

Stress perception among Hungarian learners of English

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Outline



Stress deafness and Hungarians



Research design



Results and discussion



Conclusions



Future directions

Stress deafness and Hungarians

Stress deafness

- Stress deafness: difficulties distinguishing stress contrasts (Peperkamp & Dupoux, 2010)
- First researched by Dupoux et al. (1997) in the context of French and Spanish speakers
- Later research focusing on the same context (Dupoux et al., 2001; Dupoux et al., 2008)
- Polish (Domahs et al., 2012), Czech (Tlolková, 2018)

Stress deafness and Hungarians

- **Hungarian:** non-contrastive stress; word stress fixed on the first syllable
- Hungarian learners of English have difficulty perceiving English stress (Csépe, 2010; Honbolygó et al., 2017)
- Limited empirical research available

Research Design

Research questions

- RQ1: What characterises **Hungarian university students' perceptions** in terms of stress deafness?
- RQ2: Are there any significant differences based on **background variables** in terms of stress deafness of Hungarian university students?
- RQ3: What **individual difference variables** influence Hungarian university students' stress perception?

Participants

- 57 Hungarian university students
- age: $M=23.50$; $SD=7.58$
- 29% male ($N=18$); 58% female ($N=36$); 4.8% did not say ($N=3$)
- various levels of proficiency in English (from beginner to advanced)
- none of them lived in an English-speaking country before the critical period

Data collection instrument: *Online questionnaire*

7 constructs (5-point Likert-scale items):

- auditive learning style (6 items) (based on: Bernáth et al., 2015)
- beliefs about pron. learning (6 items) (based on: Pawlak et al., 2015)
- motivation to improve pron. (5 items) (based on: Smit, 2002)
- pronunciation anxiety (6 items) (based on: Gómez Lacabex & Roothoof, 2023)
- willingness to communicate (4 items) (based on: Baran-Łucarz, 2021)
- musical ability – perception (11 items) (based on: Müllensiefen et al., 2014)
- musical ability – production (6 items) (based on: Müllensiefen et al., 2014)

Data collection instrument: *Stress deafness test*

10 stress minimal pairs (e.g., *ímport* – *impórt*, *belów* – *bíllow*, etc.)

Answer options (e.g., Kelly, 2000):

O_o – O_o

O_o – oO

oO – oO

oO – O_o

Results and Discussion

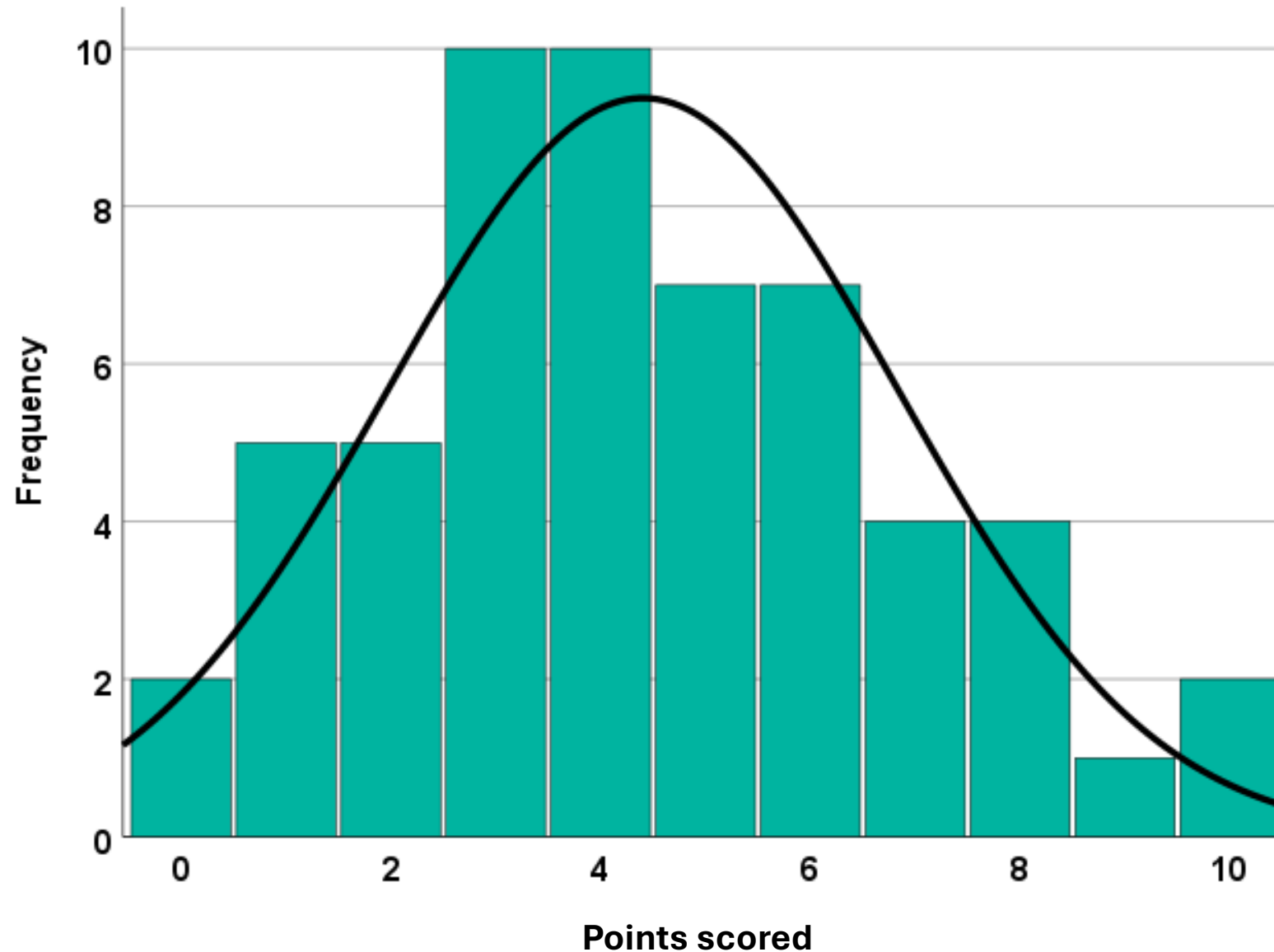
Reliability

(Dörnyei, 2007)

Construct	Cronbach's alpha
auditive learning style	0.45
beliefs	0.67
motivation	0.74
pron. anxiety	0.81
WTC	0.76
music perception	0.90
music production	0.90

RQ1: What **characterises** Hungarian university students' perceptions in terms of stress deafness?

Stress deafness test - Distribution



$N=57$

$M=4.40$; $SD=2.43$

Skewness: 0.35

Kurtosis: -0.34

(reference point: ± 2
George & Mallery, 2010)

RQ2: Are there any significant differences based on **background variables** in terms of stress deafness of Hungarian university students?

Independent samples *t*-tests

Grouping variable		<i>M</i>	<i>SD</i>	<i>n</i>	<i>t</i>	<i>p</i>
gender	male	4.50	2.50	18	0.19	0.85
	female	4.36	2.50	36		
playing instruments	no instrument	3.93	1.94	28	1.24	0.22
	1 or more	4.74	2.73	23		
proficiency level	B2 or below	3.90	1.97	21	1.19	0.24
	C1 and above	4.69	2.64	36		
level of listening skills	B2 or below	4.09	2.05	22	0.77	0.45
	C1 and above	4.60	2.65	35		

RQ3: What **individual difference variables** influence Hungarian university students' stress perception?

Individual **difference variable** that have a significant impact on the stress deafness score
($R^2= 0.16$)

- musical ability - production
($\beta=0.38$; $t=3.21$; $p=0.002$)



Stress deafness scores **correlated** with individual difference variables

		pron. anxiety	musical perception	musical production
Stress deafness test score	<i>r</i>	-0.27*	0.32*	0.40**
	<i>p</i>	0.049	0.02	0.002

*Significant at 0.05 level

**Significant at 0.01 level

Conclusion

Conclusions

- As expected, Hungarians suffer from stress deafness (cf. Honbolygó et al., 2017)
- No significant differences based on background variables
- BUT: musical ability has been found to have a significant impact on university students' stress deafness scores (Piukovics, 2021; Piukovics & Üstöki, 2019)
- Pronunciation anxiety has a negative weak relationship with the stress deafness scores

Future Research Directions

Future Research Directions

- Validated questionnaire → larger sample
- European survey to see the impact of L1
- Stress deafness test revision:
Taking phonological factors affecting stress perception into consideration (e.g., vowel length – *cf. bíllow*) → using nonwords
- Including other variables: explicit knowledge, language input
- It might be worth looking at other types of anxiety

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Thank you for your attention!

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