

# Early acquisition of word stress: a cross-linguistic infant study

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## 1. Introduction

Age	Lang	Method	Stimuli	Outcome
4-mos	GE FR	Discrimination (EEG)	Single non-word <i>GE speaker</i>	Language-specific response for both
6-mos	GE FR	Preference (HPP)	Single non-word <i>GE speaker</i>	Native preference for GE, none for FR
	GE TU		Multiple non-words <i>GE and TU speaker</i>	No preference for TU (between-subjects)
9-mos	EN	Preference (HPP)	Multiple words	Native preference

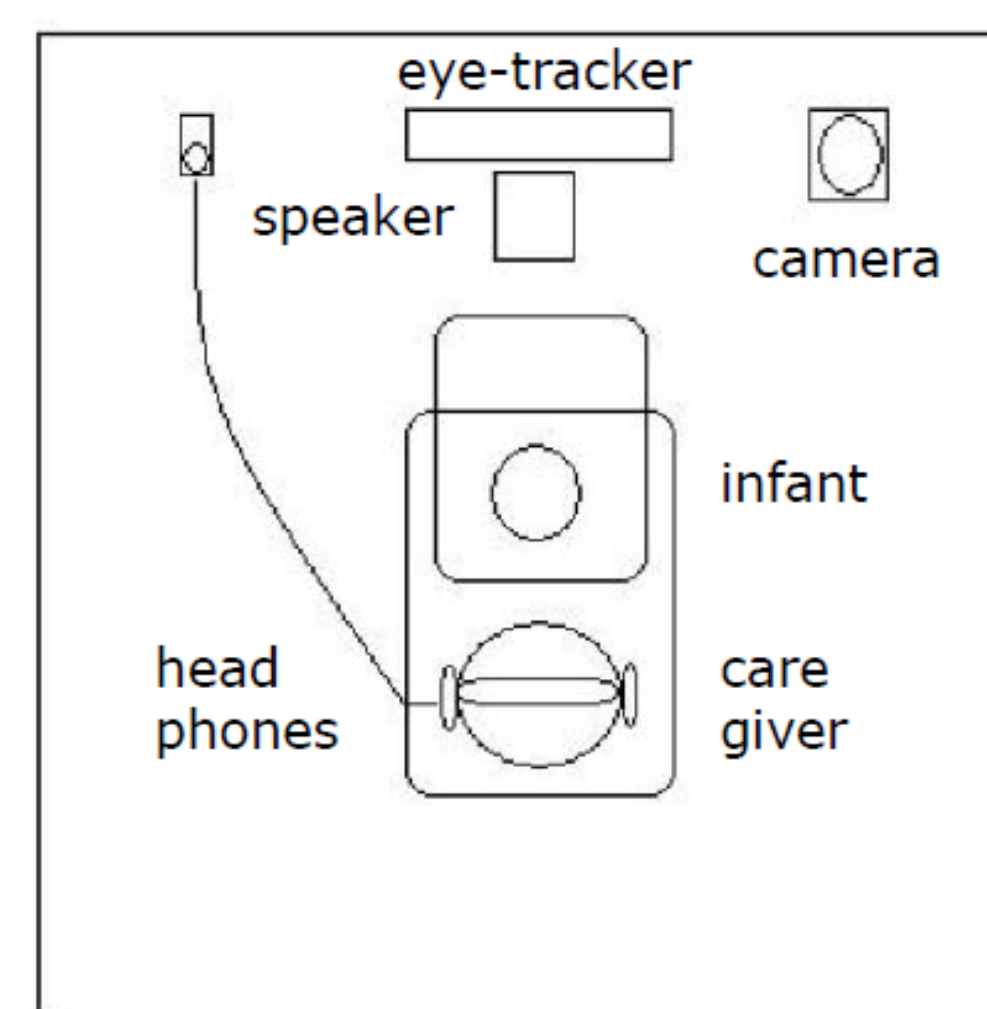
Do **Dutch-** and **Turkish-** learning infants develop a **language-specific rhythmic preference**, and if so, at **what age?**

Language	Age	Preference
Dutch	4	No/ trochaic bias
	6	Native (SW)
	8	Native (SW)
Turkish	4	No/ trochaic bias
	6	No/ native (WS)
	8	No/ native (WS)

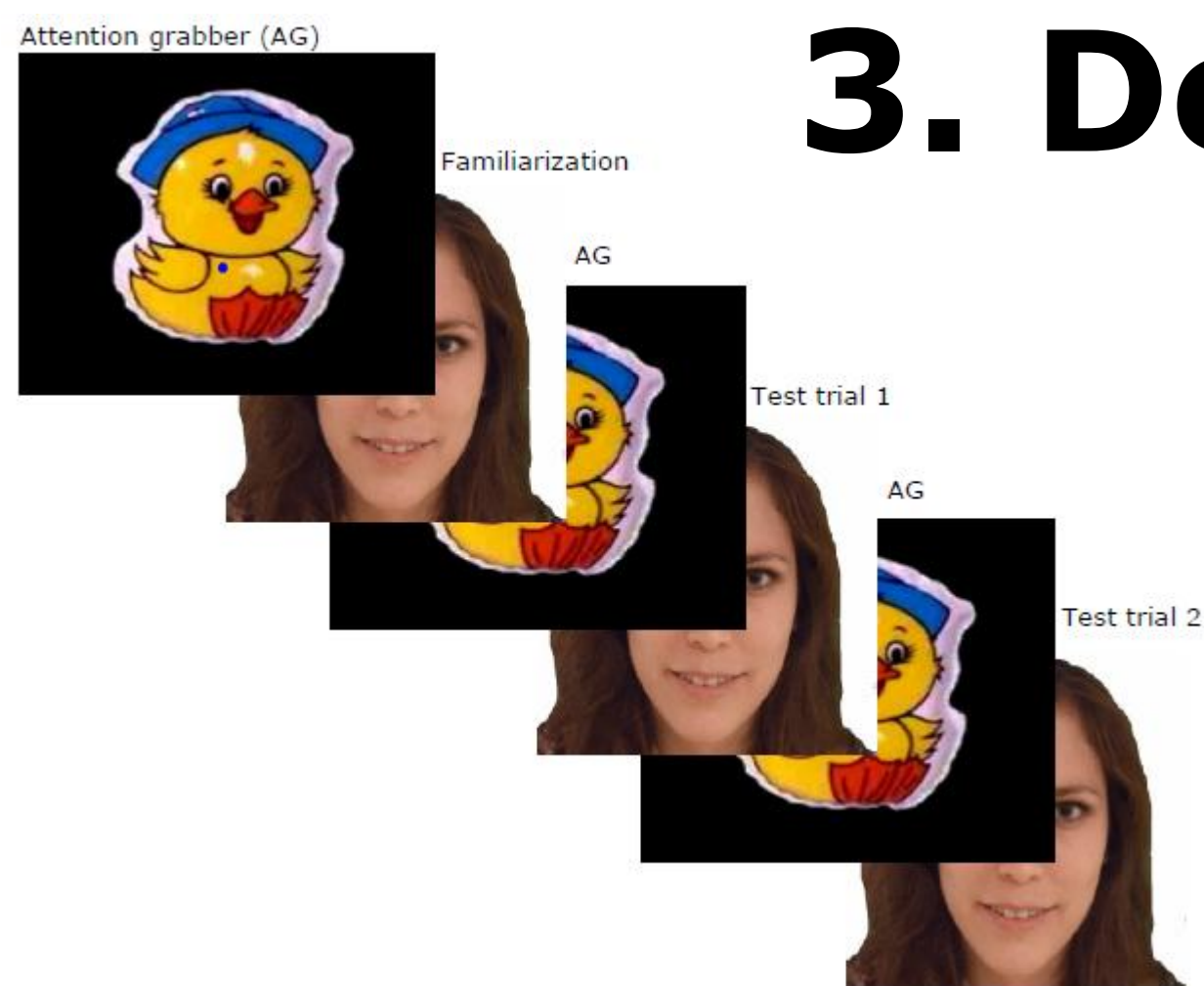
## 2. Method

Language	4-mos	6-mos	8-mos
Dutch	<b>31</b> (44)	<b>41</b> (50)	<b>30</b> (43)
Turkish	<b>30</b> (41)	<b>31</b> (43)	<b>31</b> (51)

Single visual target preferential listening procedure using **eye-tracking** (Tobii 1750 / T120)  
Gaze samples on screen > **looking time** (LT)



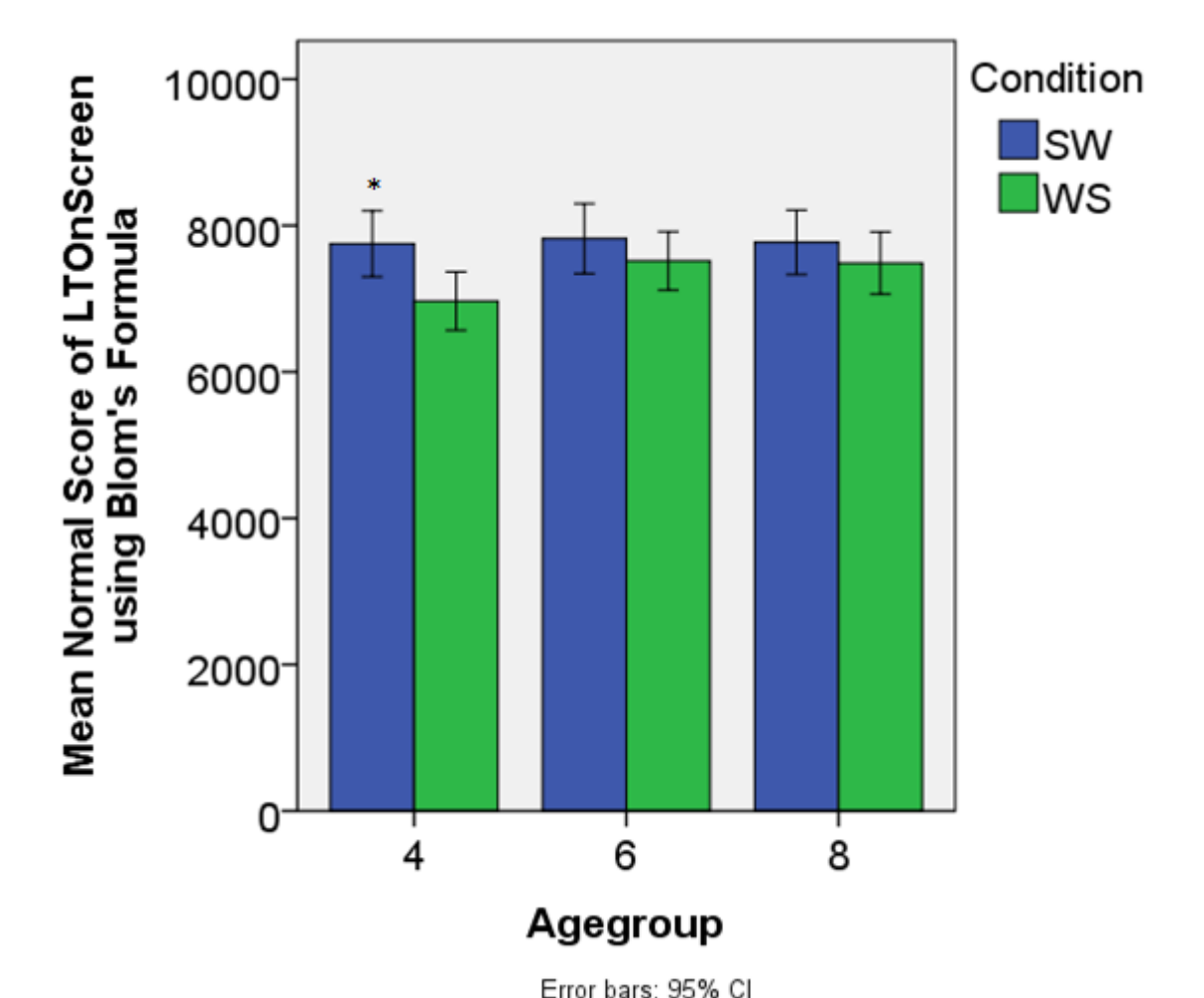
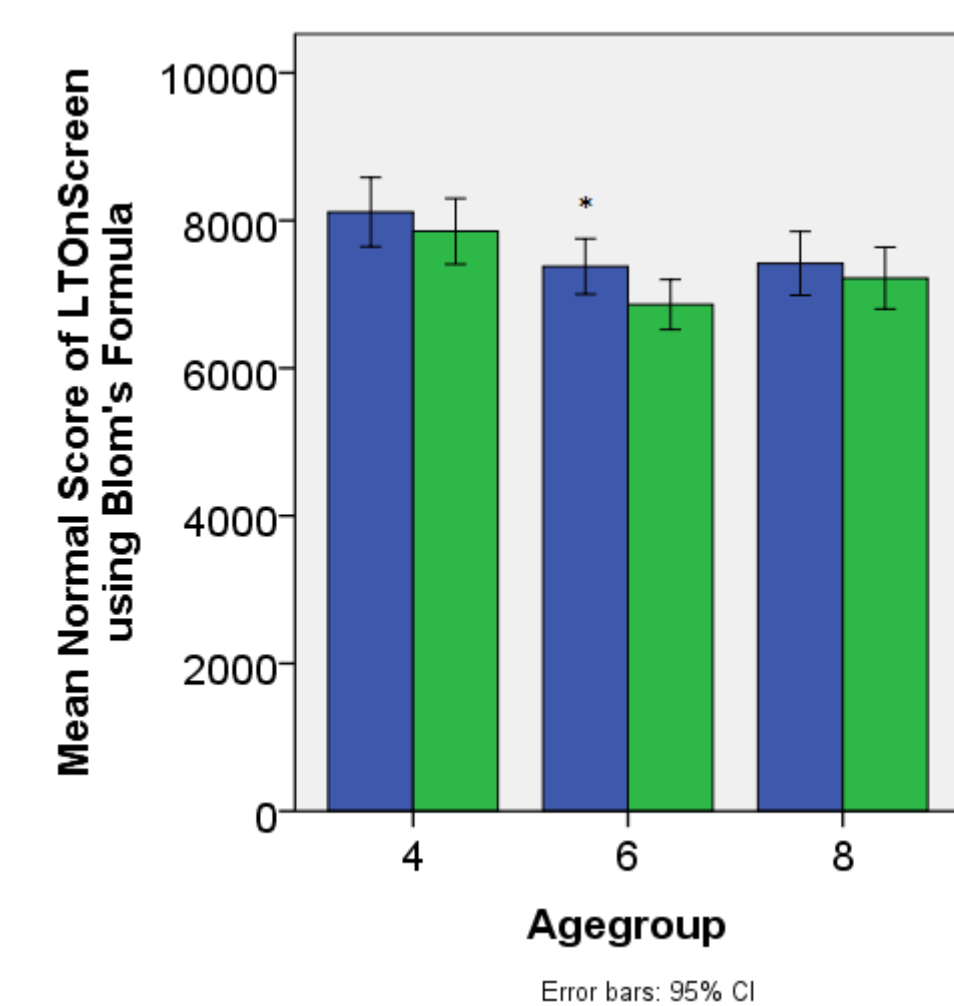
## 3. Design



**/ˈnɔldaf/ vs. /nɔˈdaf/**  
Female SP-speaker

**10 trials** (15 s) of **10 tokens** for each rhythmic pattern (SW-WS) = **20 alternating trials**

## 4. Results



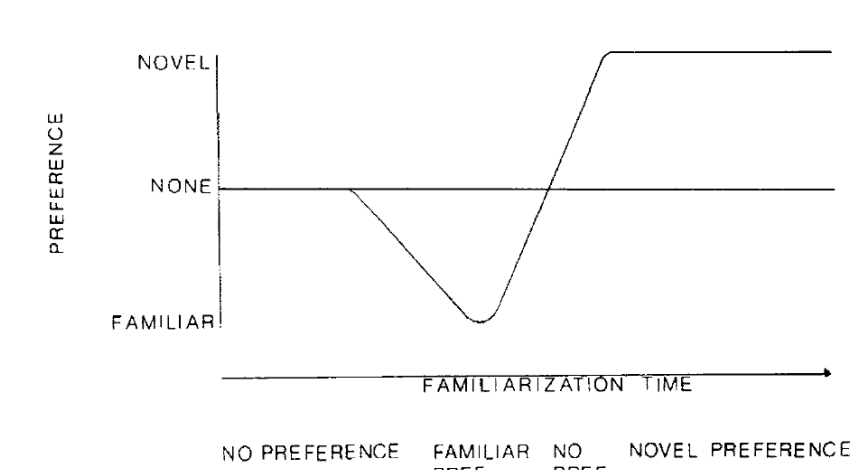
**Main effect of condition:**  $F(1,3443) = 18.985$ ,  $p = .000$ , with a **longer mean NLT during the SW condition**

No effect of language or age group or any interactions

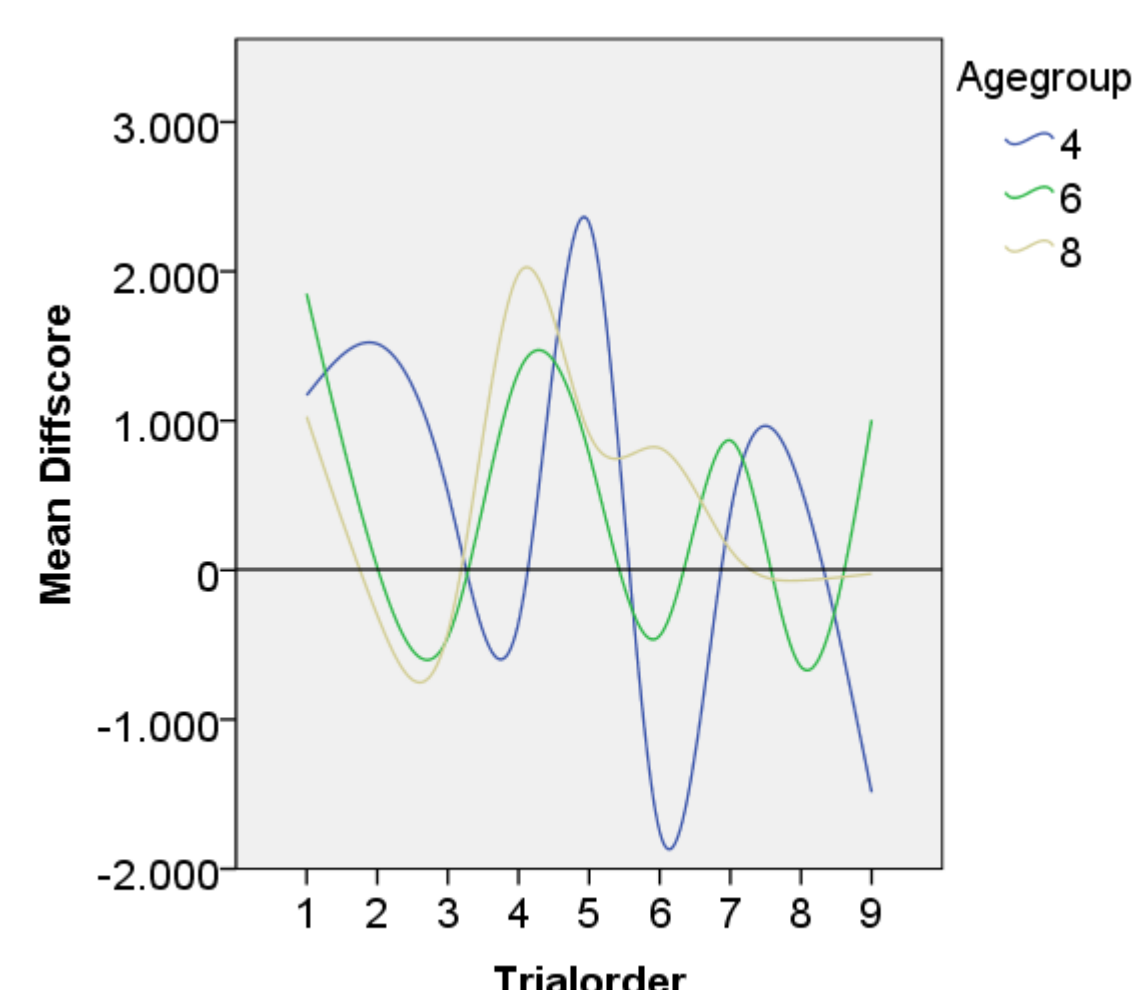
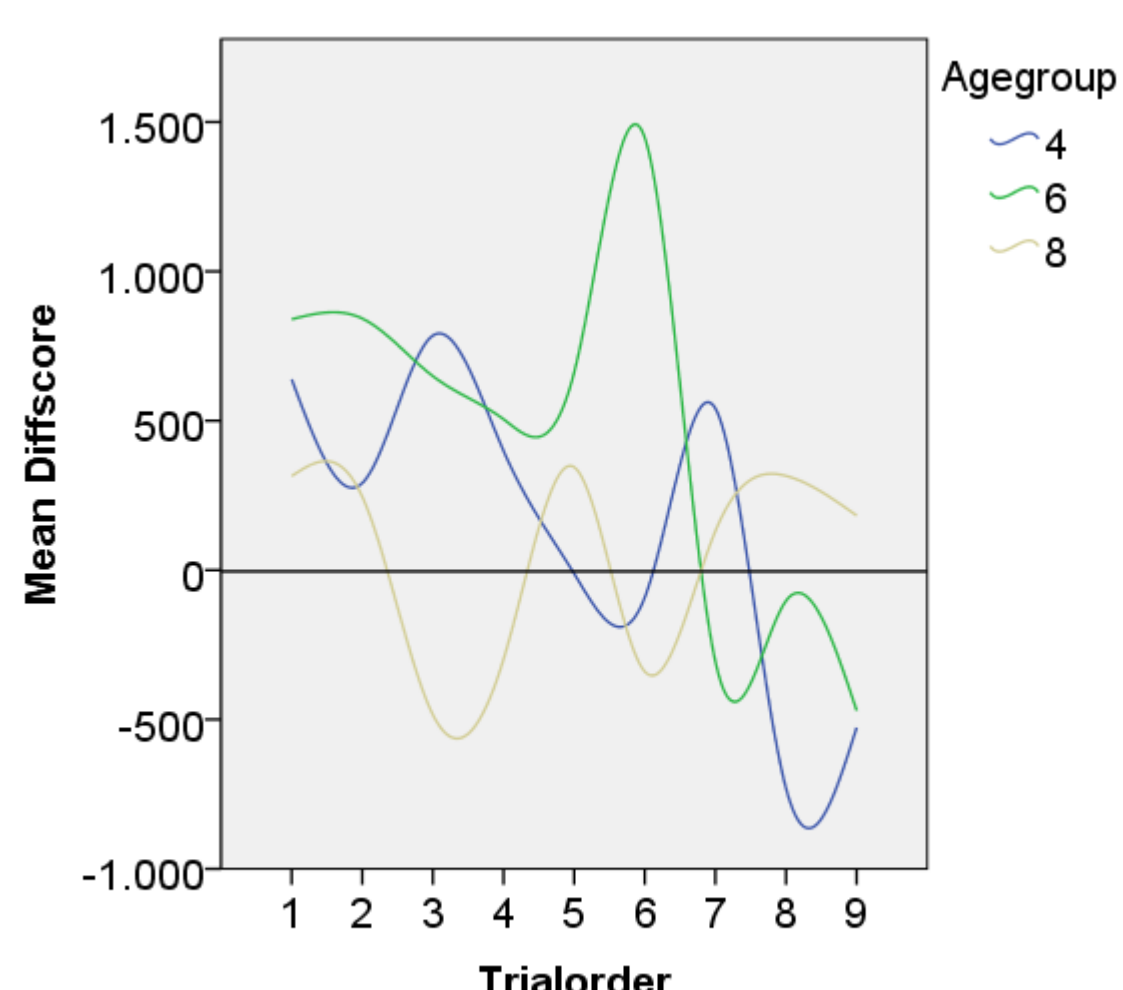
Preference	DU 4-mos	DU 6-mos	DU 8-mos
SW	<b>18</b> (31)	<b>28</b> (41)	<b>14</b> (30)
WS	<b>12</b> (31)	<b>9</b> (41)	<b>15</b> (30)
None	<b>1</b> (31)	<b>4</b> (41)	<b>1</b> (30)

Preference	TU 4-mos	TU 6-mos	TU 8-mos
SW	<b>20</b> (30)	<b>16</b> (31)	<b>17</b> (31)
WS	<b>8</b> (30)	<b>13</b> (31)	<b>13</b> (31)
None	<b>2</b> (30)	<b>2</b> (31)	<b>1</b> (31)

## 5. Discussion



Language	Age	Preference
Dutch	4-mos	Native (SW)?
	6-mos	Native (SW)?
	8-mos	Native (SW)?
Turkish	4-mos	Non-native (SW)
	6-mos	Non-native (SW)?
	8-mos	Non-native (SW)?



Experiment was **not developed for 8-mos** > lack of interest?

**HE-learning 9-mos** show native preference (WS) with HE-stimuli, but **non-native preference (SW) with EN stimuli** > non-native preference for TU-learning infants with SP stimuli?

## 6. References

Friederici, A., Friedrich, M., & Christophe, A. (2007); Jusczyk, P., Cutler, A. & Redanz, N. (1993a); Höhle, B., Bijeljac-Babic, R., Herolda, B., Weissenborn, J. & Nazzi, T. (2009); Houston-Price, C. & Nakai, S. (2004); Segal, O. & Kishon-Rabin, L. (2012); Van Kampen, A., Parmaksiz, G., van de Vijver, R. & Höhle, B. (2008); Vihman, M., Thierry, G., Lum, J., Keren-Portnoy, T. & Pam, M. (2007).