrby, 2015). However, simply being a proficient user of English is not sufficient (Prodromou, 2008). Maximized listening comprehension and a positive attitude toward Global Englishes speakers with diverse accents are also of great importance for intercultural communication (Matsumoto, 2011; Melchers et al., 2019). In this regard, current information about the relationship of Swedish youths with English in the existing literature does not provide a clear basis for assessing whether the global perspective of the national English syllabus has been successfully implemented. While Swedish youths show strong favoritism toward American English and its popular culture (Cabau, 2009; Eriksson, 2019; Henry et al., 2019), there is paucity of research on how they react to "other" English accents, with few studies indicating that young Swedish people feel negatively about English accents they perceive as "non-native" (e.g., Kuteeva, 2014).

Particularly, it has not yet, to our knowledge, been ascertained how Swedish youths perform as listeners of speakers of English as a global contact language or lingua franca with diverse accents, by determining their actual understanding, and their perceptions and attitudes in connection to that understanding. Our study seeks to respond to this research gap by addressing the need for assessing whether the stated goals of the national curriculum are being achieved. To accomplish this, we draw on the concepts of *intelligibility* (actual understanding of speech with a certain accent), *comprehensibility* (degree of feeling easy or difficult in understanding an accent), *accentedness* (perceived degree of an accent), and *acceptability* (degree of acceptance of an accent). These concepts have been used extensively to evaluate second language (L2) learners as *speakers* and their pronunciation against a listener's judgment (see Thomson, 2018) but seldom to assess learners as *listeners* of different Global Englishes accents and their *listening abilities*, which may have ecological validity, particularly in the context of international communication. Although there is an increasing trend in research on attitudes toward Global Englishes speakers in order to help inform the curriculum innovation process (e.g., Fang, 2020; Lee and Drajati, 2019; Tsang, 2020), the reports are usually about attitudes emerging from preconceptions of different accents; examination of listeners attitudes toward accents in relation to

actual understanding of the speakers is seldom found in the extant literature. Our investigation of the understanding and attitude, emerging from the same speech stimuli, is to find out what pedagogical help learners need to become globally competent listeners. Therefore, in addition to the novelty of the research topic, our study possesses the methodological significance of using these constructs from a new perspective.

BACKGROUND

English for Swedish Youths: Unproblematic?

A probable explanation for the high English proficiency of Swedish youths is the prevalence of the language in their lives. Like many other young Europeans, particularly those in other Scandinavian countries, Swedish youths develop their English through extensive exposure to and engagement with popular culture, as well as studying the language as a compulsory school subject (Cabau, 2009; Henry, 2019b). Often, the language mediates their leisure time activities, and they are surrounded by and eagerly consume English-mediated popular culture, including games, films, YouTube clips and channels, television series, music, news, online blogs, and literature (Sundqvist, 2011).

Therefore, for young Swedish people, English "generates immediate associations with imaginary worlds of glamour, celebrity, and consumer aspirations," "indexes pleasure and hedonism," and "triggers identifications with desirable products and desired identities" (Henry, 2019b, p. 24). Much of the popular culture that surrounds Swedish youths "has its roots in" the cultures of English-speaking countries, particularly American culture (Henry, 2019a, p. 75). Consequently, the younger generation is "greatly attracted by Anglo-American culture" (Cabau, 2009, p. 140). This tendency has been traced to schools; for example, in Henry et al. (2018), nearly all teaching strategies that upper secondary English teachers considered appealing to their students and, thus, effective to motivate their learning had a strong focus on privileged variants of English and their national cultures, particularly American English and its popular culture.

However, while popular culture may enhance the motivation to learn English, having major contact with the language through one national culture can result in a limited perspective of the language, its cultural history, and its users. The English of popular culture that Swedish youths admire represents "only a small fraction of the varieties of English, types of speakers, and culture that English users today encounter" (Matsuda, 2018, pp. 26–27). As highlighted in the national syllabus (Swedish National Agency for Education, 2011), most Swedish youths will eventually "need English to communicate with almost anyone in the global community," rather than merely "for personal development or cultural awareness," for which they need to develop "maximum scope of proficiency" through "wide exposure" (Melchers et al., 2019, p. 202). Although unchallenged and, in fact, endorsed through their school education (see Henry et al., 2019; Mohr et al., 2019), the orientations of young Swedes toward English and English-speaking culture may not be congruent with the global vision of the national English syllabus that aims to prepare them for "different social and cultural contexts, as well as [for] global studies and working life" (Swedish National Agency for Education, 2011, p. 1).

Thus, while proficient, Swedish youths may not be well prepared to use English in globalized settings as much as the vision of the national syllabus. Without pedagogical help "to experience diverse Englishes," they, like other English learners, "may be startled, surprised, confused, overwhelmed, or feel underprepared for such situations" and may even "develop negative attitudes toward such varieties that may interfere with their ability to engage in successful communication" (Matsuda, 2018, p. 29). In this vein, Kuteeva (2014) alarmingly reported that, while they are aware that English facilitates international communication, Swedish university students are often not ready to accept and communicate with people who they think speak "non-standard" Englishes, as reflected in the following comment by one of her student participants:

"I also wonder if it is really OK to let, e.g., Indian, Pakistani, Arabic, or Russian-speaking researchers teach. Their spoken English with a terribly strong accent makes it difficult for students to understand what is being said." (p. 337).

Are English Learners Taught to be Good Listeners of Global Englishes Accents?

Nascent research has begun to report the positive effects of exposure to diverse accents on learners attitudes toward and interest in using English as a global contact language (e.g., Attamimi and Chittick, 2018). However, both Swedish youths and English learners in many other countries are still situated in instructional settings where native-speaker accents, especially the General American accent (GA) or the British Received Pronunciation (RP) accent, are the focus of teaching listening skills (Sung, 2016; Alonso-Herrero and Lasagabaster Herrarte, 2019; Tsang, 2019) and are presented as "correct", "standard" forms (Jansen et al., in press). Thus, "standard native-like English accents are ubiquitous and predominant in a lot of materials such as listening exercises" (Tsang, 2019, p. 581), and "exposure to different accents is not seen as an important part of the curriculum" (Sung, 2016, p. 192). This trend in listening instruction goes together with listening tests that primarily assess learners against "standard" native-speaker accents (Harding, 2012; Kang et al., 2018; Jenkins, 2020; Sifakis et al., 2020). Internationally recognized large-scale tests, such as the Test of English as Foreign Language or the International English Language Testing System, have begun to incorporate diverse English accents into listening tests (Kang et al., 2018); however, the inclusion of accent varieties is partial (Harding, 2012), and whether it has produced a washback effect on teaching practice is uncertain.

As Derwing and Munro. (2014). (p. 219) noted, "communication is a two-way street;" thus, gaining an understanding of an interlocutor's accent features is as crucial to being a good listener as having an intelligible pronunciation as a speaker. However, by focusing only on a couple of privileged English accents, the teaching of listening seems to keep learners

from developing their knowledge of and ability to understand diverse accents. An indication of this are the iterative reports about the misunderstandings or communication breakdowns among L2 speakers caused by accent features distant from GA or RP (e.g., Field, 2005; Deterding, 2013; Kim and Billington, 2016; Jeong et al., 2020). Moreover, only learning to listen to a few native pronunciations seems to lead learners to develop negative attitudes toward "other" accents. In his study of university students perceptions in Hong Kong, for example, Sung, (2016) found that many of his participants did not want to be exposed to diverse English accents and expressed dislike of certain second-language accents, even though they are situated in an English-as-an-international-language context and, thus, are aware of the benefits of understanding diverse accents. Sung observed that the belief that native-speaker English is the "best" and the "standard," may have caused the interviewees to "evaluate non-native accents against the native-speaker yardstick" (Sung, 2016, p. 196).

Intelligibility, Comprehensibility, and Perceptions and Attitudes Toward Accentedness: Who can be Assessed?

Intelligibility, *comprehensibility*, *accentedness*, and *acceptability* are constructs that have been operationalized to evaluate L2 speakers pronunciation against a listener's understanding and perception (Thomson, 2018). Often, listener judges are native speakers (e.g., Munro and Derwing, 2006; Kennedy and Trofimovich, 2008) and more recently also L2 speakers (e.g., Jeong et al., 2020). While intelligibility, comprehensibility, and accentedness have been extensively adapted since Munro and Derwing's seminal studies (e.g., Munro and Derwing, 1995a; Munro and Derwing, 1995b), acceptability is a relatively new construct for measuring listeners negative or positive attitudes toward perceived accentedness (e.g., Szpyra-Kozlowska, 2014; Tulaja, 2020).

Although researchers have not reached a consensus regarding the exact definitions of the four constructs, converging understandings of each construct have emerged. *Intelligibility* is the actual understanding of a speaker's exact utterance and/or intended messages, operationalized through the measurement of listener performance, such as scores from dictation or comprehension tasks (Derwing and Munro, 2015, pp. 3–8). In contrast, the other three constructs relate to the listener's subjective perception and attitude. *Comprehensibility* is a listener's feeling or experience of whether, and to what extent, the speaker's pronunciation is easy or difficult to understand. *Accentedness* is the listener's subjective perception of the degrees of nativeness or foreignness of a speaker's accent. Meanwhile, *acceptability* represents the extent to which a pronunciation is accepted by the listener; it is expressed through the listener's ratings of an accent, for example, in terms of the degree of annoyance/irritability (Szpyra-Kozlowska, 2014), correctness, likability, acceptability of pronunciation teaching purposes (Sewell, 2012), and acceptability for international communication (Li-Ann, 2008).

As oral communication is a process involving both speaker and listener, operationalizing listener's judgment to assess a speaker's pronunciation has some rationale; however, using the constructs of intelligibility, comprehensibility, accentedness, and acceptability for assessing speakers has not been unproblematic. The central problem is the assumption behind using listener's judgment to evaluate L2 speaker's accent features, which views that listener's inability "to understand L2 speech is evidence of the L2 speaker's linguistic failures," and that L2 users are projected as the speaker group mainly responsible for communication breakdown and thus in need of pedagogical intervention (Lindemann and Subtirelu, 2013, p. 582). Against such an assumption, it has been argued that the measurement of the constructs reflects listener's own expectations, beliefs, and psychological and linguistic attributions, although it has been assumed to be an indicator of a speaker's inherent accent features (Zielinski, 2008; Kang and Rubin, 2009; Lindemann and Subtirelu, 2013; Subtirelu and Lindemann, 2016).

More crucially, since what is determined by the four constructs is not the speaker's but the listener's performance, perception, or attitude, it can be straightforward and suitable to operationalize these four constructs to assess learners as listeners. This is particularly conceivable in the context of English as an international language, where learners need to develop "maximum scope of proficiency" through "wide exposure" (Melchers et al., 2019, p. 202). That is, learners who need to learn English for international communication will eventually encounter interlocutors with diverse accents; some of their interlocutors may be RP or GA speakers, but many more will be speakers of varieties with phonological systems that are not congruent with the phonology of prestigious accents or speakers who maintain pronunciation features inherent in their first languages. Within all these possibilities, learners have very little or no control over the accents of their international interlocutors. Thus, there is ecological validity in utilizing the four above-mentioned constructs to identify their ability and inclination as listeners toward different accents, whereby pedagogical intervention for their perceptual training for diverse accents can be suggested.

METHOD

Aim and Research Questions

Against the background, the present study investigated Swedish youths as listeners of diverse English accents in terms of their actual understanding, feeling of ease or difficulty, perception, and attitudes toward such accents. To this end, we adapted the four constructs of intelligibility, comprehensibility, accentedness, and acceptability, which previous research has utilized to assess features of speaker's pronunciation. To clearly indicate that our study focused on learners as *listeners* rather than speakers, we intentionally labeled the constructs:

- *Listener intelligibility* (LI): actual understanding of an intended message and/or utterance
- *Listener comprehensibility* (LC): feeling easy or difficult to understand an accent

- *Accentedness perception* (AP): perceiving an accent as native or foreign
- *Accentedness acceptance* (AA): showing a positive or negative attitude toward an accent

The research questions corresponding to our aim were as follows:

1. What are the listener intelligibility (LI), listener comprehensibility (LC), accentedness perception (AP), and accentedness acceptance (AA) of Swedish upper secondary school students for global Englishes speakers with diverse accents? Are there significant differences among the groups listening to different speakers?
2. What are the relationships among the listener intelligibility (LI), listener comprehensibility (LC), accentedness perception (AP), and accentedness acceptance (AA) of the listener groups of different speakers?

Listeners

160 students (88 females and 72 males) in their second year of upper secondary school participated in our study as listeners, providing consent for participation according to Swedish ethics legislation. As we report in greater detail in *Listening sessions*, the students were randomly assigned to six groups, and each group listened to one of the six speakers who we present in *Speakers*. Recruiting student participants was done with the help of four English teachers at three different schools in three cities in southern Sweden, who replied to our request letter. The students were from seven different classes at the schools, studying in the Social Sciences (*Samhälle*), Technologies (*Teknik*), Natural Sciences (*Natur*), and Economics (*Ekonomi*) programs. None of them reported hearing problems. According to a follow-up survey after the main data collection, student's mean age was 17.25 years, and their L1s were Swedish (117), Arabic (21), English (3), and other languages (19). These students with non-Swedish L1s should possess Swedish proficiency sufficient to study in regular classes as students with low Swedish proficiency are placed in a different class.

Through the same follow-up survey, we also found that students used English substantially outside of school, which is a common tendency among Swedish youths (see *Background*). To the question of how frequently they used English outside of school, where "1" meant "none" and "9" meant "several hours every day," the mean rating was 6.2 (SD = 1.8). However, their extramural English use was much more receptive (listening or reading) than productive (speaking or writing), when we compared the 9-point self-reporting scale items for receptive and productive use of English: robust t (95) = 15.5, 20% trimmed mean difference = 3.79, CI = 3.3, 4.4, $p = 0$, with a large effect size, Cohen's $d = 0.8$.

In addition, to ensure statistic validity of comparing listener groups for different speakers, we checked whether there was interaction between group effect on student's listening performances and ratings and three listener individual variables that we did not control, by means of robust two-way ANOVAs (see Mair and Wilcox, 2019 for robust statistics). These variables were: English grades, which were first self-reported as A to F, but eventually classified into high-grade (A-C) and low-grade (D-F) after consulting with their teachers; L1s (Swedish L1 and non-Swedish L1); and gender (male and female). Significant difference between high- and low-grade students as well as interaction between group effect and grades for LI and LC were detected (to be reported in *Result*), conforming to a study by Harding. (2008), who found that listener's proficiency level can influence their performances and perceptions toward different accents. However, no difference was found between Swedish L1 and non-Swedish L1 students and between male and female students for their LI, LC, AP, and AA, and these two individual variables did not interact with group effect either. Thus, they were excluded from further analysis.

Speakers

To create speech materials for assessing student participant's listener intelligibility (LI), listener comprehensibility (LC), accentedness perception (AP) and accentedness acceptance (AA) of diverse English accents, we recruited six speakers living in Sweden. **Table 1** presents information about the speaker participants.

From 15 proficient English speakers who expressed their interest in participation, we selected the six speakers as they met the two following criteria. First, the speakers were assessed to have typical accent features of their own varieties to a great extent, according to Gardiner and Deterding. (2020), Swan and Smith. (2001) and Kortmann and Schneider. (2004). Particularly, the American and British speakers had pronunciation features typically presented as the General American accent (GA) and the standard British Received Pronunciation (RP) (e.g., Collins, Mees and Carley, 2019; Kretzschmar, 2004). In the online supplementary material, we include the speaker's segmental and prosodic descriptions, which are also compared with the phonology of their varieties. Regarding the first criterion for speaker recruitment, we were cautious of considering them representative of their own English varieties, as, for example, different speakers from the same variety can have different degrees of speaker intelligibility, although such a possibility seems to become much smaller with speakers of "standard" English (e.g., Kang et al., 2018). Second, to include as diverse accents as possible, we tried to be sure that two speakers were from the Inner Circle (British English and American English), two from the Outer Circle (Indian and Ugandan), and two from the Expanding Circle (Chinese and Russian/Ukrainian), according to Kachru, 1992 World Englishes Model. However Given that the distinction between the Outer and Expanding Circles is becoming increasingly less distinct (Jenkins, 2015; Melchers et al., 2019), all the speakers could be simply classified as Global Englishes speakers with diverse accents, who use English for working, socializing and communicating with Swedes and other international people in various contexts.

Listening Tests

Overview of the Tests

To compare six student groups listening to six different speakers, we prepared two tests for each listener group, with one of the six

TABLE 1 | Information about speaker participants.

L1	Home country	Gender	Age	Job	Years in Sweden	How to use English[b]
Mandarin	China	Male	28	Lecturer	8	Socializing, entertainment (e.g., traveling, gaming, or YouTubing), work (teaching, researching, or studying)
Russian/ Ukrainian	Ukraine	Female	46	Lecturer	10	
Tamil	India	Female	45	Lecturer	1	
Lusoga/ Luganda	Uganda	Female	41	Student[a]	7	
American English	The US	Male	40	Lecturer	22	
British English	The United Kingdom	Male	56	Lecturer	29	

Note. [a]*Ugandan speaker had worked as a secondary school teacher using English as the instructional language before coming to Sweden.*
[b]*All lecturer participants used English for teaching and the Ukrainian, American and British speakers sometimes taught in Swedish too.*

speaker's readings of passages and sentences. One test (hereafter, main idea test) was to assess students' listener intelligibility (LI) as comprehending intended messages overall and the other test (hereafter, dictation test) was to determine LI as understanding every uttered word (see Derwing and Munro, 2015, pp. 3-8 for the definition of intelligibility that our study draws on). The main idea test comprised six questions, and each question was to identify a person's job described in a passage. The dictation test had 20 questions and each question was to write down a sentence verbatim. Besides the LI questions, both main idea and dictation tests also included one listener comprehensibility (LC) item, one accentedness perception (AP) item and four accentedness acceptance (AA) items. With two separate tests, we intended to assess the two aspects of LI–overall understanding of intended messages and detailed understanding of every uttered word. We also intended to see if the two listening tasks would evoke similar or different LC, AP, and AA ratings, about which previous studies offer mixed findings.

Preparation of speech materials, *preparation of online testing*, *Listening sessions* following report how we prepared speech materials and online testing, as well as the procedure for test administration.

Preparation of Speech Materials

As the first step of creating listening tests, we recorded the six speaker's readings of two texts. One text was for the main idea test, comprising 10 short passages from a previous Swedish National Test. Student participants had not been exposed to the selected passages, but they were familiar with the question format with such passages (i.e. listening to a speaker reading one such passage and finding a person's job described in the passage). We considered that familiarity with the question format would allow the speaker's accents to be the main factor affecting student listener's performances and ratings. The other text comprised 40 true/false sentences adapted from Munro and Derwing. (1995b) for its suitability for the dictation test. Each of the 40 sentences contained three to five highly frequent content words that were mostly verbs, nouns, adjectives, adverbs, and one preposition ("through" in the sentence "people eat through their noses").

Each speaker read the two texts during a 30-min to 1-h recording session in a soundproof studio. The session began with the collection of the speaker's demographic information and their consent for participation, through a simple computer survey. Before the recording, the speakers could rehearse and practice as much as they wanted. The texts were identically arranged for all speakers in a PowerPoint presentation: first passages and then sentences (one passage/sentence per slide). During the recording, the speakers were asked to read the texts as naturally as possible, without slowing down or articulating too much. They sometimes read the same sentence or passage twice or more, voluntarily or upon request when necessary. The readings were recorded via a RØDE NP-USB microphone and the free software Audacity 2.4.0 (audacityteam.org) at a 44.1-kHz sample rate and a 16-bit resolution.

After having recorded all six speakers, we created each passage and sentence reading as a WAV file with a 0.5-s silence at the beginning and end. We then selected six out of 10 passages and 20 out of 40 sentences by removing ambiguous passages and seeking even numbers between true/false sentences (see the online supplement). Eventually, we converted the selected WAV files (i.e., six speaker's readings of the same six passages and 20 sentences) into MP4 files, as WAV files were not possible to embed in the tests that we created in MS forms.

Before moving on, we briefly discuss the importance of using different speaker's readings of the same texts for our study. Since we examined the effect of different accents (i.e., pronunciation) on student's performances, perception, and attitudes, it was very crucial to control "noise" factors possibly affecting test results, such as individual speaker's syntactic or lexical preferences. Regarding the concern that text reading is too artificial to represent real-life language use, it can be highlighted that language use in the digital age largely involves listening to pre-recorded and/or scripted speeches (i.e., text-reading).

Preparation of Online Testing

The main idea and dictation tests were created in Microsoft Forms in which the speakers' readings in MP4 files were embedded. In the main idea test, each of the six questions contained one passage and multiple choice answers with one correct answer, four distractors, and "I don't know" as the last

option. In the dictation test, each of the 20 questions contained one sentence and an empty box to type in the sentence.

As mentioned in *Overview of the tests*, both main idea and dictation tests contained one listener comprehensibility (LC) item, one accentedness perception (AP) item, and four accented acceptance items (AA1, AA2, AA4 and AA4). All these items had 9-point scales and were placed after the LI questions. For LC, "1" meant "very easy to understand" and "9" meant "very hard to understand" (Munro and Derwing, 1995a, and adapted by many studies). For AP, "1" meant "no non-native accent at all" and "9" meant "very heavy foreign accent" (Hansen Edwards et al., 2018). For AA1, "1" meant "the accent was very pleasant to listen to" and "9" meant "the accent was very annoying and irritating," respectively (Szpyra-Kozlowska, 2014). For AA2, "1" meant "no pronunciation errors" and "9" meant "a lot of pronunciation errors."; for AA3, "1" meant "I like the accent very much" and "9" meant "I do not like the accent at all."; for AA4, "1" meant "the speaker has a high level of education and a high-status job" and "9" meant "the speaker has a low level of education and a low-status job" (Sewell, 2012).

To remove training effect, the LI questions in both tests and the multiple choices in each main idea question were set to randomly appear to different students. We also counterbalanced the main idea and dictation tests in the Google Blog we used as the test platform, so that half of students in each group would do the main idea test first while the other half would begin with the dictation test. Together with the two tests, we also included a follow-up survey requesting demographic information in the test platform.

Listening Sessions

Each of seven classes with 22–30 students was administered a listening session by the first and second authors. Although students were sitting in a classroom, they took the tests individually using their own laptops and headphones. We first introduced the purpose of the study and instructed students to listen to each passage and sentence only once, informing them that they would remain anonymous to us and that assessing individual performance was not our concern.

The following steps were made to randomly assign students tested class by class into six listener groups. We asked listeners to choose a paper from a box, which assigned them an ID and the group they belonged to. The group names matched the page names on the Google blog. Students were then given the blog address from where they navigated to their own group pages and then to the tests. All listener participants completed the two tests and the follow-up survey within 20–30 min.

Crucially, students were not informed of the profiles and language backgrounds of the speakers they listened to because knowledge of the speakers could be a preconceptual factor affecting listeners' test performances and ratings, as found by numerous studies on L1 listener's perceptions and attitudes toward a speaker's accent, using matched- or verbal-guize techniques (see Lindemann and Subtirelu, 2013 for a survey of such studies). This methodological decision was important to examine listeners' perceptions and attitudes emerging from listening to a speaker, as well as to observe whether, and to what extent listeners appear to associate the accents that they hear with their preconceptual knowledge of and attitudes toward different accents.

Data Analysis

We examined listener intelligibility (LI), listener comprehensibility (LC), accentedness perception (AP), and accentedness acceptance (AA) separately for the main idea and dictation tests, for which we reversed the LC and AA ratings. To operationalize LI, we used the percentages of correct answers from both main idea and dictation tests: for the main idea, we took the percentage of correct answers against the total number of questions, and for the dictation, we used the mean percentage of the percentages of correctly dictated content words against the total number of content words for the 20 sentences (Kennedy and Trofimovich, 2008). We accepted typographical errors in the dictation test when it was clear that the target word had been correctly understood (e.g., "gazoline" instead of "gasoline" and "excelent" in place of "excellent" in the phrase, "Gasoline is an excellent drink"). As the ratings of LC and AP were completed once after the main idea test and once after the dictation test, we used the ratings as they were to operationalize the constructs. As for the four AA ratings, the inter-rater reliability of the four was as high as 0.812 for the main idea and 0.802 for the dictation; thus, the AA ratings in each test were produced by averaging the four ratings.

After identifying that the data did not have normal distribution, we performed robust ANOVAs and pairwise tests with 20% trimmed means in the R WRS2 Package (Wilcox and Schönbrodt, 2015) and non-parametric correlation tests in SPSS to obtain valid statistics and the power of normal distribution, as suggested by Conover. (1999), Larson-Hall. (2015), Mair and Wilcox. (2019), and Turner. (2014). The WRS2 Package does not provide effect sizes for factorial ANOVAs. Thus, partial eta squared effect sizes (η_p^2) for group comparisons via ANOVAs were calculated separately with F values and degrees of freedom based on 20% trimmed mean observations, using the formula in Norouzian and Plonsky. (2018).

To answer the first research question, robust two-way ANOVAs were performed to determine group effect (main, controlled effect of the speaker's accents) and grade effect on LI, LC, AP, and AA, as well as group-grade interaction (see the last paragraph of *Listeners* for the reason for involving English grade as a factor). When a significant main effect was determined, pairwise between-group tests were conducted. Further, robust mixed ANOVAs were performed to ascertain whether the LC, AP and AA ratings in the main idea and dictation tests were consistently done by individual students. To address the second research question regarding the relationships among LI, LC, AP, and AA, non-parametric partial correlation tests were performed, controlling for English grade that occasionally interacted with main group effect.

Our data is available as an excel file in the online supplement, including the mean values, standard deviations, and medians of groups for each test construct as well as test values, confidence intervals and *p*-values of pairwise *post hoc* tests.

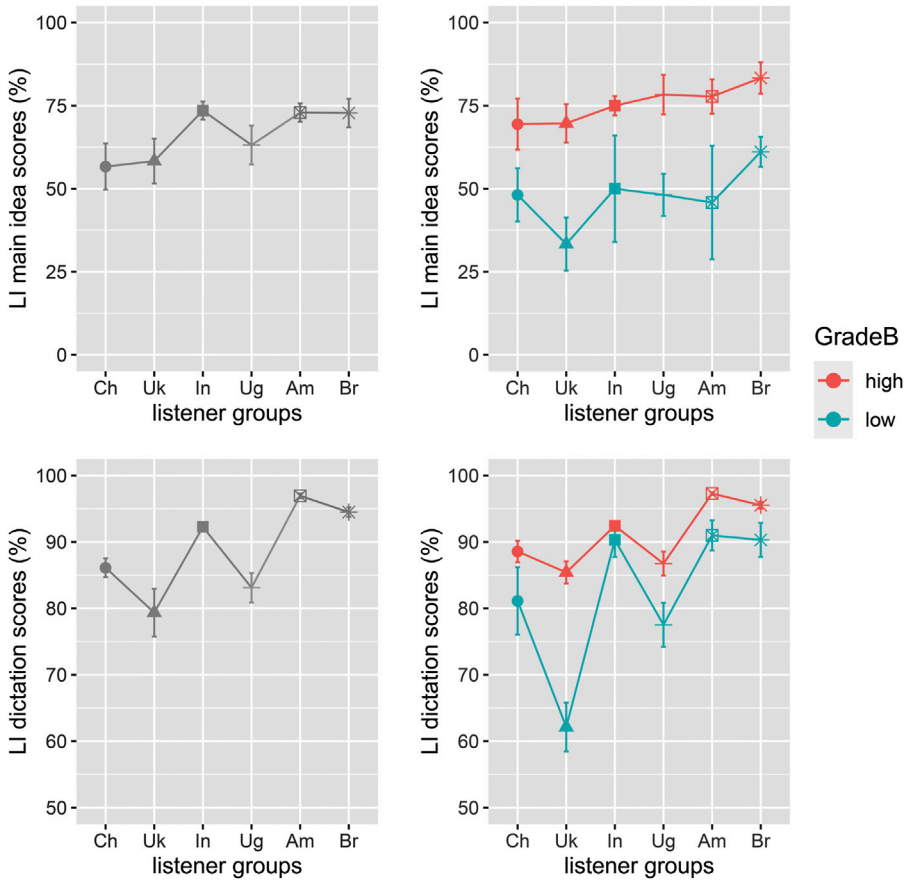

FIGURE 1 | Listener intelligibility groups **(left)** and groups*English grades **(right)** plots using 20% trimmed means and standard errors: Note. Subject numbers are: Ch = 23 (high = 10 and low = 13), Uk = 26 (high = 17 and low = 9), In = 27 (high = 24 and low = 3), Ug = 29 (high = 14 and low = 15), Am = 26 (high = 20 and low = 6), Br = 29 (high = 19 and low = 10).

RESULTS

Listener intelligibility, Listener Comprehensibility, Accentedness Perception, and Accentedness Acceptance for Six Different Speaker Accents

This section reports the findings that address the first research question (see *Aim and research questions*). **Figures 1–4** present descriptive statistics for LI, LC, AP, and AA for the six listener groups, as well as group and English grade interaction plots. **Table 1** shows the outcomes of robust 2-way ANOVAs for group effect on LI, LC, AP, and AA and pairwise *post hoc* tests. As reported in *Listening sessions*, the listeners were not informed of the speaker's nationalities or L1s.

First, for the listener intelligibility (LI) tests, it should be considered that the scores for the main idea and dictation tests were incompatible. Thus, score differences for the main idea test of six questions and for the dictation test of 20 questions, presented in **Figure 1**, should be understood in considering the nature of the tests. As seen in **Table 2**, there was no group difference in the main idea test, indicating that all groups performed similarly in understanding their own speakers. However, a difference appeared in the dictation test: $F\ (5,\ 84) = 141.31$, $p = 0.001$, $\eta_p^2 = 0.89$. The *post hoc* tests indicated that, overall, those listening to the American, British, and Indian speakers performed better than those listening to the Chinese, Ugandan, and Ukrainian speakers, and those listening to the American speaker performed significantly better than those listening to the Indian speaker (see **Table 2**). The effect of English grades was significant for both the main idea LI: $F\ (1,\ 84) = 40.97$, $p = 0.001$, $\eta_p^2 = 0.32$. and the dictation LI: $F\ (1,\ 84) = 46.18$, $p = 0.001$, $\eta_p^2 = 0.35$, revealing high-grade students performed better than low-grade students in all groups for both main idea and diction tests. However, interaction between group and grade was identified only among the dictation scores: $F\ (5,\ 84) = 34.22$, $p = 0.002$, $\eta_p^2 = 67$. This group-grade interaction in the dictation test indicates two things as seen in **Figure 1**. First, low-grade students in the Ukrainian speaker's listener group performed much more poorly than high-grade ones in the same group and low-grade ones in the other groups. Second, low-grade students in the Indian speaker's listener group performed better than low-grade ones in the other groups, and even better than high-grade ones listening to the Ukrainian and Ugandan speakers.

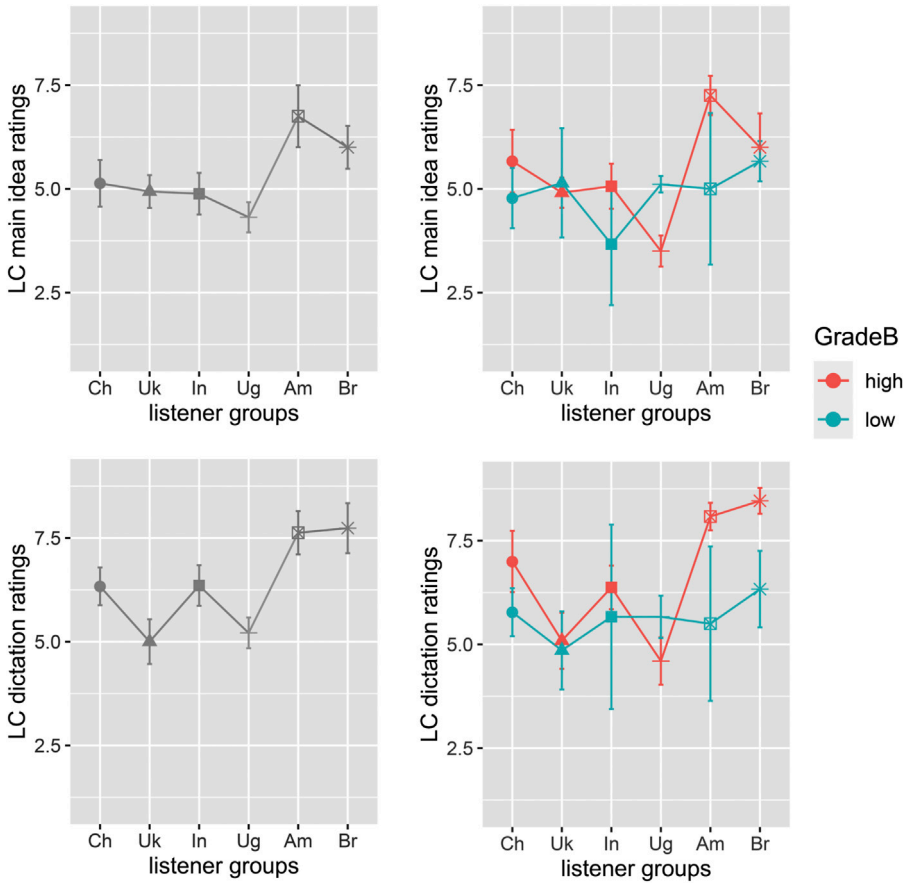

FIGURE 2 | Listener comprehensibility groups **(left)** and groups*English grades **(right)** plots using 20% trimmed means and standard errors: Note. Subject numbers are: Ch = 23 (high = 10 and low = 13), Uk = 26 (high = 17 and low = 9), In = 27 (high = 24 and low = 3), Ug = 29 (high = 14 and low = 15), Am = 26 (high = 20 and low = 6), Br = 29 (high = 19 and low = 10).

Second, we looked at the listener comprehensibility (LC) rating, which was about feeling easy or difficult about a speaker's accent. All speakers received statistically similar LC ratings after the main idea test, but after the dictation test, group effect appeared: F (5, 84) = 19.34, p = 0.03, η_P^2 = 0.53. The American and British speakers were rated more highly than the Ugandan speaker but not more highly than the other three speakers (see **Table 2**). No significant effect of grade on the two LC ratings was observed. However, some interesting information about the LC ratings by high- and low-grade students emerged from the significant group-grade interaction in the second LC rating: F (5, 84) = 16.79, p = 0.042, η_P^2 = 0.5, se well as in the descriptive statistics in **Figure 2** provide. Centrally, high-grade students listening to the Ugandan speaker felt her accent difficult more than low-grade ones in the same group, although the high-grade students' LI scores (i.e., actual understanding) were significantly higher than the low-grade student's scores. Meanwhile, contrary to the evident discrepancy in high- and low-grade student's LI scores for the Ukrainian speaker, the difference between theses high- and low-grade student's own LC ratings for the speaker was very small, indicating that their subjective feeling about the speaker's accent was not strongly connected to their actual listening ability. In addition, the LC rating after the dictation test was significantly higher than the LC rating after the main idea test: F (1, 27.91) = 9.59, p = 0.0044, η_P^2 = 0.25, revealing rather inconsistent ratings by individual listeners after they listened to the same speakers during the main idea and dictation tests.

Third, the accentedness perception (AP) rating was about the degree to which the listener perceives an accent as native or foreign. Statistics in both **Figure 3** and **Table 2** indicate that significant group differences were found in AP ratings after both main idea test: F (5, 84) = 112.88, p = 0.001, η_P^2 = 0.87 and dictation test: F (5, 84) = 23.88, p = 0.016, η_P^2 = 0.58. Students who listened to the Indian speaker perceived accentedness more than other speakers' listeners. The American and British speakers' listeners rated these speakers the lowest. While no English grade effect was found, there was group-grade interaction among the AP

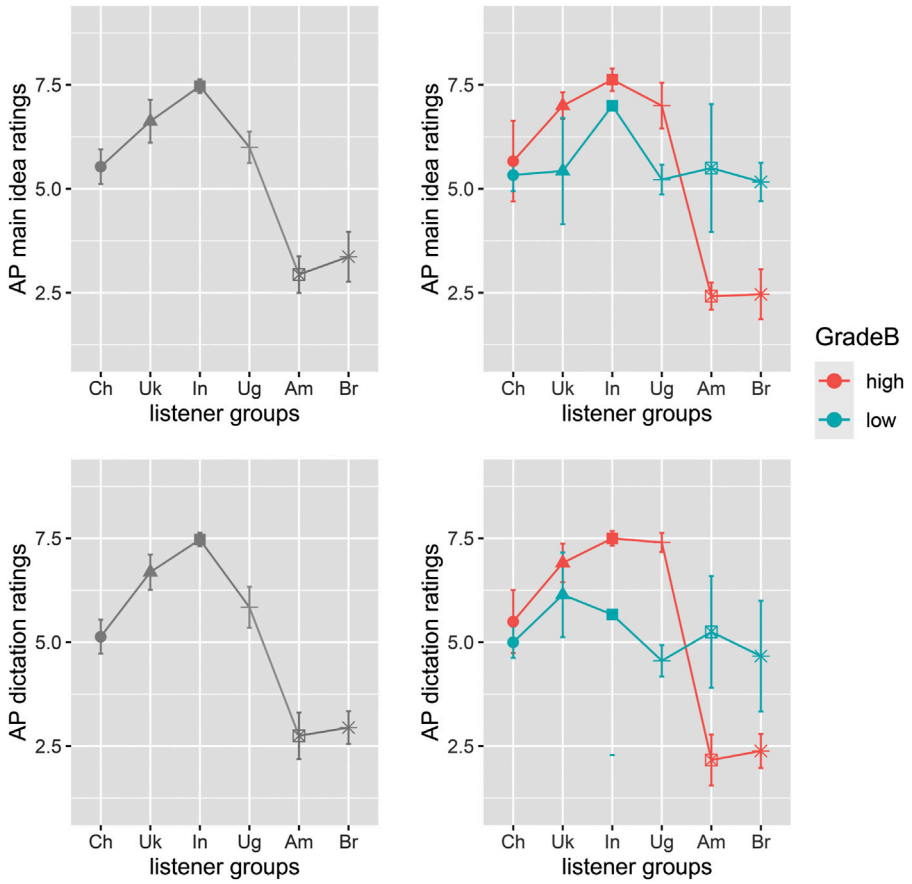

FIGURE 3 | Accentedness perception groups **(left)** and groups*English grades **(right)** plots using 20% trimmed means and standard errors: Note. Subject numbers are: Ch = 23 (high = 10 and low = 13), Uk = 26 (high = 17 and low = 9), In = 27 (high = 24 and low = 3), Ug = 29 (high = 14 and low = 15), Am = 26 (high = 20 and low = 6), Br = 29 (high = 19 and low = 10).

ratings both after the main idea: F (5, 84) = 31.57, $p = 0.002$, $\eta_P^2 = 0.65$, and dictation tests: F (5, 84) = 28.91, $p = 0.007$, $\eta_P^2 = 0.63$. Evidently, high-grade students in all groups reacted more sensitively to the speakers' accentedness than low-grade students. There was no within-subject difference for the AP ratings, and no interaction with the group effect was found either, meaning that the AP ratings in the main idea and diction tests were consistent.

Finally, the accentedness acceptance (AA) rating was to measure the degrees to which student's attitudes were positive or negative toward their speakers. The results revealed significant group effects after both main idea test: F (5, 84) = 25.11, $p = 0.006$, $\eta_P^2 = 0.59$ and dictation test: F (5, 84) = 21.77, $p = 0.015$, $\eta_P^2 = 0.56$. The American and British speakers were significantly more accepted by their listener groups than the speakers of other groups (see **Figure 4** and **Table 2**). The AA ratings for the American and British speakers were significantly more positive than the ratings for the Chinese, Ukrainian, and Indian speakers after both the main idea and dictation tests, and for the Ugandan speaker after the dictation test. No group-grade interaction was found; however, **Figure 4** shows that the overall trend of the AA rating was clearer among the high-grade students. Again, neither a within-subject difference for the AA ratings for the tasks nor an interaction with the main group effect was found, indicating consistent ratings.

Relationships Among Listener Intelligibility, Listener Comprehensibility, Accentedness Perception, and Accentedness Acceptance

To answer the second research question (see *Aim and research questions*), we examined the relationships among LI, LC, AP, and AA for the six speaker's listener groups, through partial non-parametric (Spearman) correlations tests (Conover, 1999), controlling for English grade, which sometimes interacted with the group effect (see **Table 3**).

LI (actual understanding) and LC (feeling of ease or difficulty) had a moderate positive correlation only among the Ukrainian and Indian speaker's listeners for the main idea test; otherwise, no correlation between the two constructs was observed. This means that subjective feeling about an accent, whether to be easy or difficult, was not a strong indicator for student listener's actual

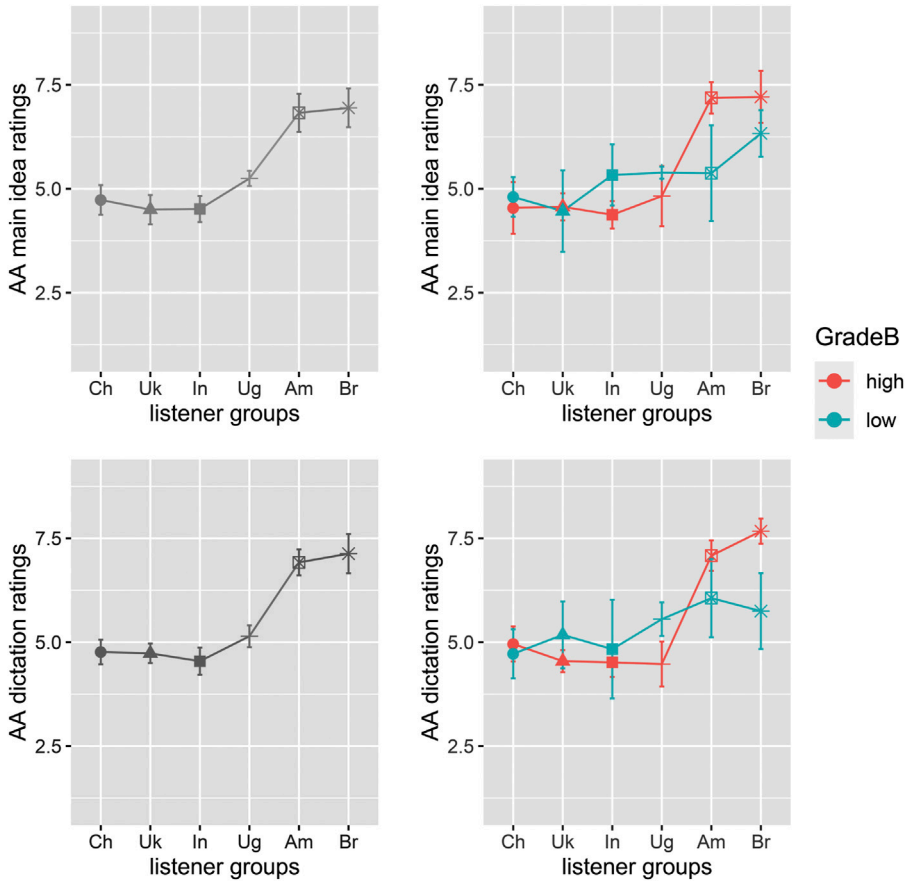

FIGURE 4 | Accentedness acceptance groups **(left)** and groups*English grades **(right)** plots using 20% trimmed means and standard errors: Note. Subject numbers are: Ch = 23 (high = 10 and low = 13), Uk = 26 (high = 17 and low = 9), In = 27 (high = 24 and low = 3), Ug = 29 (high = 14 and low = 15), Am = 26 (high = 20 and low = 6), Br = 29 (high = 19 and low = 10).

TABLE 2 | Outcomes of robust two-way ANOVAs for group difference in listener intelligibility (LI), listener comprehensibility (LC), accentedness perception (AP), and accentedness acceptance (AA) and pairwise post hoc tests (N = 160).

		F-values	*p*-values	Effect sizes (η_p^2)	*Post hoc* ($p < 0.01$)
LI	Main idea test	16.73	0.043[a]	0.49	
	Dictation dets	141.31	0.001**	0.89	Am > In > Ch, UK, Ug Br > Ch, UK, Ug
LC	After main idea test	15.23	0.059	0.47	
	After dictation test	19.34	0.003*	0.53	Am, Br > Ug
AP	After main idea test	112.88	0.001**	0.87	In > Ch, Ug > Am, Br UK > Am, Br
	After dictation test	23.88	0.016**	0.58	In > Ch > Br UK, In, Ug > Am, Br
AA	After main idea test	25.11	0.006**	0.59	Am, Br > Ch, UK, In
	After dictation test	21.77	0.015**	0.56	Am, Br > Ch, UK, In, Ug

Note. Ch, Chinese speaker; Uk, Ukrainian speaker; In, Indian speaker; Ug, Ugandan speaker; Am, American speaker; Br, British speaker; Ch = 23, Uk = 26, In = 27, Ug = 29, Am = 26, Br = 29.

df1 = 5 and df2 = 84 for all eight robust ANOVA based on 20% trimmed means observations.

p < .05.,p < .01. For post hoc tests p-value lower than .01 were accepted through Bonferroni Corrections.*

[a]*The p-value appeared significant but no significant difference was found from the post hoc tests.*

The WRS Package does not calculate effect sizes for factorial ANOVAs and partial eta-squared effect sizes were calculated with the formula by Norouzian and Plonsky. (2018).

The data excel file in the online supplementary material includes the mean values, standard deviations, and medians of groups for each test construct and detailed information for pairwise post hoc tests.

TABLE 3 | Significant non-parametric partial correlations among listener intelligibility (LI), listener comprehensibility (LC), accentedness perception (AP), and accentedness acceptance (AA) of six listener groups when controlling for grades.

		LI × LC		LI × AP		LI × AA		LC × AP		LC × AA		AP × AA	
		Main idea	Dictation	Main idea	Dictation	Main idea	Dictation	Main idea	Dictation	Main idea	Dictation	Main idea	Dictation
Listener group	Ch		—	—	—	—	—	−0.433*	—	0.472*	0.577**	—	−0.433*
	UK	0.557**	—	—	—	—	—	—	—	0.687**	—	−0.595**	—
	In	0.515**	—	—	—	—	—	—	—	—	—	−0.598**	—
	Ug	—	—	—	—	—	—	−0.738**	—	0.415*	—	—	−0.437*
	Am	—	—	—	—	—	—	−0.681**	−0.900**	0.494*	0.604**	−0.820**	−0.741**
	Br	—	—	—	—	—	—	−0.499**	—	0.613**	0.553**	−0.717**	−0.624**

Note. Information is organized into "group: coefficient (p-value)": Ch (df = 20); Uk (df = 23); In (df = 24); Ug (df = 26); Am (df = 23); Br (df = 26).
**p < .05., **p < .01.*
Ch, Chinese speaker; Uk, Ukrainian speaker; In, Indian speaker; Ug, Ugandan speaker; Am, American speaker; Br, British speaker.

listening comprehension or understanding of the speaker's accents. This was in fact manifested when we observed the LC ratings by the Ugandan and Ukrainian speaker's listeners in view of their performances for the dictation LI tests (see *Listener intelligibility (LI), listener comprehensibility (LC), accentedness perception (AP), 437 and accentedness acceptance (AA) for six different speaker accents*). In addition, LI was also not correlated with either AP (degrees of perception of an accent as native or foreign) or AA (degrees to which the listener is positive or negative toward an accent) in any group. This means that student's perceptions of and attitudes toward the speaker's accents were independent of their abilities to understand the speakers.

On the other hand, either a moderate or highly negative correlation between LC and AP was found among the listeners of the Chinese, Ugandan, American, and British speakers for the main idea test, as well as a very strong negative correlation among the American speaker's listeners for the dictation test. Thus, student participant's feeling of ease or difficulty with their speakers seems to be strongly connected to the degrees to which the speaker's accents were perceived as native. LC was also positively correlated with AA among most groups except for the Indian speaker's listener group, indicating that students seemed to accept the accents which they felt easy. In addition, there was a negative correlation between AP and AA among all groups, indicating that when they perceived foreignness or non-nativeness in an accent, listeners were less likely to accept it, and vice versa.

The relationships (or no relationships) among LI, LC, AP, and AA, altogether, indicate that perceived nativeness seemed to be a crucial factor for students to judge whether their speakers were easy to understand and whether their accents were acceptable, to which, however, their actual understandings of the same speakers did not have much relevance.

DISCUSSION

Discussion of the Results

We sought to address two research questions regarding Swedish youths as listeners to speakers of Global Englishes. First, we investigated upper secondary school student's listening ability (LI), feeling of ease or difficulty (LC), perception of nativeness or foreignness (AP), and negative or positive attitude (AA) toward the diverse accents of six English speakers, by comparing the listener groups of six different speakers. In doing so, we also observed the effect of English grade on the student's performance, perception, and attitude as well as the interaction between group and grade effects. Second, we examined the relationships among LI, LC, AP, and AA of each of the six speaker's listener groups, controlling for grade. Key results are discussed below in view of previous studies.

Regarding student's listener intelligibility (LI), our finding is aligned with the finding by Kang et al. (2018) that American and British speakers were consistently better understood than all speakers with other English accents. This was, in fact, predicted, given the great influence of popular culture from

English-speaking countries (particularly the United States) on the Swedish youth (Cabau, 2009; Henry et al., 2019), as well as the general tendency to focus strongly on GA and RP accents during the teaching of listening in instructional settings (Sung, 2016; Alonso-Herrero and Lasagabaster Herrarte, 2019; Tsang, 2019), including the English education in Swedish schools (see Henry et al., 2018; Mohr et al., 2019).

On the other hand, considering that some of their non-American/British speaker participants in Kang et al. (2018) were better understood than other speakers from the same varieties, the significant differences in dictation scores among students who listened to the Chinese, Ukrainian, Indian, and Ugandan speakers in our study may not be generalizable. The differences in the LI scores among students listening to the Chinese, Ukrainian, Indian, and Ugandan speakers may simply indicate our student participant's understanding of the four individual speakers, rather than their understanding of the whole population of the English varieties that the speakers belong to. The result may have differed if we had included multiple other speakers from the same varieties.

Additionally, the finding that there was no significant difference among the six listener group's main idea scores was somewhat unexpected. This outcome may signal that Swedish youths possess listening comprehension to understand diverse English accents when hearing every detail is not necessary. Alternatively, it may have been that their familiarity with the format of the national English test allowed students to guess right answers, whether they fully understood their speakers or whether they only understood key information for answering the questions. The outcome attached to the main idea LI should be further scrutinized to establish a plausible conclusion, for which a more rigorous test method should be identified through piloting different test designs.

As for LC, feeling easy or difficult about an accent, the ratings were in favor of the American and British speakers although a statistical difference was found only between the students who listened to the American and British speakers on one side and those who listened to the Ugandan speaker on the other. While AP (perception) and AA (attitude) ratings were consistent for both main idea and dictation tests, inconsistency was found in LC ratings, as visible in **Figure 2**. According to Thomson. (2018) review of L2 pronunciation research, actual understanding (LI) and subjective feeling of ease or difficulty (LC) tend to have a close relationship. However, our data did not clearly show such a trend between LI and LC, while as seen in **Table 2**, our listener's LC tended to have more relationships with perceived nativeness or foreignness (AP) and attitude (AA).

Particularly, the correlation between the LC and AP of the American speaker's listeners was outstandingly strong. This seems to be simply because Swedish youths are extensively exposed to the variety (Cabau, 2009). That is, the students seemed to rate their speaker as being native through recognizing his American accent features that they had extensively heard, and also as being easy, as the level of familiarity is known to play an important role in feeling easy or comfortable with an accent (Gass and Varonis, 1984; Isaacs and Trofimovich, 2012). Interestingly, however, neither their LC nor their AP was corelated to their actual understanding (LI) of the American speaker. In fact, similar to the American speaker's listener group, all other listener group's LC ratings for their own speakers were usually not correlated, or had only a weak correlation with their listener intelligibility. This finding about LI and LC is aligned with the findings of Kim. (2008), Matsuura. (2007), and Matsuura et al. (1999), where L2 listener's intelligibility and comprehensibility often did not have strong correlations. Together their and our findings raise the question that, besides familiarity, other factors might come into play in student's LC ratings, such as "their notions or conceptions of the value of the speaker's accent" (Ballard and Winke, 2017, p. 214; Lindemann, 2017), or Standard Language Ideology (i.e., the belief system of 'correct' language forms) that they have internalized through school education and media exposure (Jansen et al., in press).

Moreover, our results about AP (i.e., perception of an accent) and AA (i.e., attitude toward the accent), largely confirmed the findings of previous studies. First, the AP ratings were most consistent among the four constructs in both main idea and dictation tests, such that the accents of the American and British speakers were highly perceived as "native" while other speaker's accents highly as "foreign" (Kim, 2008; Ballard and Winke, 2017). This tendency was much more evident among high-grade students than low-grade ones, which was also observed by Goh. (1999) and Harding. (2008). Taken together, both their and our findings indicate that proficient listeners who are capable of recognizing different accents tend to be more biased in their attitudes toward the accents they label as native or non-native.

Although we cannot be certain how many students recognized their speaker's accents correctly, our finding about the AP ratings for the Indian, American, and British speakers seems to be comparable with McKenzie et al. (2019), in which Thai L1 university students tended to identify Indian, American, and British accents more correctly than other accent varieties, due to the "socio-psychological salience" of the three varieties (p. 14), that is, due to them being "prominent and frequently heard in the media" (p. 2). In both McKenzie et al. and our study, a recognition of American and British accents appeared to result in positive attitudes toward the speakers of the two accents, whereas a recognition of Indian accent seemed to lead the speakers with the accent to be judged slightly negatively. The possible salience of the Indian speaker's accent to her listeners in our study may also be a reason for her listener's relatively high LI, whereas just one of the three Indian speakers in Kang et al. (2018) was significantly better understood than speakers from other varieties.

Further, while the AP ratings for the Indian speaker was higher than the AP for the Chinese, Ukrainian, and Ugandan speakers, there was no statistical difference in the AA (i.e., attitude) of their listeners. There was a 50% chance of a moderate negative correlation between the AP and AA ratings for these four speakers, whereas there was always a strong negative correlation between the AP and AA ratings for the American and British speakers. Therefore, students were not *very* negative toward the speakers perceived to be foreign, but they were *clearly* positive toward the speakers perceived to be native, particularly

toward the American speaker whose variety features seemed to be highly noticed by his listeners. These findings confirm that the accent preference of Swedish youths is skewed toward that of American English (Cabau, 2009; Norrby, 2015), which is a common tendency found among learners in other contexts (Sung, 2016; Tsang, 2019). In addition, for all six speakers, neither AP nor AA was correlated with LI. This was somewhat puzzling for us for a while as a close relationship between attitudes and actual understanding has been reported in the extant literature (e.g., Lindemann, 2002; Lindemann and Subtirelu, 2013). Apparently, as speculated earlier, students involved certain preconceived values, such as Standard Language Ideology, in perceiving and evaluating their speakers' accents (Ballard & Winke, 2017; Lindemann, 2017), for which the question of whether they could understand the speakers did not seem to be counted much. This finding probably needs to be addressed separately from the result about their listener intelligibility, which informs that Swedish youth listeners in our study had poorer understanding of non-American/British.

Implications for English Language Education

To recapitulate, the results showed that the intelligibility scores and perception/attitude ratings of participants favored the two speakers with privileged accents–the American and British speakers. However, across all six listener groups, no correlation was detected between their actual understanding of the speakers and their perception/attitude ratings, which often had a strong correlation with their feelings of ease/difficulty regarding the speaker's accents.

Overall, our results suggest the need for pedagogical intervention involving curriculum innovation for English language teaching at school (Matsuda, 2018; Rose et al., 2020). First, students need to be guided to improve their actual understanding and sense of familiarity with Global English speakers besides the native accents that they prefer. Without a doubt, understanding a speaker requires different abilities, not least decoding phonetic/phonological signals, comprehending the meaning of the decoded utterances, and interpreting pragmatic meaning behind uttered meaning (Rost, 2011), where meaning-negotiating strategies also play a role. Therefore, endeavors to help learners become effective international communicators should involve fostering all levels of linguistic abilities as well as pragmatic strategies as suggested by Lee and Drajati (2019), Sifakis et al. (2020). However, based on our results, and given that much of communication breakdown in the context of English as a contact language is caused at the level of phonological decoding (see Deterding, 2013; Kim and Billington, 2016 for example), we wish to highlight the importance of training learners to understand different accents, which the concept of LI encapsulates. Here we add some empirical reports that suggest that increasing learner's listener intelligibility for diverse Global Englishes accents through training is doable. For example, several studied report that exposure to multiple speakers of an English accent variety resulted in improved understanding of unfamiliar speakers from the same variety (e.g., Bradlow and Bent, 2008; Lindemann et al., 2016). Listening to speakers of multiple varieties of English has even led to better understanding of an unfamiliar international variety (Baese-Berk et al., 2013). Moreover, exposure to speakers with diverse accents can help listeners develop listening strategies, such as focusing on general and relevant cues to understanding an accent, while not being distracted by irrelevant variation (Xie and Myers, 2017).

Apart from perceptual training for improving listener intelligibility, innovative pedagogical work should be undertaken to improve Swedish youth's perceptions and attitudes and prepare them to become open-minded toward diverse English speakers. As our results indicate, an increased understanding of the accents of certain English speaker groups may not automatically stimulate positive attitudes toward them. However, research reports interaction between the listener's comprehension of and attitude/belief about a certain accent in both positive and negative ways (Lindemann and Subtirelu, 2013), and if attitudes are mediated by some other pedagogical interventions having a good understanding of an accent can possibly strengthen positive attitudes, and vice versa. Such interventions can include activities for problematizing Standard Language Ideology that prescribes "standard" or "correct forms" of English (Jansen et al., in press), as well as for developing awareness and knowledge of the globalized English reality (Rose and Galloway, 2019).

Moreover, we suggest that the English national test should be more aligned to the global perspective of the national English syllabus, realizing that the focus on native norms in testing has been the major hinderance to innovative teaching practice (Rose and Galloway, 2019); that is, in the listening section of the test, a greater variety of accents should be included to "achieve greater authenticity" of globalized situations and to "create positive washback" (Harding, 2008, p. 3, p. 3).

As discussed earlier, the Swedish national English syllabus for upper secondary school promotes a global perspective, stating, "[k]nowledge of English increases the individual's opportunities to participate in different social and cultural contexts, as well as in global studies and working life" (Swedish National Agency for Education, 2011, p. 1). This is an appropriate measure and response to the fact that the Swedish use English as an international communication tool. Such a need is increasing even within the country, where the implementation of the Bologna Process has brought a great number of international teachers and students to the country. In fact, the six speakers who participated in our study represent the type of international interlocutors that Swedish youths will encounter within the country. We suggest that school teachers consider a wider interpretation of the recommendation of the syllabus that "[t]eaching should make sure of the surrounding world as a resource for contacts, information and learning" (Swedish National Agency for Education, 2011, p. 1) and apply the idea to curriculum innovation (Rose et al., 2020).

Limitations

In our study, we attempted to ensure the meaningfulness and generalizability of the statistical results by employing several methodological strategies, including random group assignment

of listeners, who were tested class by class, and robust inferential tests. Nevertheless, we are aware of the limitations of our results that we consider. First, the speakers, although selected from different varieties to include Global Englishes speakers with diverse accents, were not considered to represent their own varieties. Thus, for example, the Swedish learner's listening performances and attitudes toward speaker's accents should not be overinterpreted as their understanding of and attitudes toward the whole populations of the English varieties that our speaker participants belong to. In addition, the one-time measurement of LC, AP and AA after the main idea and dictation tests represents a limitation of this research, which should be considered in understanding our results. Moreover, there were several variables we could not control or check their effects on the listener's performances and ratings, including speaker's gender or their voice qualities, and interaction between speech and listener gender. We therefore suggest to readers that they consider these uncontrolled variables when critically examining the results of our study.

CONCLUSION

This study investigated Swedish upper secondary student's listener intelligibility (LI), listener comprehensibility (LC), accentedness perception (AP), and accentedness acceptance (AA) of Global Englishes speakers with diverse accents. The results suggest that Swedish youths share the known tendencies of L2 learners and users of English: they better understand (e.g., Kang et al., 2018) and favor privileged accents over other English accents (e.g., Sung, 2016; Tsang, 2019). Our study, therefore, highlights the need to help Swedish youths and other English learners widen their view of English as a global contact language and its speakers, maximize their listening proficiency, and, thus, be ready for globalized English use (Morrison and White, 2005; Rose et al., 2020). Moreover, we believe that our study is of methodological significance, by extending the use of the concepts of intelligibility, comprehensibility, and accentedness from assessing L2 speakers to determining L2 listener's abilities with and perceptions of diverse English accents, thereby suggesting pedagogical intervention for learners as *listeners* rather than speakers.

In future research, detailed examinations of phonological features that affect Swedish youth's LI should be conducted to identify areas to be included in the curriculum for teaching listening proficiency with diverse accents. We also recommend classroom practice studies that document the process through which school education helps improve learner's listener intelligibility (LI), listener comprehensibility (LC), accentedness perception (AP), and accentedness acceptance (AA) for Global Englishes users (also see Rose et al., 2020 for discussions related to this recommendation). Such studies can also examine whether positive contacts with and exposure to different English speaker groups help students to become unbiased (Subtirelu and Lindemann, 2016) and even mediate their attitudes to have more positive, straightforward correlations with actual understanding. Further, to attest the current results, we suggest more studies that operationalize the constructs of LI, LC, AP, and AA, with other speaker and listener combinations as well as employing various research techniques for triangulation, such as eliciting attitudes through a mixed method approach (e.g., Cameron and Galloway, 2019) or observing interaction between the listener's four constructs and the speaker's accommodation skills in an interactional context.

DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article/**Supplementary Material**, further inquiries can be directed to the corresponding author.

ETHICS STATEMENT

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. The participants provided their informed consent to participate in this study through the voluntary online submission of their answers as the authors requested.

AUTHOR CONTRIBUTIONS

The first author made most contribution to the design of the study and data analysis, as well as to completing the manuscript. All the three authors worked together to produce testing materials, and the first and second authors collected data. All authors approved the work for publication.

FUNDING

The study was internally funded by University West Research in Children and Youths.

ACKNOWLEDGMENTS

We are *very* grateful to the reviewers of our manuscript, our speaker and listener participants, the teachers who helped us with listener recruitment, and Professor Emma Sorbring at University West, who believed in and supported our study (Jeong et al., 2021).

SUPPLEMENTARY MATERIAL

The Supplementary Material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/feduc.2021.651908/full#supplementary-material

REFERENCES

Alonso-Herrero, A., and Lasagabaster Herrarte, D. (2019). Student Attitudes towards English Pronunciation and Different Varieties in the English Classroom. *Elia: Estudios de Lingüística Inglesa Aplicada* 19, 71–100. doi:10.12795/elia.2019.i19.04

Attamimi, R., and Chittick, J. (2018). Exploring the Effects of Teachers' Different English Accents within English Language Learning Classrooms: Students' and Teachers' Narratives. *Int. J. Linguistics, Lit. Cult.* 5 (3), 65–75. doi:10.19044/llc.v5no3a5

Baese-Berk, M. M., Bradlow, A. R., and Wright, B. A. (2013). Accent-independent adaptation to foreign accented speech. *J. Acoust. Soc. Am.* 133 (3), EL174–EL180. doi:10.1121/1.4789864

Ballard, L., and Winke, P. (2017). "Students' Attitudes towards English Teachers' Accents: The Interplay of Accent Familiarity, Comprehensibility, Intelligibility, Perceived Native Speaker Status, and Acceptability as a Teacher," in *Second Language Pronunciation Assessment: Interdisciplinary Perspective*. Editors T. Isaacs and P. T. Movich(Bristol: Multilingual Matters), 121–140. Multilingua Matters.

Bayyurt, Y., and Dewey, M. (2020). Locating ELF in ELT. *ELT J.* 74 (4), 369–376. doi:10.1093/elt/ccaa048

Björkman, B. (2011). English as a Lingua Franca in Higher Education: Implications for EAP. *IBERICA* 22, 79–100.

Björkman, B. (2018). "Morphosyntactic Variation in Spoken English as a Lingua Franca Interactions: Revisiting Linguistic Variety," in *The Routledge Handbook of English as a Lingua Franca*. Editors J. Jenkins, W. Baker, and M. Dewey (Oxon: Routledge), 255–266. [Google Scholar].

Bolton, K., and Meierkord, C. (2013). English in Contemporary Sweden: Perceptions, Policies, and Narrated Practices. *J. Sociolinguistics* 17 (1), 93–117. doi:10.1111/josl.12014

Bradlow, A. R., and Bent, T. (2008). Perceptual Adaptation to Non-native Speech. *Cognition* 106 (2), 707–729. doi:10.1016/j.cognition.2007.04.005

Cabau, B. (2009). The Irresistible Rise and Hegemony of a Linguistic Fortress: English Teaching in Sweden. *Int. Multilingual Res. J.* 3 (2), 134–152. doi:10.1080/19313150903073786

Cameron, A., and Galloway, N. (2019). Local Thoughts on Global Ideas: Pre- and In-Service TESOL Practitioners' Attitudes to the Pedagogical Implications of the Globalization of English. *RELC J.* 50 (1), 149–163. doi:10.1177/0033688218822853

Collins, B., Mees, I. M., and Carley, P. (2019). *Practical English Phonetics and Phonology: A Resource Book for Students*. 4th ed. London: Routledge. doi:10.4324/9780429490392

Conover, W. J. (1999). *Practical Nonparametric Statistics*. New York, NY: John Wiley.

Derwing, T. M., and Munro, M. J. (2014). "10. Training Native Speakers to Listen to L2 Speech," in *Social Dynamics in Second Language Accent*. Editors A. Moyer and J. M. Levis (Berlin: De Gruyter Mouton), 219–236. doi:10.1515/9781614511762.219

Derwing, T., and Munro, M. (2015). *Pronunciation Fundamentals: Evidence-Based Perspectives for L2 Teaching and Research*. Amsterdam: John Benjamins. doi:10.1075/lllt.42

Deterding, D. (2013). *Misunderstandings in English as a Lingua Franca: An Analysis of ELF Interactions in South-East Asia*. Berlin: Walter de Gruyter. doi:10.1515/9783110288599

EF EPI (2020). EF English Proficiency Index. EF EPI Available at: https://www.ef.com/wwen/epi/.

Eriksson, L. E. (2019). *Teachers' and Students' Attitudes and Perceptions toward Varieties of English in Swedish Upper Secondary School* ASLA-Symposiet I Karlstad, 12-13 April, 2018, Karlstad. Available at: http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-72262.

Fang, F. G. (2020). *Re-positioning Accent Attitude in the Global Englishes Paradigm: A Critical Phenomenological Case Study in the Chinese Context*. London: Routledge.

Field, J. (2005). Intelligibility and the Listener: The Role of Lexical Stress. *TESOL Q.* 39 (3), 399–423. doi:10.2307/3588487

Galloway, N. (2017). *Global Englishes and Change in English Language Teaching: Attitudes and Impact*. London: Routledge. doi:10.4324/9781315158983

Gardiner, I. A., and Deterding, D. (2020). "The Features of Asian Englishes," in *The Handbook of Asian Englishes*. Editors K. Bolton, W. Botha, and A. Kirkpatrick (Hoboken, NJ: John Wiley & Sons), 189–207. doi:10.1002/9781118791882.ch8

Gass, S., and Varonis, E. M. (1984). The Effect of Familiarity on the Comprehensibility of Nonnative Speech. *Lang. Learn.* 34 (1), 65–87. doi:10.1111/j.1467-1770.1984.tb00996.x

Goh, C. (1999). How Much Do Learners Know about the Factors that Influence Their Listening Comprehension? *Hong Kong J. Appl. Linguistics* 4 (1), 17–42.

Hansen Edwards, J. G., Zampini, M. L., and Cunningham, C. (2018). The Accentedness, Comprehensibility, and Intelligibility of Asian Englishes. *World Englishes* 37 (4), 538–557. doi:10.1111/weng.12344

Harding, L. (2008). Accent and Academic Listening Assessment: A Study of Test-Taker Perceptions. *Melbourne Pap. Lang. Test.* 13 (1), 1–33.

Harding, L. (2012). Accent, Listening Assessment and the Potential for a Shared-L1 Advantage: A DIF Perspective. *Lang. Test.* 29 (2), 163–180. doi:10.1177/0265532211421161

Henry, A. (2019a). "What Motivates Students?," in *Motivational Practice: Insights from the Classroom*. Editors A. Henry, P. Sundqvist, and C. Thorsen (Lund: Studentlitteratur), 63–85.

Henry, A. (2019b). "Young People and English : A Changing Landscape with Changing Challenges," in *Motivational Practice: Insights from the Classroom*. Editors A. S. P. Henry and C. Thorsen. First edition ed.(Lund: Studentlitteratur AB), 23–41. Studentlitteratur AB Available at: http://urn.kb.se/resolve?urn=urn:nbn:se:hv:diva-13717.

Henry, A., and Cliffordson, C. (2015). The Impact of Out-Of-School Factors on Motivation to Learn English: Self-Discrepancies, Beliefs, and Experiences of Self-Authenticity. *Appl. Linguistics* 38 (5), 713–736. doi:10.1093/applin/amv060

Henry, A., Korp, H., Sundqvist, P., and Thorsen, C. (2018). Motivational Strategies and the Reframing of English: Activity Design and Challenges for Teachers in Contexts of Extensive Extramural Encounters. *Tesol Q.* 52 (2), 247–273. doi:10.1002/tesq.394

Henry, A., Sundqvist, P., and Thorsen, C. (2019). *Motivational Practice: Insights from the Classroom*. Studentliteratur.

Hult, F. M. (2012). English as a Transcultural Language in Swedish Policy and Practice. *Tesol Q.* 46 (2), 230–257. Available at: http://www.jstor.org/stable/41576046. doi:10.1002/tesq.19

Hult, F. M. (2017). More Than a Lingua Franca: Functions of English in a Globalised Educational Language Policy. *Lang. Cult. Curriculum* 30 (3), 265–282. doi:10.1080/07908318.2017.1321008

Isaacs, T., and Trofimovich, P. (2012). Deconstructing Comprehensibility. *Stud. Second Lang. Acquis* 34 (3), 475–505. doi:10.1017/S0272263112000150

Jansen, S., Mohr, S., and Forsberg, J. (in press). "Standard Language Ideology in the English Language Classroom: Suggestions for EIL Informed Teacher Education," in *Glocalising Teaching English as an International Language: New Perspectives for Teaching and Teacher Education in Germany*. Editors M. Callies, S. Hehner, P. Mee, and M. Westphal (London: Routledge).

Jenkins, J. (2015). *Global Englishes: A Resource Book for Students*. London: Routledge. [Google Scholar].

Jenkins, J. (2020). Where Are We with ELF and Language Testing? an Opinion Piece. *ELT J.* 74 (4), 473–479. doi:10.1093/elt/ccaa045

Jeong, H., Elgemark, A., and Thorén, B. (2021). Swedish youths as listeners of global Englishes speakers with diverse accents: Listener intelligibility, listener comprehensibility, accentedness perception, and accentedness acceptance. [Epub ahead of print]. doi:10.6084/m9.figshare.13553720

Jeong, H., Thorén, B., and Othman, J. (2020). Effect of Altering Three Phonetic Features on Intelligibility of English as a Lingua Franca: a Malaysian Speaker and Swedish Listeners. *Asian Englishes* 22 (1), 2–19. doi:10.1080/13488678.2018.1536817

Kachru, B. B. (1992). *The Other Tongue: English across Cultures*. Chicago: University of Illinois Press.

Kang, O., and Rubin, D. L. (2009). Reverse Linguistic Stereotyping: Measuring the Effect of Listener Expectations on Speech Evaluation. *J. Lang. Soc. Psychol.* 28 (4), 441–456. doi:10.1177/0261927x09341950

Kang, O., Thomson, R. I., and Moran, M. (2018). Which Features of Accent Affect Understanding? Exploring the Intelligibility Threshold of Diverse Accent Varieties. *Appl. Linguistics* 41, 453–480. doi:10.1093/applin/amy053

Kennedy, S., and Trofimovich, P. (2008). Intelligibility, Comprehensibility, and Accentedness of L2 Speech: The Role of Listener Experience and Semantic Context. *Can. Mod. Lang. Rev.* 64 (3), 459–489. doi:10.3138/cmlr.64.3.459

Kim, H., and Billington, R. (2016). Pronunciation and Comprehension in English as a Lingua Franca Communication: Effect of L1 Influence in International Aviation Communication. *Appl. Linguistics* 39 (2), 135–158. doi:10.1093/applin/amv075

Kim, T. (2008). Accentedness, Comprehensibility, Intelligibility, and Interpretability of NNESTs. *CATESOL J.* 20 (1), 7–26.

Kortmann, B., and Schneider, E. W. (2004). *A Handbook of Varieties of English 1: Phonology*. Berlin: Mouton de Gruyter. [Google Scholar].

Kretzschmar, W. A. J. (2004). 'Standard American English pronunciation,' in *A Handbook of Varieties of English 1: Phonology*. Editors B. Kortmann and E. W. Schneider. Mouton de Gruyter, 257–269.

Kuteeva, M. (2014). The Parallel Language Use of Swedish and English: the Question of 'nativeness' in university Policies and Practices. *J. Multilingual Multicultural Develop.* 35 (4), 332–344. doi:10.1080/01434632.2013.874432

Larson-Hall, J. (2015). *A Guide to Doing Statistics in Second Language Research Using SPSS and R*. New York: Routledge. doi:10.4324/9781315775661

Lee, J. S., and Drajati, N. A. (2019). English as an international language beyond the ELT classroom. *ELT J.* 73 (4), 419–427. doi:10.1093/elt/ccz018

Li-Ann, D. C. (2008). Understand me or not? Accent, acceptability and intelligibility in International English: The case of Singapore. *ScholarBank@NUS Repository*. Available at: https://scholarbank.nus.edu.sg/handle/10635/13223.

Lindemann, S., Campbell, M.-A., Litzenberg, J., and Close Subtirelu, N. (2016). Explicit and Implicit Training Methods for Improving Native English Speakers' Comprehension of Nonnative Speech. *Jslp* 2 (1), 93–108. doi:10.1075/jslp.2.1.04lin

Lindemann, S. (2002). Listening with an Attitude: A Model of Native-Speaker Comprehension of Non-native Speakers in the United States. *Lang. Soc.* 31 (3), 419–441. doi:10.1017/s0047404502020286

Lindemann, S., and Subtirelu, N. (2013). Reliably Biased: The Role of Listener Expectation in the Perception of Second Language Speech. *Lang. Learn.* 63 (3), 567–594. doi:10.1111/lang.12014

Lindemann, S. (2017). "Variation or 'Error? Perception of Pronunciation Variation and Implication for Assessment," in *Second Language Pronunciation Assessment: Interdisciplinary Perspective*. Editors T. Isaacs and P. Trofimovich (Bristol: Multilingual Matters), 193–209.

Mair, P., and Wilcox, R. (2019). Robust Statistical Methods in R Using the WRS2 Package. *Behav. Res.* 52 (2), 464–488. doi:10.3758/s13428-019-01246-w

Matsuda, A. (2018). Is Teaching English as an International Language All about Being Politically Correct? *RELC J.* 49 (1), 24–35. doi:10.1177/0033688217753489

Matsumoto, Y. (2011). Successful ELF Communications and Implications for ELT: Sequential Analysis of ELF Pronunciation Negotiation Strategies. *Mod. Lang. J.* 95 (1), 97–114. doi:10.1111/j.1540-4781.2011.01172.x

Matsuura, H., Chiba, R., and Fujieda, M. (1999). Intelligibility and Comprehensibility of American andIrish Englishes in Japan. *World Englishes* 18 (1), 49–62. doi:10.1111/1467-971x.00121

Matsuura, H. (2007). Intelligibility and Individual Learner Differences in the EIL Context. *System* 35 (3), 293–304. doi:10.1016/j.system.2007.03.003

McKenzie, R. M., Huang, M., Ong, T. T., and Snodin, N. (2019). Socio-psychological Salience and Categorisation Accuracy of Speaker Place of Origin. *Lingua* 228, 102705. doi:10.1016/j.lingua.2019.06.006

Melchers, G., Shaw, P., and Sundkvist, P. (2019). *World Englishes*. 3 ed. London: Routledge. doi:10.4324/9781351042581

Mohr, S., Jansen, S., and Forsberg, J. (2019). European English in the EFL Classroom? *English Today* 37, 85–91. doi:10.1017/S0266078419000403

Morrison, R., and White, M. (2005). Nurturing global listeners: increasing familiarity and appreciation for world Englishes. *World Englishes* 24 (3), 361–370. doi:10.1111/j.0083-2919.2005.00417.x

Munro, M. J., and Derwing, T. M. (1995a). Foreign Accent, Comprehensibility, and Intelligibility in the Speech of Second Language Learners. *Lang. Learn.* 45 (1), 73–97. doi:10.1111/j.1467-1770.1995.tb00963.x

Munro, M. J., and Derwing, T. M. (1995b). Processing Time, Accent, and Comprehensibility in the Perception of Native and Foreign-Accented Speech. *Lang. Speech* 38 (3), 289–306. doi:10.1177/002383099503800305

Munro, M. J., and Derwing, T. M. (2006). The Functional Load Principle in ESL Pronunciation Instruction: An Exploratory Study. *System* 34 (4), 520–531. doi:10.1016/j.system.2006.09.004

Norouzian, R., and Plonsky, L. (2018). Eta- and Partial Eta-Squared in L2 Research: A Cautionary Review and Guide to More Appropriate Usage. *Second Lang. Res.* 34 (2), 257–271. doi:10.1177/0267658316684904

Norrby, C. (2014). "1. English in Scandinavia: Monster or Mate? Sweden as a Case Study," in *Challenging the Monolingual Mindset*. Editors J. Hajek and Y. Slaughter (Bristol: Multilingual Matters), 17–32. doi:10.21832/9781783092529-004

Prodromou, L. (2008). *English as a Lingua Franca: A Corpus-Based Analysis*. Continuum.

Rose, H., and Galloway, N. (2019). *Global Englishes for Language Teaching*. Cambridge: Cambridge University Press. doi:10.1017/9781316678343

Rose, H., McKinley, J., and Galloway, N. (2020). Global Englishes and Language Teaching: A Review of Pedagogical Research. *Lang. Teach.* 54, 157–189. doi:10.1017/S0261444820000518

Rost, M. (2011). *Teaching and Researching Listening*. 2nd ed. Harlow: Pearson Education.

Sewell, A. (2012). The Hong Kong English Accent: Variation and Acceptability. *Hong Kong J. Appl. Linguistics* 13 (2), 1–21.

Sifakis, N. C., Tsantila, N., Masina, A., and Vourdanou, K. (2020). Designing ELF-Aware Lessons in High-Stakes Exam Contexts. *ELT J.* 74 (4), 463–472. doi:10.1093/elt/ccaa031

Subtirelu, N. C., and Lindemann, S. (2016). Teaching First Language Speakers to Communicate across Linguistic Difference: Addressing Attitudes, Comprehension, and Strategies. *Appl. Linguistics* 37 (6), 765–783. doi:10.1093/applin/amu068

Sundqvist, P. (2011). "A Possible Path to Progress: Out-Of-School English Language Learners in Sweden," in *Beyond the Language Classroom*. Editors P. Benson and H. Reinders (Harlow: Pearson Education), 189–208.

Sundqvist, P., and Sylvén, L. K. (2014). Language-related Computer Use: Focus on Young L2 English Learners in Sweden. *ReCALL* 26 (1), 3–20. doi:10.1017/S0958344013000232

Sung, C. C. M. (2016). Exposure to Multiple Accents of English in the English Language Teaching Classroom: from Second Language Learners' Perspectives. *Innovation Lang. Learn. Teach.* 10 (3), 190–205. doi:10.1080/17501229.2014.936869

Swan, M., and Smith, M. (2001). in *Learner English: A Teachers Guide to Interference and Other Problems*. 2nd ed. (Cambridge: Cambridge University Press).

Swedish National Agency for Education (2018). Curriculum for Compulsory School 2011: Revised 2018. Swedish Government. Retrieved from: https://www.skolverket.se/publikationsserier/styrdokument/2018/curriculum-for-the-compulsory-school-preschool-class-and-school-age-educare-revised-2018.

Swedish National Agency for Education (2011). English. Swedish Government. Retrieved from: https://www.skolverket.se/download/18.4fc05a3f164131a74181056/1535372297288/English-swedish-school.pdf.

Szpyra-Kozlowska, J. (2014). *Pronunciation in EFL Instruction: A Research-Based Approach*. Bristol: Multilingual Matters.

Thomson, R. (2018). *Assessment in Second Language Pronunciation*. Oxon: Routledge, 11–29. [Google Scholar]. Measurement of Accentedness, Intelligibility, and Comprehensibility

Tsang, A. (2020). Are Learners Ready for Englishes in the EFL Classroom? A Large-Scale Survey of Learners' Views of Non-standard Accents and Teachers' Accents. *System* 94, 102298. doi:10.1016/j.system.2020.102298

Tsang, A. (2019). Reconceptualizing Speaking, Listening, and Pronunciation: Glocalizing TESOL in the Contexts of World Englishes and English as a Lingua Franca. *Tesol Q.* 53 (2), 580–588. doi:10.1002/tesq.504

Tulaja, L. (2020). in Exploring acceptability: L1 judgements of L2 Danish learners PSLLT (Pronunciation In Second Language Learning And Teaching Conference) (Northern Arizona University).

Turner, J. L. (2014). *Using Statistics in Small-Scale Language Education Research*. New York: Routledge. doi:10.4324/9780203526927

Wilcox, R. R., and Schönbrodt, F. D. (2015). The WRS Package for Robust Statistics in R. (Version 0.27.5). https://github.com/nicebread/WRS.

World Economic Forum (2012). "Global Information Technology Report,". WEF.

Xie, X., and Myers, E. B. (2017). Learning a Talker or Learning an Accent: Acoustic Similarity Constrains Generalization of Foreign Accent Adaptation to New Talkers. *J. Mem. Lang.* 97, 30–46. doi:10.1016/j.jml.2017.07.005

Zielinski, B. W. (2008). The Listener: No Longer the Silent Partner in Reduced Intelligibility. *System* 36 (1), 69–84. doi:10.1016/j.system.2007.11.004

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.