

Disclosures

- Financial Disclosures:
 - *Clinical Applications of Linguistics to Speech-Language Pathology: A Guide for Clinicians* (Routledge, 2023)
- Nonfinancial Disclosures:
 - I like coffee
 - I designed ISHA's logo




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Accent impact index: Novel psychosocial tool for collecting client-reported outcomes



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Outcomes

- At the end of this session, participants will be able to
 1. explain the difference between accent **modification** and accent **reduction** and how it relates to the multifaceted ways that one's accentedness impacts their life.
 2. identify the context/situation specific positive and negative ways a foreign accent can impact a speaker.
 3. formulate functional client-centered goals for accent modification clients.

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Abstract

- As a clinician, you know that speaking with a foreign accent is a communication difference, not a disorder.
- The conventional diagnose-then-treat paradigm leads to the assumption that a speaker seeks to eliminate or reduce this difference in their speech.
- However, accentedness is a complex phenomenon: Accents are critical to the cultural and linguistic identity of speakers, and the impact of one's accent on the life of a speaker is not always proportional to the extent that an accent is noticeable (or its perceived "thickness").
- In other words, while in general we can assume that the more severe the disorder the larger its impact on an individual, when it comes to accentedness, the measure of impact is related to many internal and external factors not usually addressed in the curricula of SLP programs.
- Clinicians wishing to work with accent modification clients need a way to evaluate the context- and situation-specific ways that one's foreign accent might affect them in order to write culturally-aware and functional goals, and a way to baseline and track progress of intervention.
- A client-reported outcome measure is a crucial component of client-centered approaches. This is the first such tool for the purpose of accent modification intervention.

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Definitions

- Accented speech
- Foreign accent
- Accentedness
- Intelligibility
- Comprehensibility

} [subjective]

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Speech-Based Biases

- Accented instructors are evaluated more negatively, including in terms of intelligibility and comprehensibility (Hendriks et al., 2021).
- Seeing an Asian face can make listeners perceive speech as more accented and less intelligible (Rubin, 1992; Rubin et al., 1999; Rubin & Smith, 1990; Yi et al., 2014; Yi et al., 2013; Zheng & Samuel, 2017).
- Spanish-influenced English-speaking students in the U.S. rated lower than native English speakers (Ford, 1984).
- Attitudes of speakers (towards listeners, the language, or a situation) affect judgement of accentedness, intelligibility, and proficiency (Hutchinson et al., 2019).

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Controlling Accentedness

- Measure
 - Baseline
 - Track progress
- Write goals

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Measuring Accentedness

- Accentedness: A measure from the listener's perspective
- The speaker's perspective:
 - An accent's impact on one's life may not be proportional to the listener's perspective of accentedness

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Measuring Accentedness

- Is awareness an appropriate goal?
 - This view favors the listener (how distracting they find an accent) over the speaker (the client)
 - Is that client-focused? [NO!]

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Measuring Accentedness

- Replace "severity of accentedness" (a disorder-focused approach) with "experience of the speaker"
 - Involves sociolinguistic factors such as language and group identities, and attitudes
 - Involves also thinking about power balances among languages and their varieties, and how these impact speakers



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The Linguistics of a "Foreign" Accent

- Phonetics and Phonology
- Sociolinguistics

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Phonetics and Phonology

- Sound Systems
- Phonological Rules
- Prosody

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Phonetics and Phonology

- Sound Systems
- Phonological Rules
- Prosody

English phonemes	Greek phonemes	Hebrew phonemes
p b t d k g	ρ β τ δ κ γ	פ ב ת ד כ ג ך
m n ŋ	μ ν η	מ נ ן
f v θ ð s z ʃ ʒ h	φ ψ θ ð σ ζ χ γ	פֿ בֿ סֿ זֿ שֿ זֿ ח ה
w	υ	וֿ
j	ι	יֿ
l	λ	לֿ

• 'I love you'

Greek	σ'αγαπώ	/sɑgɑpɔ/
English	I love you	/aɪ lʌv ju/
Russian	я тебя люблю	/ja tʲɛbʲɪɑ lʲublʲu/
Hebrew	אני אוהב אותך	/ʔani ʔohev ʔotxɑ/
German	ich liebe dich	/ɪç li:bə dɪç/

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Phonetics and Phonology

- Sound Systems
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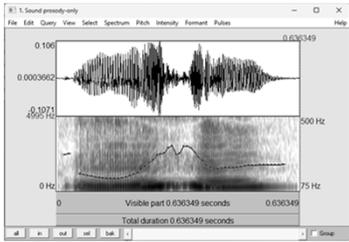


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Phonetics and Phonology

- Sound Systems
- Phonological Rules
- Prosody



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Sociolinguistics

- Sociolinguistics is the study of how social factors impact the use of language and influence language change and language shift
- Language Attitudes

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Language Attitudes & Bias

- Social stereotypes and spoken language
 - Matched-guise technique (Lambert et al., 1960)
 - English and French students in Quebec rated English and French speakers on a scale of positive-to-negative traits (likeability, reliability, education, intelligence)
 - English speakers were consistently rated higher on positive by both English and French speaking students
 - The recordings were of the **same** bilingual individuals (same speaker, same message, only **language** was different)

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Language Attitudes & Bias

- The **status of a language in a community** impacts how its speakers are perceived
- The **status of the speakers** can influence the relative status of a language or language variety
 - E.g., Spanish in Latin America vs. in the U.S.
 - Compared to Indigenous languages of Latin America, Spanish is prestigious
 - In the U.S. Spanish is stigmatized
 - Speakers with Spanish accents are regularly subjected to biases (e.g., Ford, 1984; Hosoda et al., 2012).

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Group Identity

- Move from lower to higher status
 - Labov (1966) study – sales attendants in NY dept stores modifying production of /r/ to match clients
- But research shows that large scale movement across groups is often countered by group identity
 - Countering lower with higher
 - MacGregor-Mendoza (2015) – Spanish-speaking immigrants from the Latin American educated elites chose to maintain Spanish, despite its stigmatized status in the US
 - In fact, group identity may involve shunning new members
 - Labov (1963) – Martha's Vineyard study

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Working with Clients

- The importance of a speaker's language & its role in their identity
- Desire to improve an accent in a target language ≠ desire to switch communities
- Goals for working on accent are affected by multiple considerations
- The client's experiences matter:
 - Allow the client to educate you rather than educating the client

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Accent modification intervention

- "Generalizing" comm strategies beyond treatment session takes on a different meaning:
 - It is selective:
 - Situational contexts may not be predictable by a bystander (or by a clinician)
 - Help speakers control the influence of one language over another in certain situations

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Accent Impact Index

- Client-reported outcomes are a crucial component of client-centered approaches to intervention (Yorkston & Baylor, 2019)
- Recall:
 - Salience of accent is not necessarily proportional to the impact on one's life
 - It is difficult to predict what situations or contexts a speaker may have difficulty with
 - In contrast to disorders, the impact can be positive (beneficial)

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Accent Impact Index

- The Index
 - Encourages clients to reflect on **their needs** for accent modification
 - Helps develop appropriate, informed **goals** for this intervention
 - Provides a tool for measuring **baseline** and tracking **progress**

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Accent Impact Index

- Speaker's Awareness of Accent Impact
 - About how noticeable or distracting it is and how it affects them personally
- Speaker's judgement of Listeners' Impression
 - About their impression of how noticeable it is to others
- Communicative Effectiveness & Intelligibility
 - Does the accent get in the way of comm (including with Siri)?
- Activity and Participation
 - Effect on personal, social, daily life

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Accent Impact Index

My accent...	never	rarely	sometimes	often	always
	0	1	2	3	4
	0	1	2	3	4
	0	1	2	3	4
	0	1	2	3	4
	0	1	2	3	4
	0	1	2	3	4
Subtotal 5: Add up each column, then provide sum: []					

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Accent Impact Index: Scoring

- There is no WNL analog in the index
- There is no basis for comparing the scores across speakers/clients
 - The client responses only relate to their individual experiences and are not comparable
- Each client's score is a baseline for that individual
 - More items = more personalized (so add custom client questions)

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Accent Impact Index: Scoring

- Possible scores
 - Without custom client items, highest possible score is 136
- No basis for comparison across clients
 - A score of 97 may not have a higher impact on their life than a client with 35
- Client's total is their baseline before intervention
 - Can be compared to post-intervention totals to measure progress.
 - Progress would be reflected in a lower overall score on the index

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But... Siri

- One measure in our index lends itself to the traditional clinical evaluate-and-treat paradigm:
 - Being understood by digital assistants such as Siri or Alexa
 - Relies on processing of acoustic signals
 - Technically purely a matter of intelligibility (can have a severity rating)
 - There's an objective way to assess it (using the program)
 - Is a common self-selected intervention target

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