

Summary

- In American dialects, /ð, θ/ can be realized as [d]/[t] - a process referred to as fortition or [d]/[t]-stopping.
- [d]/[t]-stopping previously reported as a substrate effect in heritage communities in the Midwest (and elsewhere).
- Present study examines similar effect among older-aged Finnish heritage communities in Michigan's UP.
- Analyzed reading passage data from 43 older speakers.
- Reveals fortition process not as common in UP English.
- However, in cases of where (d/t)-stopping does occur, working-class males exhibit strongest preference for variant.

Background

- Interdental fricatives, ([ð]/[θ]) realized as coronal oral stops ([d]/[t]), is a well documented and complex linguistic feature.
 - Undergoing of a fortition process (i.e., [ð]/[θ] → [d]/[t]).
 - The following varieties exhibit this feature: Cajun English¹, African American English², and Wisconsin English^{3,4}.
- Furthermore, [d]/[t]-stopping in some rural American English speech communities is said to index not only ethnicity but also working-class³.

Present Study

- Michigan's Upper Peninsula (UP) is an excellent case to examine the linguistic feature & its complex variation w/in an immigrant speech community.
 - Rural region with a complex immigration history.
- Fortition of interdental fricatives has been documented in UP English^{3,5}:
 - However, limited quantitative accounts have been done.
- Present study draws on:
 - Reading passage data
 - A 43-speaker corpus of older-aged Finnish-heritage American English from Michigan's Marquette County.
 - Stratified by language-dominance, sex, and class.

GUIDING RESEARCH QUESTION:

- To what degree, if any, is [d]/[t]-stopping occurring in the speech of the older-aged Finnish-heritage speech community in Michigan's Upper Peninsula (UP)?
 - Do speakers exhibit this feature in a semi-conservative speech style (e.g., the reading of a passage)?
 - Do sociolinguistic trends exist for such data, and if so, do they lend support to the claim that this feature indexes working-class?

Dataset

- 1,161 tokens from reading passage task:
 - Tokens per speaker: 23 /ð/ and 4 /θ/
 - Various positions: word-initial, word-medial and word-final
 - Unique words: *the, they, that, there, then, them, thought, mouth, with, weather, and nothing.*

Table 1: Breakdown of tokens (by position) in passage task

Position	Ling. Variables		Total
	/ð/	/θ/	
Word-initial	22	1	23
Word-medial	1	1	2
Word-final	0	2	2
Total	23	4	27

- A 43-speaker sub-corpus out of 69-speaker corpus.⁶
 - Controlled variables:
 - Location (Marquette County, MI)
 - Age (59-100 yoa)
 - Heritage (Finnish)
 - Stratified variables:
 - Sex (male/female)
 - Socioeconomic status (working-/middle-class)
 - Lingua-dominance (Finnish-dominant bilinguals/English-dominant bilinguals/English monolinguals).

Table 2: Subset of the 69-speaker Finnish-American corpus

Age Groups	Bilingualism Subtotals		Total
	Bilinguals	Monolinguals	
Older	28	15	43
Middle	13	28	41
Younger	13	30	43

Table 3: Breakdown of 43-speaker sub-corpus

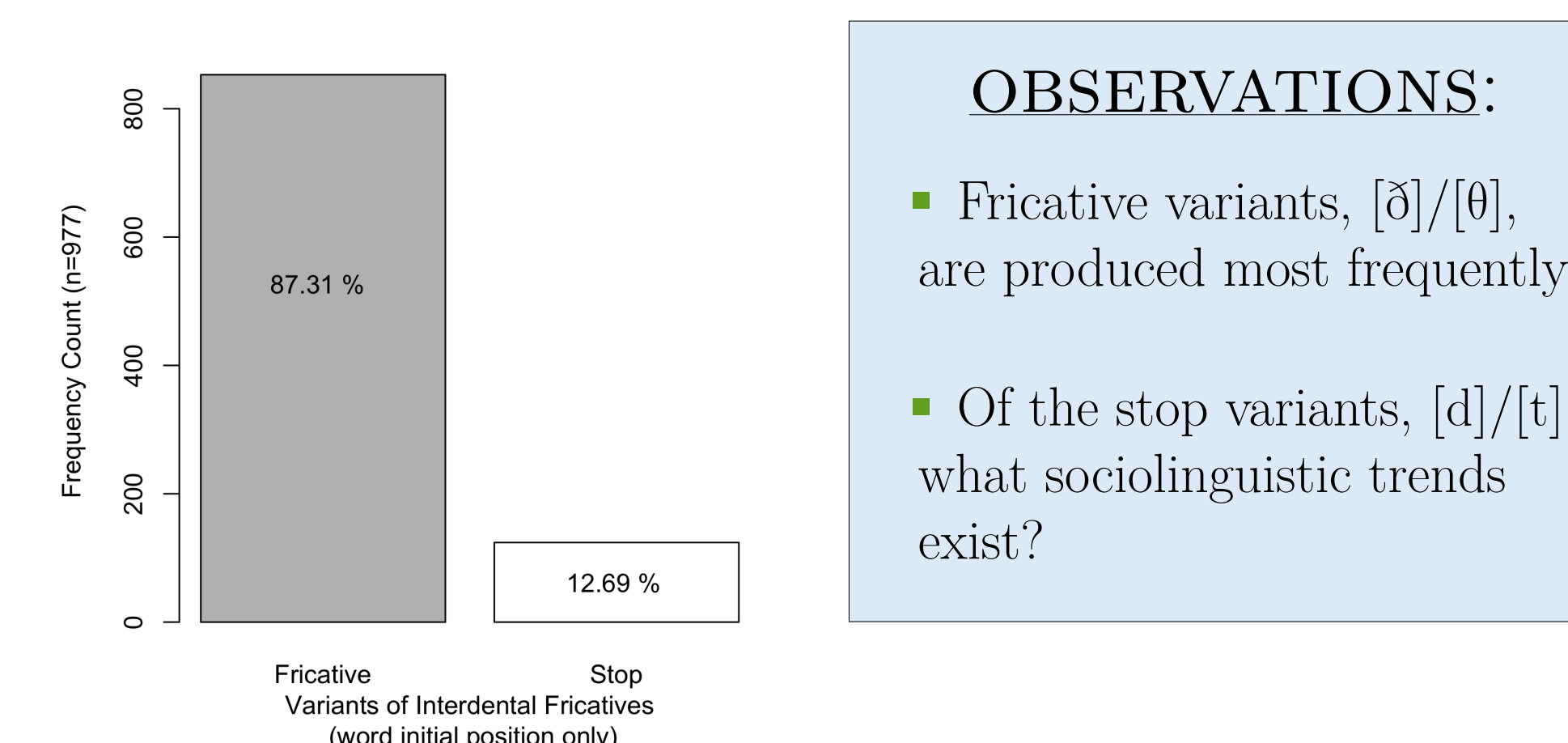
Sex	SES	FINN L1;	ENG L1;	ENG L1;	Total
		Bilingual	Bilingual	Monolingual	
Female	Middle	2	3	5	10
	Working	6	4	4	14
Male	Middle	2	3	3	8
	Working	5	3	3	11
Total		15	13	15	43

Methods

- Data comes from a reading passage task.
 - 27 words of potential tokens of interdental fricatives occur.
- For each case, the token produced by each speaker was determined to be either a fricative ([ð]/[θ]) or a oral stop ([d]/[t]) via spectrographic analysis⁷.
 - Determine frequency of [d]/[t]-stopping occurrence.
- The cases where [d]/[t]-stopping does occurs:
 - Statistical comparison (e.g., Chi-square of Independence)

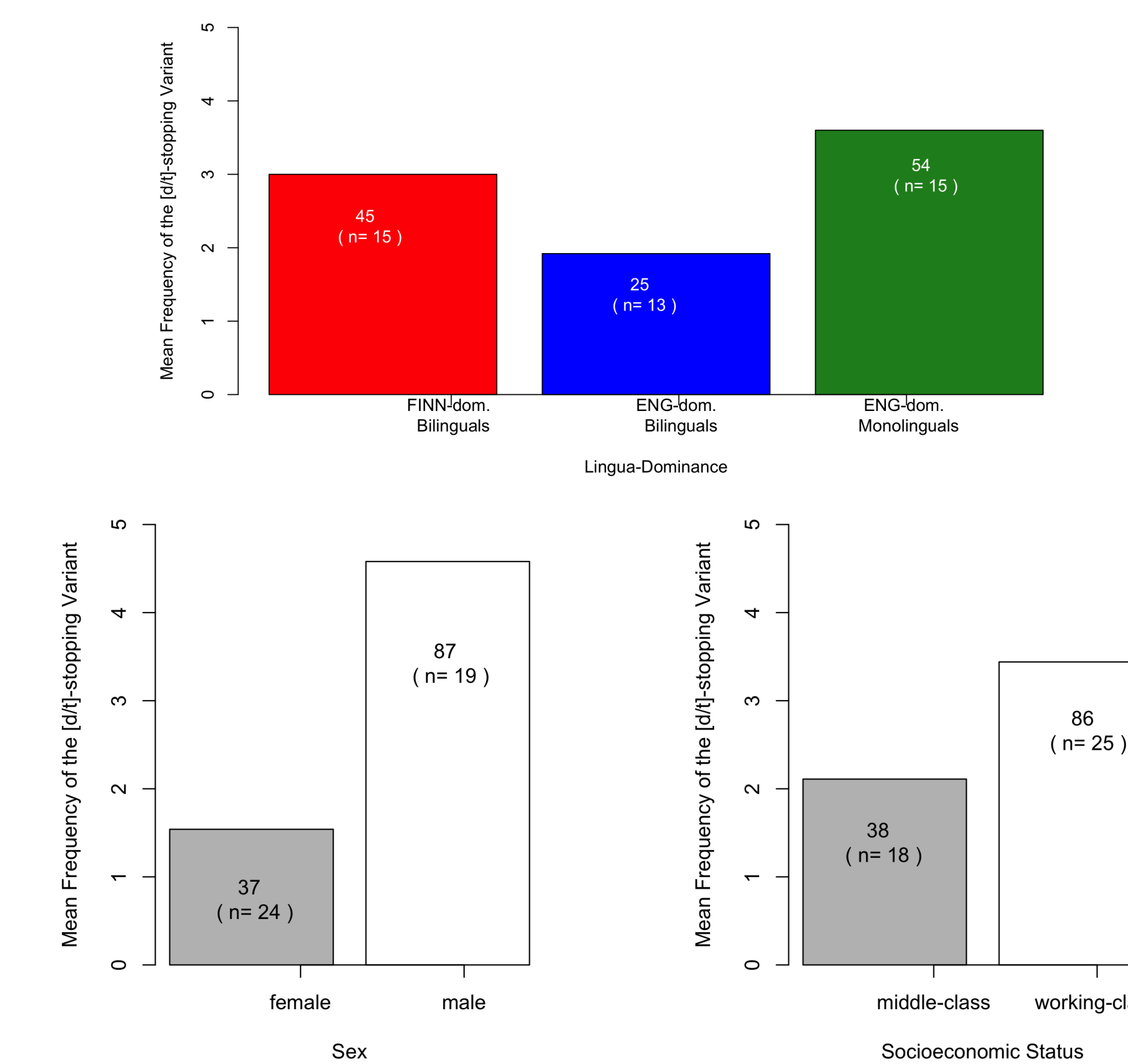
Results I: Global Distribution

Figure 1: Global distribution of [d]/[t]-stopping variable



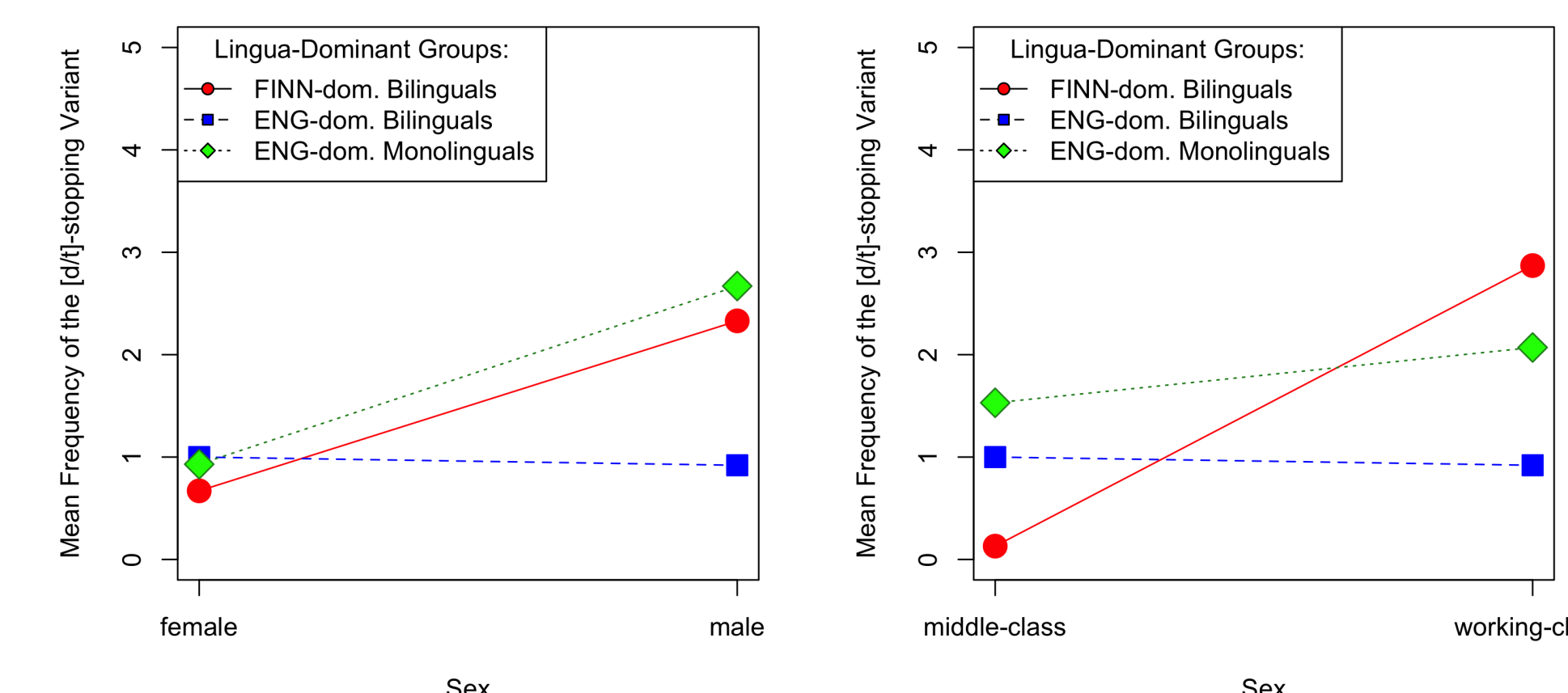
Results II: Main Effects

Figure 2: Main Effects of Sociolinguistic Variables



Results III: 2-way Interactions

Figure 4: Two-way Comparison



Results IV: 3-way Interactions

Figure 6: Three-way Comparison

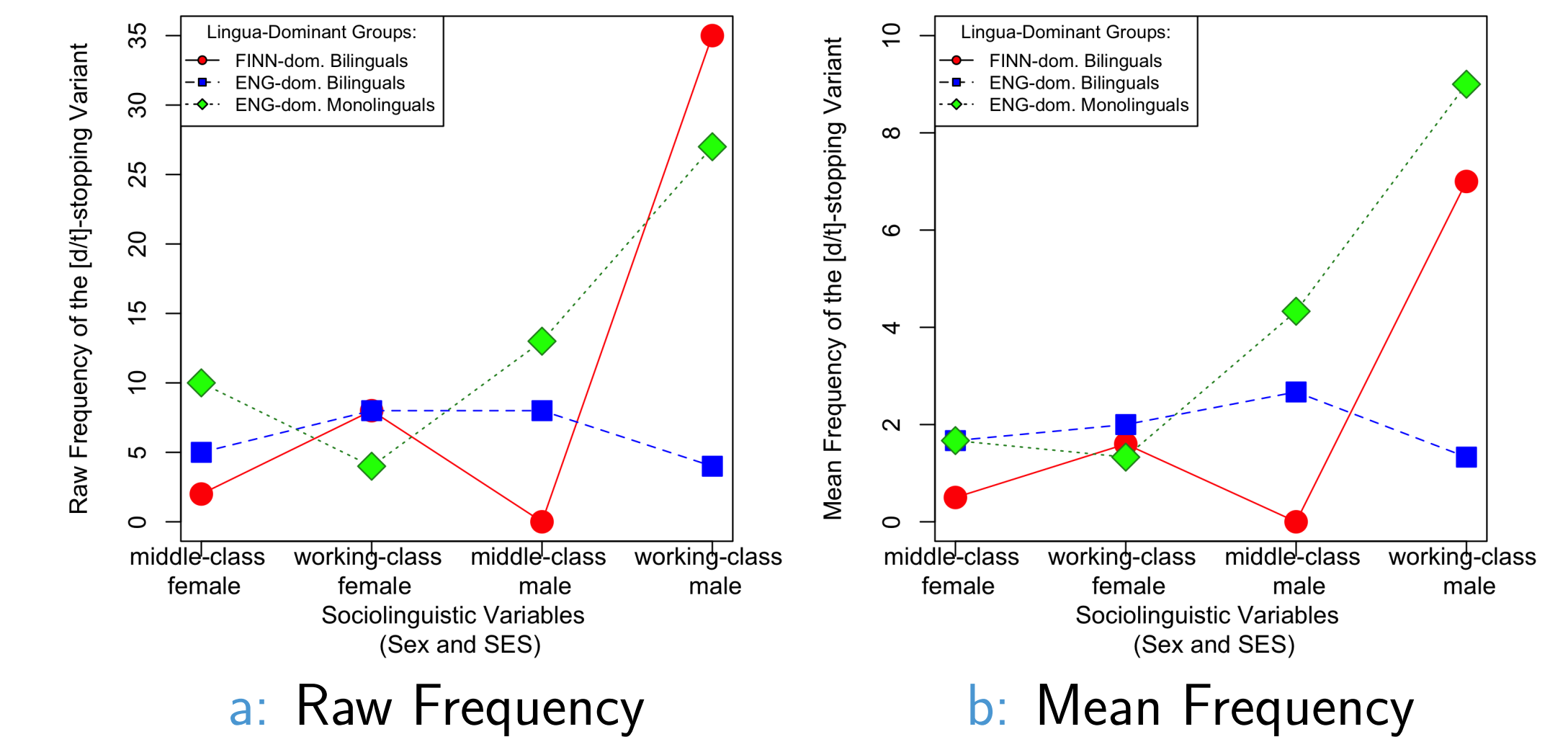


Table 4: Distribution of speakers' raw and mean frequency by Lingua-Dominance, Sex, and SES

Lingua-Dominance	Sex	SES	nSpeakers	Frequency	Mean
FINN-dom. Bilingual	female	MC	4	2	0.50
		WC	5	8	1.60
FINN-dom. Bilingual	male	MC	0	0	0.00
		WC	5	35	7.00
ENG-dom. Bilingual	female	MC	3	5	1.67
		WC	4	8	2.00
ENG-dom. Bilingual	male	MC	3	8	2.67
		WC	3	4	1.33
ENG-dom. Monolingual	female	MC	6	10	1.67
		WC	3	4	1.33
ENG-dom. Monolingual	male	MC	3	13	4.33
		WC	3	27	9.00

Discussion

- This study reveals:
 - [ð]/[θ]-variants produced far more often than [d]/[t]-variants.
 - In cases of the latter, [d]/[t] more often:
 - most often among working-class males
 - least among middle- and working-class females.
 - The frequency of [d]/[t]-stopping in this study does not support previously claims about UP English.⁵
 - Possible Cause: Conservative speech style
 - Nevertheless, the sociolinguistic trends reported do support the claim that this feature of UP English seems to index working-class.³
 - Furthermore, [d]/[t]-stopping indexes not only working-class but working-class masculinity.
 - Indicative of a prestigious linguistic marker for local speech and identity in Michigan's UP English speech community.

References

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