

# We are IntechOpen, the world's leading publisher of Open Access books Built by scientists, for scientists

6,900

Open access books available

186,000

International authors and editors

200M

Downloads

Our authors are among the

154

Countries delivered to

TOP 1%

most cited scientists

12.2%

Contributors from top 500 universities



WEB OF SCIENCE™

Selection of our books indexed in the Book Citation Index  
in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?  
Contact [book.department@intechopen.com](mailto:book.department@intechopen.com)

Numbers displayed above are based on latest data collected.  
For more information visit [www.intechopen.com](http://www.intechopen.com)



# Listener Background in L2 Speech Evaluation

*Mohammadreza Dalman and Okim Kang*

## Abstract

Listeners are integral parts of second language (L2) oral performance assessment. However, evaluation of listeners is susceptible to listener background variables and biases. These variables and preexisting biases distort native speaker (NS) listeners' perceptions of non-native speakers' (NNSs) speech performance and contribute errors into their oral performance assessment. Among listener background variables, listeners' first language status, the amount of exposure to different English varieties, listeners' educational background, prior language teaching experience, NNSs' linguistic stereotyping, and listener attitude have been investigated in the literature and assumed to exert sizable amount of variation in speakers' oral proficiency true scores. To minimize listeners' bias in the assessment context, listeners are provided with intensive training programs in which they are trained how to rate NNSs' speech more objectively utilizing scoring rubrics. To mediate listeners' bias in social contexts, the literature has provided strands of evidence in favor of structured intergroup contact programs, which are inoculations particularly devised to improve NSs' attitude, thereby making them more receptive to NNSs' English varieties. To enhance L2 listeners' self-efficacy and foster their autonomy, L2 instructors are encouraged to emphasize explicit instruction of listening strategies.

**Keywords:** listener background, listener bias, listener training, listening strategies, self-efficacy, assessment

## 1. Introduction

Despite recent advances made in the application of automatic speech recognition (ASR) technology in second language (L2) pronunciation, the evaluation of L2 speakers' oral performance is extensively carried out through the judgment of human raters. This is the case whether the evaluation is narrowly focused on pronunciation accuracy and speech intelligibility or more broadly on communication success. The human rater judgments of L2 speakers' oral performance have consequential impacts on L2 speakers due to the fact that they form the bases upon which critical decisions are made regarding L2 speakers' education and employment. However, human raters are vulnerable to be impacted by listeners' bias. Listeners who harbor negative expectations toward a certain group of speakers due to their social group affiliations, nationality, and un-prestigious accent have the proclivity to assess accented speech more negatively [1–3]. The bias formed mainly by listeners' background factors, such as listeners' predispositions, attitudes, expectations, and stereotypes, compromises the validity of oral proficiency assessment and unrightfully contributes to the

speakers' oral proficiency score variance. Thus, the results of the assessments may not make valid contributions to L2 speech research and teaching due to such inaccurate assessment. Given the fact that the insertion of the listener-related variables, also referred to as "trait-irrelevant" variables, would obscure the speakers' true speaking ability, the main objective of oral proficiency assessment and second language research is to mitigate the potency of the extraneous factors so that the obtained score rightfully reflects the true ability of the speakers [4].

The current chapter is a desktop review aimed at examining existing research that have investigated a wide range of listener background factors, which are at play in speakers' score variation and oral proficiency discrepancies. This review would inform future researchers of the presence of the listener-related variables and help them devise some effective strategies to lessen, if not to eradicate, their intervening effects. The factors specifically accentuated in this desktop review include listener first language status, effect of exposure to different varieties of English, listener educational background and linguistic knowledge, effects of prior language teaching and tutoring experience, linguistic stereotyping, and listener attitude. We will then discuss rater training in the assessment contexts and structured contact activities which are used as remedies for minimizing the effects of listeners' bias, as well as L2 listening strategy instruction and self-efficacy, followed by implications for L2 pronunciation research and pedagogy as well as recommendations for future directions.

## **2. Listener background**

### **2.1 Listener first language status**

The literature on the effect of listeners' first language status on rating NNSs' oral performances has yielded mixed results. On the one hand, some studies reported that NNSs tend to be more stringent in their assessments than NSs [5–7]. This severity could be justified in the light of the fact that "NNSs may reflect their personal L2 learning struggles, leading them to attribute examinees' errors to a lack of language learning effort on the part of the test takers" ([3], p. 5). On the other hand, some other studies reported contradictory findings in which NSs were more severe listeners than NNSs [8]. Yet the results of some studies reported similar trends of stringency for NNS and NS listeners [9, 10].

Bent and Bradlow [11] noted the fact that some listeners might be more tolerant of accented speech than others based on the concept of "interlanguage speech intelligibility benefit." This occurs when listeners are well-attuned to the speakers' rhythm of speech due to the phonological similarities that exist between the listeners and speakers' L1. For example, Major et al. [12] argued that Chinese and Japanese listeners had a relatively decent understanding of Spanish-accented English due to the shared prosodic features that existed among Chinese, Japanese, and Spanish. Other studies reported that Japanese L1 listeners found Japanese L1 speakers of English were more intelligible than native English listeners found them to be [13], and also Indian and South African listeners were able to comprehend listening passages recorded by their own shared L1 speakers, respectively [14].

### **2.2 Effects of exposure to different varieties of English**

A growing body of literature on the effect of prior interaction with L2 varieties lends favorable support to the fact that L2 speech perception is, to a large extent, influenced by the degree of familiarity with and exposure to L2 accented varieties.

In this regard, Derwing and Munro [15] reported that those listeners who self-reported to have frequent exposure to foreign accent had higher intelligibility scores and were more successful in language identification compared with their counterparts who self-reported to have more sporadic interaction with foreign accent. The result of this study comports with Gass and Varonis [16] assertion that those listeners who have prior exposure to accented varieties of English are favorably biased toward ratings of NNSs' speech. Likewise, Kennedy and Trofimovich [17] argued that the NSs with more frequent exposure to L2 speech had a more accurate transcription of NNSs' speech. In another study, Carey et al. [18] investigating the effect of listeners' familiarity with speakers' interlanguage on their assessment of speakers' pronunciation added that those listeners who had extensive prior exposure to the L2 accented variety of the speakers tended to rate their pronunciation higher than those who reported having little or no familiarity with that particular L2 accent.

The findings of various studies further indicate that the listeners who are less familiar with particular L2 varieties tend to perceive the speakers of those specific L2 varieties more accented, which would consequently impair their comprehension [1, 19, 20]. In this regard, Adank et al. [21] hypothesized that listeners' familiarity with a particular accented English positively correlated with comprehensibility. To test the hypothesis, they had the recordings of two British English speakers varying in accent (Southern Standard versus Glaswegian) rated by two groups of British listeners both of whom familiar with Southern Standard accent but only one of them familiar with Glaswegian accent. The results indicated that familiarity with accent facilitated comprehension. Taken as a whole, the frequency with which one encounters and processes a foreign accent determines the ease with which they comprehend the speakers of that particular L2 variety. This phenomenon could be explained in the light of the fact that the listeners who have prolonged exposure to a particular L2 accent register the sound system prototypes of the accented variety and they refer to them while perceptually decoding the speech signal [22, 18]. Therefore, they would comprehend the accented speech effortlessly.

### **2.3 Listener educational background and linguistic knowledge**

Current research is equivocal on the effect of listeners' linguistic knowledge and educational accomplishment on the assessment of L2 performance. The findings of the study conducted by Kang et al. [3] did not reveal any significant relation between the degree of educational accomplishment and linguistic knowledge on listeners' holistic ratings of L2 proficiency. Also, listeners varying in degrees of educational accomplishment did not differ in rating severity; nevertheless, those listeners who were extremely severe or lenient in their assessments, regardless of their educational background, became more moderate after they received training and became familiar with assessment criteria. In another study, Kang and Rubin [2] reported that listeners' education in linguistics and TESOL conferred a higher degree of NNS perception comprehensibility on the listeners. However, the results of Kang's [1] study failed to establish a significant relationship between listeners' prior formal training in language and linguistics and their ratings of NNSs' speech. Given the contradictory results in the literature, no definitive conclusion can be drawn on the effect of listeners' formal training in linguistics and their patterns of NNSs' speech rating.

### **2.4 Effects of prior language teaching and tutoring experience**

Listeners' teaching and tutoring experience can be associated with the ratings of NNSs' speech. In Kang's [1] study, the undergraduate listeners who had the



experience of teaching and tutoring in languages tended to be less severe listeners. Such results are consistent with those of Hsieh [23]. In her study, the effects of listeners' teaching experience status on the ratings of ITAs' oral proficiency, comprehensibility, and accentedness are investigated. Hsieh reported that English as a second language (ESL) teachers were more lenient in their ratings of ITAs' oral proficiency, comprehensibility, and accentedness than American undergraduates with no teaching experience. However, in a more recent study, Kang et al. [3] did not find a statistically significant relationship between listeners' amount of teaching experience and their holistic ratings as well as their rating severity of L2 proficiency. Thus, although listeners who possess language teaching experience are assumed to be more lenient than their counterparts with no experience in teaching, this leniency is not consistent across the board.

## **2.5 Non-native speaker linguistic stereotyping**

Prior research on US undergraduates' perceptions of NNSs' oral proficiency has established the validity of linguistic stereotyping [2]. As set forth by Lambert et al. [24], linguistic stereotyping is a phenomenon through which a short sample of L2 variety attributable to low-prestige groups arouses a cascade of demeaning evaluative judgments of speakers. They elicited NSs' perceptual judgments in regard to NNSs' productions according to a speech evaluation instrument developed by their research team. This pioneering study showed that NSs tended to pass negative judgment in relation to intellect, superiority, and friendliness when they heard accented speech. Rubin and Smith [25] postulated that one of the factors that moderated the proclivity of undergraduates' engagement in linguistic stereotyping was the amount of exposure they had with international instructors. This means that those undergraduates who have more cross-cultural experiences tend to be less critical and more tolerant of L2 accented varieties. In contrast, the undergraduates who harbor negative expectations toward speakers belonging to a particular social group would not be able to provide an impartial judgment of an L2 speaker's oral performance.

Another source of bias associated with listeners is reverse linguistic stereotyping (RLS), which is the converse of linguistic stereotyping [2]. In RLS, speakers' nonlinguistic cues can affect NS listeners' perceptions of the speaker. Such cues could include pictures of the speaker and knowledge about their ethnicity, race, gender, or social class. Thus, when listeners are misinformed that they are listening to an NNS, they tend to rate the speaker highly accented and less comprehensible [2, 26]. This problem is compounded if speakers represent members of stigmatized social groups and speak with a stigmatized accent, as it is the case with those NNSs who speak Spanish-accented English. The members of this community tend to be rated less favorably on the indices of status and solidarity by NSs [2]. In Kang et al. [3] study, RLS emerged as one of the listener-related variables which significantly predicted naïve listeners' deviation from expert scores, implying that those who had the propensity to become engaged in RLS were more likely to be influenced by subjective impressions and provide less accurate ratings. Overall, listeners' perception can be influenced by a variety of nonlinguistic or paralinguistic aspects of an utterance.

## **2.6 Listener attitude**

The effects of listeners' expectations on the perception of L2 speech have been researched through listeners' attitudes in perceptual encoding of information. Using matched guise technique [25] and verbal guise technique [27], studies have revealed that listeners' attitude toward speakers' perceived social groups will not

only impact the listeners' ratings of the speakers' degree of accentedness but also their perceptions of the speakers "nonlinguistic characteristics," such as intelligence and language competence ([28], p. 570). Rubin [29] investigated students' perception toward non-native speakers. The guises (a picture of an Asian ITA and that of an American TA) were used to form participants' perceptions of the speech files and to mislead them in terms of the speaker's ethnicity. His finding reported that L1 English listeners had the proclivity to rate the speaker of the lecture more accented when the lecture was accompanied by the picture of an Asian woman than the same speaker of the lecture when it was accompanied by the picture of a Caucasian woman. Also, Brown's [30] study on American college students' attitude toward non-native instructors confirmed that listeners' preexisting knowledge of the speakers' country of origin significantly influenced their judgments of the speakers' language competence.

In addition to encoding a distorted perception of accent and language competence, the listeners who hold attitudinal biases toward a group of L2 speakers tend to have a less accurate perception of individual sounds in the speech signal transmitted by the L2 speakers. An illustrative example is the case of Cantonese L2 speakers of English who are stereotyped to have an unreleased word-final stop production. In this regard, Hu and Lindemann [31] investigated whether this existing stereotype would impair Cantonese perceptions of English word-final stops. To test their hypothesis, they selected a group of Cantonese participants and presented them with recordings of some sentences each one of which included an underlined keyword featuring a final stop. After each recording, the participants listened to three versions of the keyword that varied in the pronunciation of the final stop, and they were required to decide which one of the versions they listened to in the sentence. In one version, the final stop was totally unreleased, in another one the final stop had a released burst, and in the third version the released burst of the final stop was followed by an aspiration. The listeners who were told that the sentence was recorded by an American L1 speaker had the propensity to choose the aspirated version, and those who were told that the sentence was recorded by a Cantonese L1 speaker had the tendency to choose the unreleased version. The results of this study confirmed the hypothesis that the preconception notions held toward the speakers of a language have a direct bearing on how listeners perceive the phonemes produced by speakers of the language.

An area which is comparably under-researched in the literature is the role of listeners' bias in perceived comprehensibility and intelligibility. Smith and Nelson [32] theoretically defined comprehensibility as understanding the overall message of an utterance and intelligibility as the accuracy with which the individual words are understood in an utterance. In a similar vein, Munro and Derwing [33] conceptualized comprehensibility as the relative ease with which an utterance is understood by the listeners, measured subjectively through scalar ratings, and intelligibility as word recognition, measured objectively through transcription tasks and cloze tests. Integral to the conceptualizations of the two speech constructs is the fact that they are regarded as the inherent characteristics of speech and the speaker is blamed for any breakdown in communication due to an incomprehensible speech. This misconception is reflected in van Wijngaarden's [34] argument stating that "the intelligibility of speech is known to be lower if the speaker is non-native instead of native for the given language" (p. 103).

However, among the few scholars who pioneered appreciating the role of listener bias in the perception of speech comprehensibility and intelligibility is Munro [35] who stressed that the measurement of L2 speech is a function of three interrelated factors, namely, the characteristics of the speech per se, listener-related factors, and contextual factors. An active line of research has hitherto supported

Munro's argument and lent credence to the role of listeners' attitudinal biases. For example, Kang and Rubin's [2] RLS study revealed that the listeners presented with the picture of an Asian scored lower in the listening comprehension test than those who were presented with the picture of a Caucasian. They attributed this phenomenon to the listeners' biased perception stemming from their prior experience such as their negative experience with international teaching assistants. In another study, Wolff [36] reported that in his experiment involving Nembe and Kalabari speakers, two languages of Eastern Niger delta, Nembe speakers reported to have found more linguistic similarity between their language and Kalabari and had a more complete perception of Kalabari speakers, whereas the opposite was reported by Kalabari speakers. Lindemann and Subtirelu [28] associated this discrepancy in perception with the "asymmetrical attitude" held by the listeners toward different language groups (p. 577). Therefore, it can be concluded that listeners' predispositions make significant contributions to what listeners perceive and the attitudinal biases held by listeners toward the speakers of a particular social group, especially a low prestigious one, would impair their perceptual encoding of the speech signal produced by the speakers from that stigmatized social group.

### **3. Listener training**

#### **3.1 Listener training in the assessment contexts**

Given the effect of listener background factors on the assessment of L2 performance, it is of utmost importance to mitigate the variance of these trait-irrelevant variables. One way to curb the magnitude of the bias exerted by the listeners' background is training listeners. Training listeners would reduce, if not eradicate, the error inserted by the aforementioned listener variables. For example, some scholars recommended listener training for minimizing the effect of accent familiarity as a factor leading to listener bias [37–39]. On the importance of listener training, Cumming [40] maintained that trained listeners are less likely to be deviated by background variables, as they gravitate more toward trait-relevant variables, such as language use, content, and rhetorical organization. Regarding the effect of listener background and training on rating reliability, Shohamy et al.'s [41] study indicated that regardless of the professional background of the listeners, whether they be English teachers or lay persons, and their training status, whether they be trained or native, all groups of listeners achieved high inter-listener reliability in rating writing samples; however, inter-listener reliability was higher among trained listeners. In a more recent study, Kang et al. [3] researched the effect of listener training on reducing the amount of divergence between novice and trained listeners. The results of that study indicated that for the novice listeners who underwent training, the impact of trait-irrelevant listener variables reduced by 75% for oral proficiency holistic rating and by 50% for comprehensibility rating. As a result of listener training, the listeners who were previously scattered on each extreme of rating continuum converged, meaning that the distance between the listeners who tended to be extremely severe or lenient prior to the training reduced and they became more moderate.

#### **3.2 Structured contact activities to mediate listeners' bias in social contexts**

Another approach to listener training, which is more concerned with preparing NS listeners for accomplishing successful intercultural communication with NNSs, rather than calibrating their ratings of NNSs' speech, is structured intergroup



contact. As a consequence of globalization, there is more urgent need for people from different fields of science to communicate with interlocutors from diverse linguistic and cultural backgrounds. Thus, it is critical to devise an intervention that fosters a successful communication between NSs (ingroup) and NNSs (outgroup). A slew of research in the field of social psychology has provided support for structuring intergroup contact for reducing NSs' existing prejudices. Intergroup contact involves interaction between members of two groups (ingroup and outgroup) who do not seem to share similar identities, beliefs, and religions [42]. Intergroup contact is based on the assumption that contact across groups minimizes the alienation and promotes positive attitude toward members of outgroup. For an intergroup contact to be effective, the following five conditions should be met. First, within the contact situation, groups should have (or inculcated that they have) equal status. Second, groups should have shared objectives or common goals that make contact activities goal oriented. Third, there should be a sense of cooperation, rather than a competition between the groups for fulfilling the common goals. Fourth, there should be someone in the position of power who sanctions and regulates the contact situation. Fifth, the dynamic of the contact situation should be conducive to intergroup intimacy and encourage the members of ingroup to establish rapport with the members of outgroup. The violation of each one of the principles has been alleged to reduce the efficacy of intergroup contact [42, 43].

Pettigrew [43] maintained that the alteration of negative attitude through intergroup contact is a function of four interconnected processes, namely, learning about the outgroup, changing behavior, generating affective ties, and ingroup reappraisal. The first process is deemed to be most critical due to the fact that prejudice reduction is a direct consequence of correcting negative attitude harbored by the ingroup which occurs as a result of new learning about the outgroup. It is also important to note that the dynamics of contact situation acts as a catalyst for the attitude reform. Any alteration in the ingroup members' attitude should be preceded by a change in their behavior which is a response to the expectations of the situation. For example, if expectations of the situation call for accepting outgroup members, in response to those expectations, ingroup members modify their behaviors and, as a result, their attitude changes [43]. Although anxiety might be overwhelming in the initial encounters of the groups, as intergroup contact continues and a sense of intimacy augments between the two groups, this negative emotion would deplete and be gradually replaced with a sense of empathy for the members of outgroup. This friendship between the groups provides a fertile ground for improving positive attitude toward the outgroup as a whole. Finally, as a result of having more contact with members of the outgroup, ingroup members would revisit their established norms and customs, as they find them to be too restrictive and instead develop a perspective which is more universal. In other words, not only do ingroup members change their attitudes and become more accepting of the outgroup, but they also perceive that the norms they have set and ardently supported are not the only legitimate ones to manage the world [43].

Kang et al. [44] investigated the effect of a brief intergroup contact on American undergraduates' perception of international teaching assistants' (ITAs) teaching competence and speech performance. At the heart of this contact intervention, undergraduates engaged in doing some cooperative activities (solving puzzles) with ITAs. Comparing the results of undergraduates' ratings in the pretest and the posttest indicated that undergraduates rated ITAs' speech performance and teaching competence more highly in the posttest. Interestingly, those undergraduates who had the aversion to participate in the intervention owing to their prior negative experiences with ITAs underwent a more remarkable change in attitude toward ITAs' speech performance and teaching competence. The results of this study are



significant in that despite the short duration of the intervention, it brought about dramatic changes in undergraduates' attitude. The authors attributed this accomplishment to their strict adherence to the principles of optimal intergroup contact established by Allport.

In a similar study, Staples et al. [45] developed a structured contact program to investigate its effect on US undergraduate students' (USUGs) perception of ITAs' comprehensibility, accentedness, and instructional competence. In this study, USUGs met with ITAs once a week for an hour over a span of 8 weeks. Similar to the previous study, USUGs are involved in doing collaborative activities with ITAs aiming at accomplishing common goals. The results of the study revealed that as a result of participating in the structured contact program, USUGs' attitudes toward and perceptions of ITAs improved and they were manifested in their three outcome ratings. Both of these two studies provide evidence in support of reducing NS's preconception biases of ITAs' language ability through the successful application of an intergroup contact program.

### **3.3 L2 listening strategy instruction and self-efficacy**

As an effective approach to enhancing L2 listeners' self-efficacy and rendering them more efficient listeners both in classroom and real-life settings, L2 researchers and practitioners have emphasized equipping L2 listeners with an array of listening strategies. Given the fact that those listening strategies do not develop spontaneously, educators advocate developing carefully designed interventions to incorporate those strategies and instruct them to L2 listeners.

Broadly defined as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" ([46], p. 3), self-efficacy is regarded to determine what tasks individuals choose to perform, how willing they are to face challenges, and the level of persistence they devote to accomplishing them. The relationship between L2 listening self-efficacy and L2 listening performance has been explored in the literature. Chen [47] reported that self-efficacy beliefs among Taiwanese university students predicted their listening performance and its magnitude was larger than other variables, such as listening anxiety. In a similar study, Mills et al. [48] found a positive correlation between self-efficacy for listening and listening proficiency in their study, and both of these two constructs were inversely correlated with listening anxiety.

Self-efficacy in listening, however, can be enhanced through explicit instruction of listening strategies focusing on scaffolding of learning and learner reflection [49]. Strategies taught within this framework would be based upon listeners' needs and are specific to the task and the situation within which the task is performed. This type of strategy instruction accompanied by instructors' immediate feedback on the efficacy of the strategy employed would increase listeners' sense of control and draw their attention to the relationship between the strategy just used and the observable outcomes ensued [49]. In Graham's [50] study listeners were encouraged to jot down and keep diaries of the listening strategies they employed in accomplishing assigned tasks. The researchers then perused the strategies used and rectified those less efficient ones and encouraged the listeners to use new strategies. This model of intervention improved listeners' self-efficacy and helped them gain more control over the tasks they performed.

Another listening strategy reported to have salubrious effect on L2 listeners' self-efficacy is verbalization. According to this model, first employed by Schunk and Rice [51], listeners think aloud the strategies they plan to use prior to performing tasks after they have been modeled by their teachers. Verbalization not only draws the attention of the listeners to the strategies and facilitates the encoding

of upcoming information, but it also provides an opportunity for the listeners to have the veracity of their selected strategies confirmed by their teachers. Thus, if there is a mismatch between the strategies verbalized by the listeners with those modeled by their teachers, the teacher can intervene and rectify those mismatches. Taken as a whole, self-efficacy and listening performance are both amenable to improvement which can be achieved through judicious selection and instruction of effective listening strategies. What is more, it is assumed that L2 listeners with stronger self-efficacy would be more willing to run the risk of exposing themselves to real-life interactions involving NSs and would be more tolerant of the harsh criticisms of NSs.

#### **4. Implications and future research directions**

There are some important implications that researchers and educators can draw from the findings of the existing research investigated in this desktop review. First, researchers should be informed of the fact that NSs' judgments of NNSs' speech performance involve a varying degree of listener bias. Any research that involves subjective judgments of NS listeners should control such confounding variables and curtail their intervening effects. Second, intelligibility is as much a function of listeners' effort as that of speakers, meaning that the intelligibility of speech is not solely determined by speakers but by listeners. In measuring the intelligibility of an L2 speech variety, listeners play an active role. A speech sample might be highly intelligible for a particular group of listeners but less intelligible for another group. Communication is a two-way street. Sharing responsibility between both speakers and listeners would be the first step to take for successful communication. Finally, acknowledging the active role of listeners in determining L2 speech intelligibility challenges the research instruments prevalently used in research for measuring speech intelligibility. The stimuli used in intelligibility-based research are recorded speeches that do not provide an opportunity for listeners to employ effective communication strategies and to negotiate meaning with speakers [28]. Thus, intelligibility remains to be determined still solely by speakers. Future research should take the initiative to utilize interactive stimuli in which intelligibility is more realistically measured as a joint effort between a listener and a speaker as it is what is expected to happen in real-life interactions.

Given the importance attached to listeners as active contributors to speech intelligibility and communication success between NSs and NNSs, L2 pronunciation educators would require to dedicate a substantial amount of their instruction to introducing and practicing successful communication strategies such as how to paraphrase, do circumlocution, and use nonlinguistic signals. Additionally, in lieu of setting NS pronunciation norms and encouraging L2 learners to approximate their pronunciations to those norms, educators should emphasize the pronunciation features which contribute more to speech intelligibility and prioritize them over those less critical features in their instruction [28]. As of yet, research on the efficacy of this type of instruction is scarce. Future research will be needed to determine to what extent this type of instruction promotes the communication between NS and NNS.

It is also important to note that those L2 learners who experience varying degrees of bias in their encounter with NSs tend to report having lower self-efficacy expectations, which would, as a consequence, impair their self-estimate of their language abilities. Self-efficacy expectations would predict one's performance beyond their true abilities. Those L2 learners with lowered self-efficacy expectations would be less willing to initiate and maintain interaction with NSs both in classroom and

real-life settings. This reluctance on the part of L2 learners would exacerbate the existing bias toward them by NS. To mitigate the bias, if not eliminate it, educators can devise interventions which would foster L2 learners' self-efficacy through strategy instruction and other methods such as providing them with supportive mentors. By fortifying L2 learners' self-efficacy, they would be more encouraged to participate in interactions involving NSs. As a result of more interaction, the intensity of bias held by NSs toward that particular group of NNSs decreases.

With respect to listener background variables, researchers should be cognizant of the fact that some listener-related variables such as listeners' first language status and the amount of their exposure to accented varieties of English are more influential to listeners' perceptions of NNSs' speech than other variables (e.g., listeners' linguistic knowledge and their prior teaching experience). Thus, those variables warrant more attention in selecting listeners for rating NNSs' speech, as they might exert more potent influence and compromise the reliability of the assessment. On the other hand, as pointed out by Kang et al. [3], the effects of the latter variables are more contextually determined and should be considered regarding the type of assessment being administered. For example, if the purpose of speech assessment is evaluating the nuances of pronunciation, listeners' linguistic knowledge and their educational background should be considered for selecting listeners as raters. Additionally, the way that the prior studies have operationalized listener variables needs to be rectified. For example, Kang et al. [3] operationally defined listeners' linguistic sophistication as a function of three factors: (a) the number of foreign languages they spoke, (b) the number of years they studied foreign languages, and (c) the number of linguistic courses they had taken. However, this definition needs to be improved given that with the spread of globalization and emergence of English as an international language (EIL), the concept of foreign language is becoming ambiguous. Thus, future research should take initiatives to address these limitations marked in the prior studies.

## **5. Conclusion**

The current chapter, which was a desktop review, sought to provide an overview of various listener background variables that would influence oral performance ratings. Although the effects of these listener-related variables have been underemphasized in assessing the oral performance of L2 learners, researchers should take their influence into account and endeavor to make the potential contributions of these trait-irrelevant variables as negligible as possible. Listener training is assumed to mediate these extraneous variables. Through training, listeners are equipped with the necessary skills required to rate speech performances of L2 speakers more objectively using predetermined criteria. The effect of listener bias on the evaluation of L2 speech has also been researched in social contexts. As reported in the previous literature, the listeners who harbor negative attitudinal perspectives toward the speakers of a particular social group, especially a stigmatized one, have the proclivity to encode a distorted perception of their speech and more often than not find the speakers unintelligible. Structured intergroup contact, for example, can be a program devised to address the listeners' negative attitudes and reduce their bias. Explicit instruction of L2 listening strategies can also be effective in strengthening L2 listeners' self-efficacy and make them more motivated to embrace the challenges involved in participating in social interactions with NSs and encourage them to regard this as an opportunity to fortify their nascent oral skills. However, research on the listener role in communication is still in its infancy, and future studies should address this issue more comprehensively.

IntechOpen

IntechOpen

### **Author details**

Mohammadreza Dalman and Okim Kang\*  
Northern Arizona University, Flagstaff, USA

\*Address all correspondence to: [okim.kang@nau.edu](mailto:okim.kang@nau.edu)

### **IntechOpen**

© 2019 The Author(s). Licensee IntechOpen. This chapter is distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/3.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. 



## References

- [1] Kang O. Impact of rater characteristics and prosodic features of speaker accentedness on ratings of international teaching assistants' oral performance. *Language Assessment Quarterly*. 2012;**9**(3):249-269
- [2] Kang O, Rubin DL. Reverse linguistic stereotyping: Measuring the effect of listener expectations on speech evaluation. *Journal of Language and Social Psychology*. 2009;**28**(4):441-456
- [3] Kang O, Rubin R, Kermad A. The effect of training and rater differences on oral proficiency assessment. *Language Testing*. 2019;**36**(4):481-504
- [4] Wigglesworth G. Influences on performance in task-based oral assessments. In: *Researching Pedagogic Tasks*. Abingdon: Routledge; 2013. pp. 196-219
- [5] Fayer JM, Krasinski E. Native and nonnative judgments of intelligibility and irritation. *Language Learning*. 1987;**37**(3):313-326
- [6] Kang O. Relative salience of suprasegmental features on judgments of L2 comprehensibility and accentedness. *System*. 2010;**38**(2):301-315
- [7] Santos T. Professors' reactions to the academic writing of nonnative-speaking students. *Tesol Quarterly*. 1988;**22**(1):69-90
- [8] Brown A. The effect of rater variables in the development of an occupation-specific language performance test. *Language Testing*. 1995;**12**(1):1-5
- [9] Kim YH. An investigation into native and non-native teachers' judgments of oral English performance: A mixed methods approach. *Language Testing*. 2009;**26**(2):187-217
- [10] Zhang Y, Elder C. Judgments of oral proficiency by non-native and native English speaking teacher raters: Competing or complementary constructs? *Language Testing*. 2011;**28**(1):31-50
- [11] Bent T, Bradlow AR. The interlanguage speech intelligibility benefit. *The Journal of the Acoustical Society of America*. 2003;**114**(3):1600-1610
- [12] Major RC, Fitzmaurice SF, Bunta F, Balasubramanian C. The effects of nonnative accents on listening comprehension: Implications for ESL assessment. *Tesol Quarterly*. 2002;**36**(2):173-190
- [13] Munro MJ, Derwing TM, Morton SL. The mutual intelligibility of L2 speech. *Studies in Second Language Acquisition*. 2006;**28**(1):111-131
- [14] Kang O, Thomson R, Moran M. The effects of international accents and shared first language on listening comprehension tests. *Tesol Quarterly*. 2019;**53**(1):56-81
- [15] Derwing TM, Munro MJ. Accent, intelligibility, and comprehensibility: Evidence from four L1s. *Studies in Second Language Acquisition*. 1997;**19**(1):1-6
- [16] Gass S, Varonis EM. The effect of familiarity on the comprehensibility of nonnative speech. *Language Learning*. 1984;**34**(1):65-87
- [17] Kennedy S, Trofimovich P. Intelligibility, comprehensibility, and accentedness of L2 speech: The role of listener experience and semantic context. *The Canadian Modern Language Review*. 2008;**64**(3):459-489
- [18] Carey MD, Mannell RH, Dunn PK. Does a rater's familiarity with a

candidate's pronunciation affect the rating in oral proficiency interviews? *Language Testing*. 2011;**28**(2):201-219

[19] Ockey GJ, French R. From one to multiple accents on a test of L2 listening comprehension. *Applied Linguistics*. 2014;**37**(5):693-715

[20] Thompson I. Foreign accents revisited: The English pronunciation of Russian immigrants. *Language Learning*. 1991;**41**(2):177-204

[21] Adank P, Evans BG, Stuart-Smith J, Scott SK. Comprehension of familiar and unfamiliar native accents under adverse listening conditions. *Journal of Experimental Psychology: Human Perception and Performance*. 2009;**35**(2):520

[22] Kuhl PK. Human adults and human infants show a "perceptual magnet effect" for the prototypes of speech categories, monkeys do not. *Perception & Psychophysics*. 1991;**50**(2):93-107

[23] Hsieh CN. Rater effects in ITA testing: ESL teachers' versus American undergraduates' judgments of accentedness, comprehensibility, and oral proficiency. *Spaan Fellow Working Papers in Second or Foreign Language Assessment*. 2011;**9**:47-74

[24] Lambert WE, Hodgson RC, Gardner RC, Fillenbaum S. Evaluational reactions to spoken languages. *The Journal of Abnormal and Social Psychology*. 1960;**60**(1):44

[25] Rubin DL, Smith KA. Effects of accent, ethnicity, and lecture topic on undergraduates' perceptions of nonnative English-speaking teaching assistants. *International Journal of Intercultural Relations*. 1990;**14**(3):337-353

[26] Rubin DL. Help! My professor, (or doctor or boss) doesn't talk English. In: Martin JN, Nakayama TK, Flores LA,

editors. *Readings in Intercultural Communication: Experiences and Contexts*. Boston, MA: McGraw-Hill; 2002. pp. 127-137

[27] Garrett P. *Attitudes to Language*. Cambridge: Cambridge University Press; 2010

[28] Lindemann S, Subtirelu N. Reliably biased: The role of listener expectation in the perception of second language speech. *Language Learning*. 2013;**63**(3):567-594

[29] Rubin DL. Nonlanguage factors affecting undergraduates' judgments of nonnative English-speaking teaching assistants. *Research in Higher Education*. 1992;**33**(4):511-531

[30] Brown K. American college student attitudes toward non-native instructors. *Journal of Cross-Cultural and Interlanguage Communication*. 1992;**11**(3):249-266

[31] Hu G, Lindemann S. Stereotypes of Cantonese English, apparent native/non-native status, and their effect on non-native English speakers' perception. *Journal of Multilingual and Multicultural Development*. 2009;**30**(3):253-269

[32] Smith LE, Nelson CL. International intelligibility of English: Directions and resources. *World Englishes*. 1985;**4**(3):333-342

[33] Munro MJ, Derwing TM. Foreign accent, comprehensibility, and intelligibility in the speech of second language learners. *Language Learning*. 1995;**45**(1):73-97

[34] Van Wijngaarden SJ. Intelligibility of native and non-native Dutch speech. *Speech Communication*. 2001;**35**(1-2):103-113

[35] Munro MJ. Foreign accent and speech intelligibility. *Phonology*

and second language acquisition. 2008;**5**:193-218

[36] Wolff H. Intelligibility and inter-ethnic attitudes. *Anthropological linguistics*. 1959;**1**:34-41

[37] Xi X, Mollaun P. Investigating the utility of analytic scoring for the TOEFL Academic Speaking Test (TAST). *ETS Research Report Series*. 2006;**2006**(1):1-71

[38] Xi X, Mollaun P. Using raters from India to score a large-scale speaking test. *Language Learning*. 2011;**61**(4):1222-1255

[39] Winke P, Gass S, Myford C. Raters' L2 background as a potential source of bias in rating oral performance. *Language Testing*. 2013;**30**(2):231-252

[40] Cumming A. Expertise in evaluating second language compositions. *Language Testing*. 1990;**7**(1):31-51

[41] Shohamy E, Gordon CM, Kraemer R. The effect of raters' background and training on the reliability of direct writing tests. *The Modern Language Journal*. 1992;**76**(1):27-33

[42] Allport GW, Clark K, Pettigrew T. *The Nature of Prejudice*. Cambridge, MA: Addison-Wesley; 1954

[43] Pettigrew TF. Intergroup contact theory. *Annual Review of Psychology*. 1998;**49**(1):65-85

[44] Kang O, Rubin D, Lindemann S. Mitigating US undergraduates' attitudes toward international teaching assistants. *Tesol Quarterly*. 2015;**49**(4):681-706

[45] Staples S, Kang O, Wittner E. Considering interlocutors in university discourse communities: Impacting US undergraduates' perceptions of ITAs through a structured contact

program. *English for Specific Purposes*. 2014;**35**:54-65

[46] Bandura A. Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*. 1993;**28**(2):117-148

[47] Chen HY. Relationship between EFL Learners' Self-Efficacy Beliefs and English Performance [dissertation]. Tallahassee, Florida: Florida State University; 2007

[48] Mills N, Pajares F, Herron C. A reevaluation of the role of anxiety: Self-efficacy, anxiety, and their relation to reading and listening proficiency. *Foreign Language Annals*. 2006;**39**(2):276-295

[49] Graham S. Self-efficacy and academic listening. *Journal of English for Academic Purposes*. 2011;**10**(2):113-117

[50] Graham S. Learner strategies and self-efficacy: Making the connection. *The Language Learning Journal*. 2007;**35**(1):81-93

[51] Schunk DH, Rice JM. Strategy verbalization effects on Self-efficacy and listening comprehension. *The Journal of Experimental Education*. 1983;**5**:49-54