An analysis of speech disfluencies of Turkish speakers: Influence of educational background

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Abstract

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1. Introduction

2. Method

2.1. Participants

2.2. Procedure for collecting and analyzing the speech data

3. Data analysis and findings

	PREPARED SPEECH				UNPREPARED SPEECH		
	Mean±SD	Median (Min_Max)	p		Mean±SD	Median (Min_Max)	p
FILLED GAPS							
33-50-Year-Old Females							
Elementary/Middle School	2.22 ± 1.96	1.89 (0-5.15)	0.006**	2.22 ± 1.77	2.42 (0-4.66)	0.001**	
Bachelor's/Master's-Doctoral Degree	7.54 ± 4.02	6.79 (2.30-13.38)		7.58 ± 3.87	6.21 (3.92-14.18)		
33-50-Year-Old Males							
Elementary/Middle School	4.14 ± 3.76	5.10 (0.18-10.30)	0.073	3.28 ± 2.66	3.41 (0.17-6.53)	0.004**	
Bachelor's/Master's-Doctoral Degree	9.81 ± 4.01	9.71 (4.84-14.95)		9.86 ± 4.58	8.78 (3.42-17.21)		
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FALSE STARTS								
<u>33-50-Year-Old Females</u>								
Elementary/Middle School	0.45 ± 0.40	0.33 (0-1.25)	0.23	0.39 ± 0.35	0.34 (0-1.09)	0.86		
Bachelor's/Master's-Doctoral Degree	0.86 ± 0.65	0.88 (0-1.68)		0.40 ± 0.33	0.42 (0-0.97)			
<u>33-50-Year-Old Males</u>								
Elementary/Middle School	2.30 ± 1.83	1.68 (0.51-5.04)	0.16	1.81 ± 0.96	1.23 (0.90-3.37)	0.01*		
Bachelor's/Master's-Doctoral Degree	0.89 ± 0.24	0.85 (0.53-1.25)		0.82 ± 0.35	0.90 (0.17-1.14)			
<u>Over 50-Year-Old Females</u>								
Elementary/Middle School	0.79 ± 0.47	0.96 (0.20-1.47)	0.53	0.53 ± 0.39	0.49 (0-1.24)	0.01*		
Professor	1.02 ± 0.33	0.92 (0.61-1.49)		1.26 ± 0.49	1.19 (0.51-1.96)			
<u>Over 50-Year-Old Males</u>								
Elementary/Middle School	1.20 ± 0.73	0.97 (0.52-2.45)	0.80	0.86 ± 0.58	1.04 (0-1.55)	0.71		
Professor	1.02 ± 0.52	0.77 (0.44-1.73)		1.09 ± 0.74	0.83 (0.28-2.34)			
SLIPS OF THE TONGUE								
<u>33-50-Year-Old Females</u>								
Elementary/Middle School	0.36 ± 0.30	0.38 (0-0.83)	0.33	0.21 ± 0.16	0.25 (0-0.39)	0.77		
Bachelor's/Master's-Doctoral Degree	1.19 ± 0.19	0.09 (0-0.51)		0.18 ± 0.19	0.23 (0-0.49)			
<u>33-50-Year-Old Males</u>								
Elementary/Middle School	0.73 ± 0.30	0.69 (0.34-1.11)	0.03*	0.52 ± 0.24	0.61 (0.14-0.73)	0.21		
Bachelor's/Master's-Doctoral Degree	0.36 ± 0.28	0.35 (0-0.92)		0.29 ± 0.22	0.24 (0-0.67)			
<u>Over 50-Year-Old Females</u>								
Elementary/Middle School	0.31 ± 0.26	0.27 (0-0.61)	0.80	0.51 ± 0.33	0.58 (0-0.98)	0.053		
Professor	0.27 ± 0.18	0.33 (0-0.50)		0.18 ± 0.16	0.18 (0-0.39)			
<u>Over 50-Year-Old Males</u>								
Elementary/Middle School	0.63 ± 0.45	0.84 (0-1.13)	0.53	0.52 ± 0.30	0.34 (0.27-1.03)	1.00		
Professor	0.46 ± 0.39	0.44 (0.11-1.24)		0.44 ± 0.20	0.38 (0.25-0.84)			
REPETITIONS								
<u>33-50-Year-Old Females</u>								
Elementary/Middle School	0.23 ± 0.19	0.25 (0-0.60)	0.61	0.02 ± 0.05	0 (0-0.12)	0.46		
Bachelor's/Master's-Doctoral Degree	0.15 ± 0.15	0.08 (0-0.39)		0.02 ± 0.04	0.01 (0-0.12)			
<u>33-50-Year-Old Males</u>								
Elementary/Middle School	0.51 ± 0.81	0.21 (0-2.22)	0.38	0.48 ± 0.65	0.33 (0-1.84)	0.26		
Bachelor's/Master's-Doctoral Degree	0.10 ± 0.18	0 (0-0.48)		0.11 ± 0.20	0 (0-0.46)			
<u>Over 50-Year-Old Females</u>								
Elementary/Middle School	0.14 ± 0.18	0 (0-0.40)	0.38	0.35 ± 0.45	0.24 (0-1.23)	0.45		
Professor	0.31 ± 0.35	0.22 (0-1.01)		0.20 ± 0.02	0 (0-0.05)			
<u>Over 50-Year-Old Males</u>								
Elementary/Middle School	0.32 ± 0.46	0.16 (0-1.26)	0.80	0.14 ± 0.11	0.16 (0-0.27)	0.71		
Professor	0.34 ± 0.35	0.24 (0-0.87)		0.32 ± 0.37	0.15 (0-1.05)			

4. Discussion and conclusions

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References

- Revista de Logopedia Foniatría y Audiología* 31
- Journal of Speech, Language and Hearing Research* 41,
- Proceedings of ICSLP 2000*
- Language and Speech* 44
- Proceedings of the 14th International Conference of Phonetic Sciences*
- Cambridge grammar of English: a comprehensive guide*
- Journal of Personality and Social Psychology* 70
- Cognitive Psychology*, 37
- Cognitive Processes* 5,
- Language and The Rice University Studies* 66
- Language and Speech* 24
- Journal of Communication Disorders*, 31,
- Learning and Memory* 20
- The Neurocognition of Language*
- Proceedings of the European Conference on Speech Communication and Technology*
- Proceedings of DiSD '03*
- Conference on Spoken Language Processing (ICSLP) '92*
- Proceedings of the International Computer Speech and Language.*, 9,
- Language and Speech* 33
- Unpublished Doctoral Dissertation*
- Proceedings of International Conference on Spoken Language Processing*
- Memory and Cognition* 14,
- International Journal of Corpus Linguistics* 16