

The Contributions of Talker Familiarity and Individual Talker Characteristics to Foreign Language Listening Comprehension

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Background

- Learning a second language (L2) can be difficult for adults
- L2 listening is usually slower, more effortful, and less accurate than native language listening

Background

- **Laboratory-based** research indicates that both talker familiarity and talker intelligibility influence listening comprehension accuracy
- The goal of the present study is to investigate the relative contributions of these factors on listening comprehension by learners in a **classroom setting**

Talker Familiarity

- Native and L2 listeners exhibit greater listening comprehension accuracy when listening to familiar talkers as opposed to unfamiliar talkers
→ **The talker familiarity effect**

Talker Familiarity

- Adult L2 learners exhibit more accurate listening comprehension when they have been exposed to a variety of L2 talkers during training in laboratory-based studies (Pisoni & Logan 1991, Jacewicz 2002, etc.)

Talker Familiarity

- Thus, talker familiarity may be an especially critical issue in foreign language (FL) settings where learners' most familiar talker (their teacher) is also typically the only talker they are regularly exposed to

Talker Intelligibility

- Some talkers are inherently more intelligible to listeners than others (Markham & Hazan 2004)
→ **The talker intelligibility effect**

Research Question

What are the relative contributions of

1. talker familiarity; and
2. individual talkers' speech (talker characteristics/intelligibility)

to FL listening comprehension?

Hypotheses

1. **Talker Familiarity Hypothesis**
FL learners will demonstrate more accurate comprehension of a familiar talker's speech than unfamiliar talkers' speech
2. **Talker Intelligibility Hypothesis**
All learners will demonstrate more accurate comprehension of (a) particular talker(s) independent of their familiarity with the talker

Listening Study

- Students from beginning to low-intermediate German FL classes participated in German listening tasks
- Two phases
 - First phase was a pilot study

Phase One: Pilot Study

- Two teachers were recorded producing nonwords containing a variety of German vowels, individual words, and sentences
- Their students performed three listening tasks:
 1. Vowel identification task
 2. Word dictation task
 3. Sentence dictation task

Pilot Study Subjects

- 16 students recruited from two first-semester German language classes
- Teacher 1: female native German speaker
- Teacher 2: male native German speaker

Pilot Study Findings

- **No evidence for a talker familiarity effect** in any of the three tasks
- **Evidence for a talker intelligibility effect** in only the word dictation task (Talker 2 was more intelligible than Talker 1 to most students)

Phase Two

- Larger number of teachers
- Larger number of students
- Greater inter-talker differences
 - Half of the talkers were non-native speakers of German
- Includes a listening comprehension task in addition to a dictation task

Subjects

	Class Level	Teacher Gender	Native /Non-native Speaker of German	# of Participating Students
Teacher A (Class A)	Second-semester	F	Native	10
Teacher B (Class B)	Second-semester	F	Native	17
Teacher C (Class C)	Second-semester	M	Non-native	12
Teacher D (Class D)	First-semester	F	Non-native	22

Tasks

1. Listening Comprehension Task

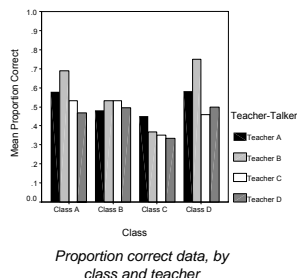
Twenty listening comprehension items followed by four multiple choice answers of which only one was correct

2. Sentence Dictation Task

Four sentences for the dictation task

Listening Comprehension Task

- Main effect of talker ($p < .05$)
 - **Talker intelligibility effect**
- No interaction of talker and class
 - **No talker familiarity effect**



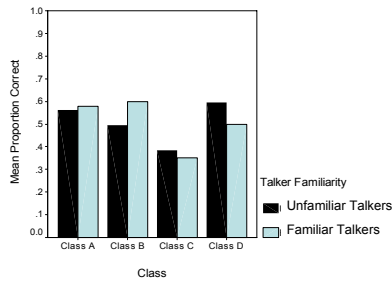
Listening Comprehension Task

- Teacher B most intelligible overall; Teachers C and D least intelligible

Teacher A	Teacher B	Teacher C	Teacher D
52.7% (26)	60.3% (32)	46.7% (24)	45.8% (24)

Percent correct data averaged across all listeners (students)

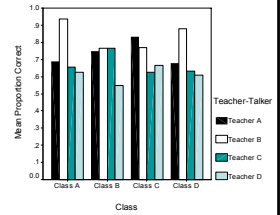
Listening Comprehension Task



Proportion correct data, by class and whether the talker is familiar or unfamiliar

Sentence Dictation Task

- Main effect of talker ($p < .05$)
→ **Talker intelligibility effect**
- No interaction of talker and class
→ **No talker familiarity effect**



Proportion correct data, by class and teacher

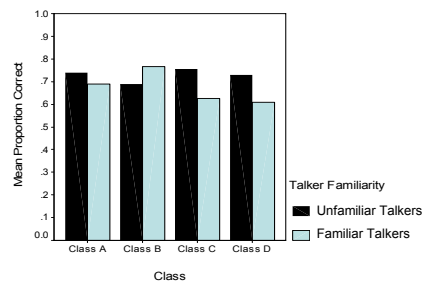
Sentence Dictation Task

- Teacher B was most intelligible overall; Teachers C and D least intelligible

Teacher A	Teacher B	Teacher C	Teacher D
73.3% (19)	83.3% (19)	67.1% (25)	60.5% (25)

Percent correct data averaged across all listeners (students)

Sentence Dictation Task



Proportion correct data, by class and whether the talker is familiar or unfamiliar

Phase Two Findings

- **Talker intelligibility effect**
- **No talker-familiarity effect**

General Discussion

- Findings were consistent in **both phases** of the study
- **Support for the Talker Intelligibility Hypothesis**

Discussion

- In fact, in both phases of this study, most students exhibited the **opposite pattern** of what was expected in terms of talker familiarity

Discussion

- These findings appear to be inconsistent with the results reported in earlier, laboratory-based studies, where L2 learners performed better with familiar than unfamiliar talkers (e.g., Nygaard *et al.* 1994, *etc.*)

If individual talker intelligibility were held constant, would we find a talker familiarity effect?

Discussion

- In Phase Two, the overall intelligibility of Talkers A and B (native German speakers) was greater than the intelligibility of Talkers C and D (non-native German speakers)
 - Interpret this with **caution**—talker native language was **not** systematically investigated in this study!
- Correlation with rate of speech?

Discussion

- Measurement of rate of speech revealed notable difference between native and non-native talkers

Native talkers		Non-native talkers	
Teacher A	Teacher B	Teacher C	Teacher D
23.12 sec	23.15 sec	18.88 sec	18.63 sec

Discussion

- Potential relationship between speech rate and intelligibility for L2 listeners (e.g., Conrad 1989, Bradlow & Pisoni 1998, Derwing and Munro 2001, *etc.*)

How does speaking rate affect L2 listening comprehension on various types of tasks?

Discussion

- Did not control specifically for individual learners' exposure to different talkers outside of class (or in class)
- If talker familiarity and variability are critical factors in L2 listening accuracy, then the effects of these factors are likely mediated by exposure to various talkers

Do individual learners' listening accuracy patterns (with respect to talker familiarity) differ depending on amount of exposure to different talkers?

Implications

- Good news for the traditional FL teaching model
 - Exposure primarily to the FL teacher's voice does not appear to limit learners' ability to comprehend other talkers of the L2

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