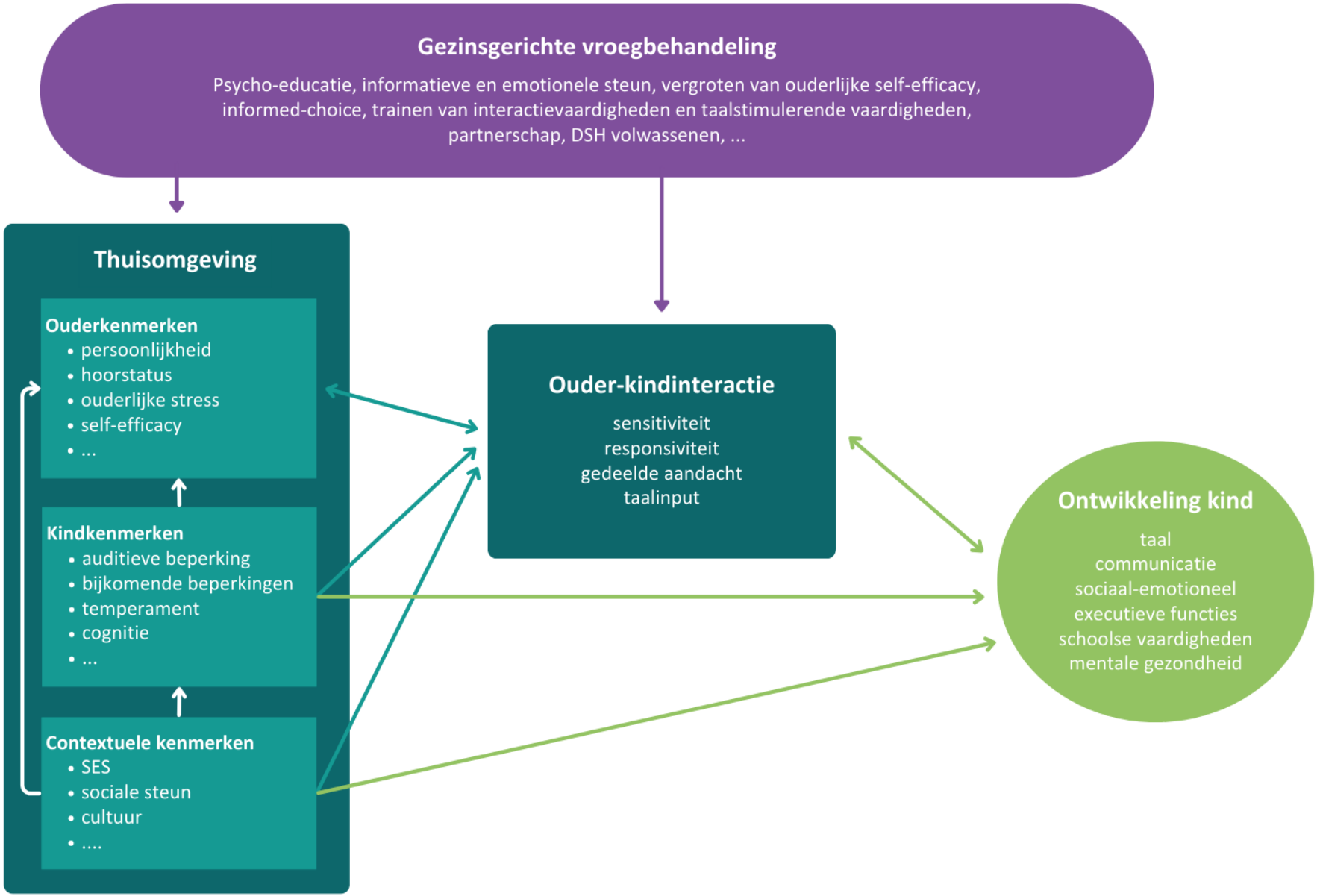
Taalontwikkeling door de ogen en oren van het dove of slechthorende kind

Evelien Dirks & Merel Maslowski


Gezinsgerichte vroegbehandeling
Psycho-educatie, informatieve en emotionele steun, vergroten van ouderlijke self-efficacy, informed-choice, trainen van interactievaardigheden en taalstimulerende vaardigheden, partnerschap, DSH volwassenen, ...
Thuisomgeving
Ouderkenmerken
• persoonlijkheid
• hoorstatus
• ouderlijke stress
• self-efficacy
• ...
Kindkenmerken
• auditieve beperking
• bijkomende beperkingen
• temperament
• cognitie
• ...
Contextuele kenmerken
• SES
• sociale steun
• cultuur
• ....
Ouder-kindinteractie
sensitiviteit
responsiviteit
gedeelde aandacht
taalinput
Ontwikkeling kind
taal
communicatie
sociaal-emotioneel
executieve functies
schoolse vaardigheden
mentale gezondheid

Technologie

Dit of Dat

- Desktop eye-tracker

WOLC

- Headmounted eye-tracker

Audiolistic

- Lena

Dit of Dat

Vroege gesproken taalontwikkeling

Merel Maslowski, Evelien Dirks, Daan Hermans,
Harry Knoors & Christina Bergmann

Methode

Deelnemers: 11 DSH kinderen; 24 TH kinderen

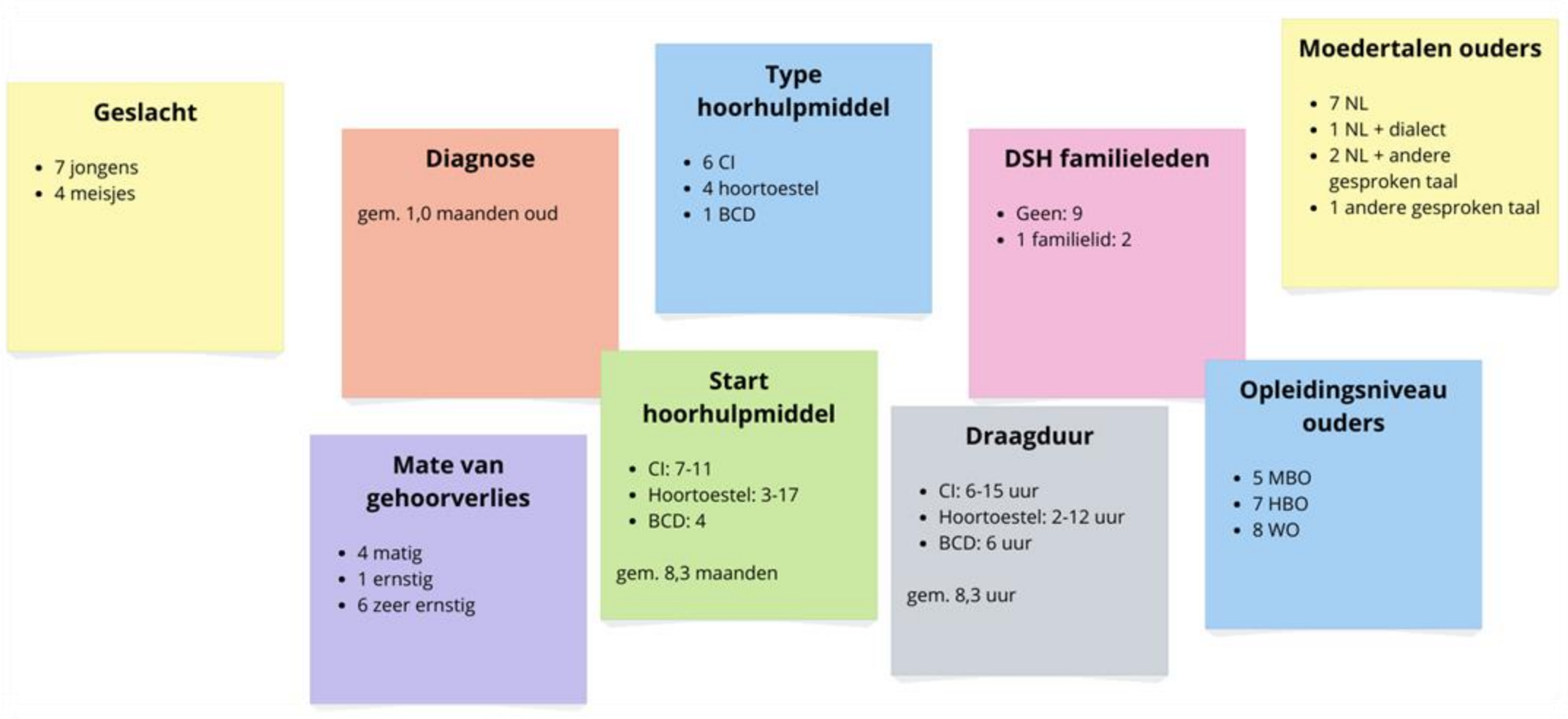
3 momenten: 6, 10 en 14 maanden hoorleeftijd

2 vaardigheden:

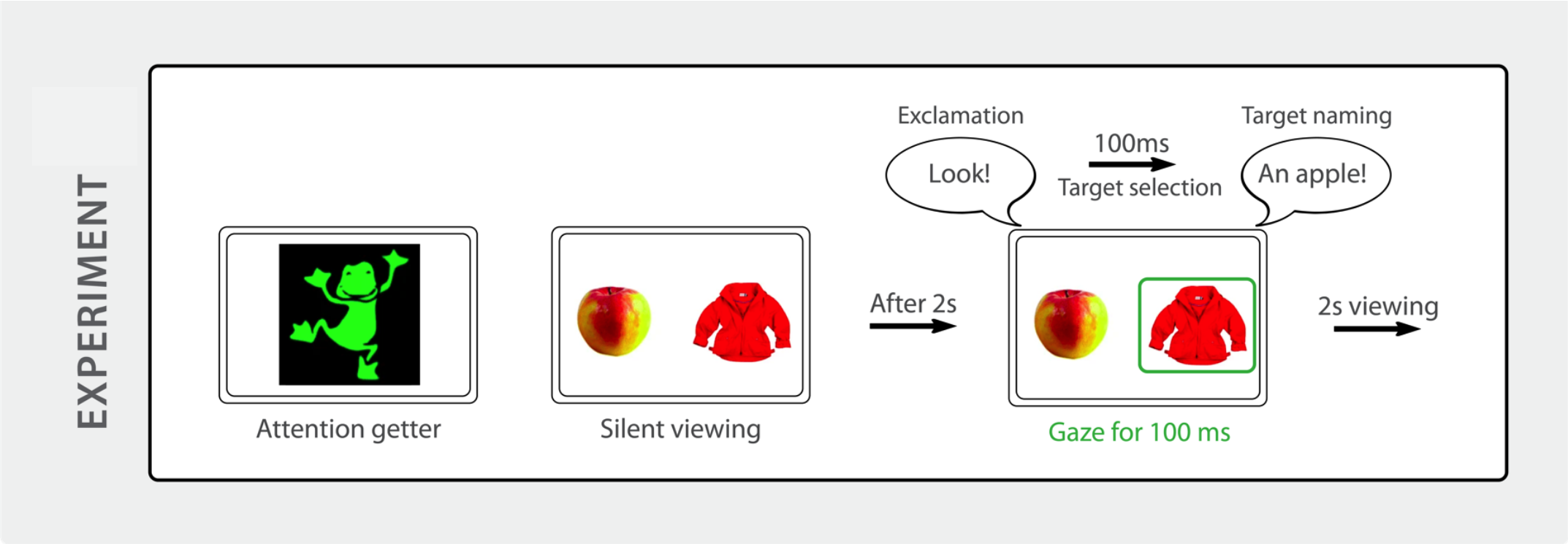
- Foneemdiscriminatie (T1, T2)
- Lexicale verwerkingssnelheid (T2, T3)

Locatie: thuis

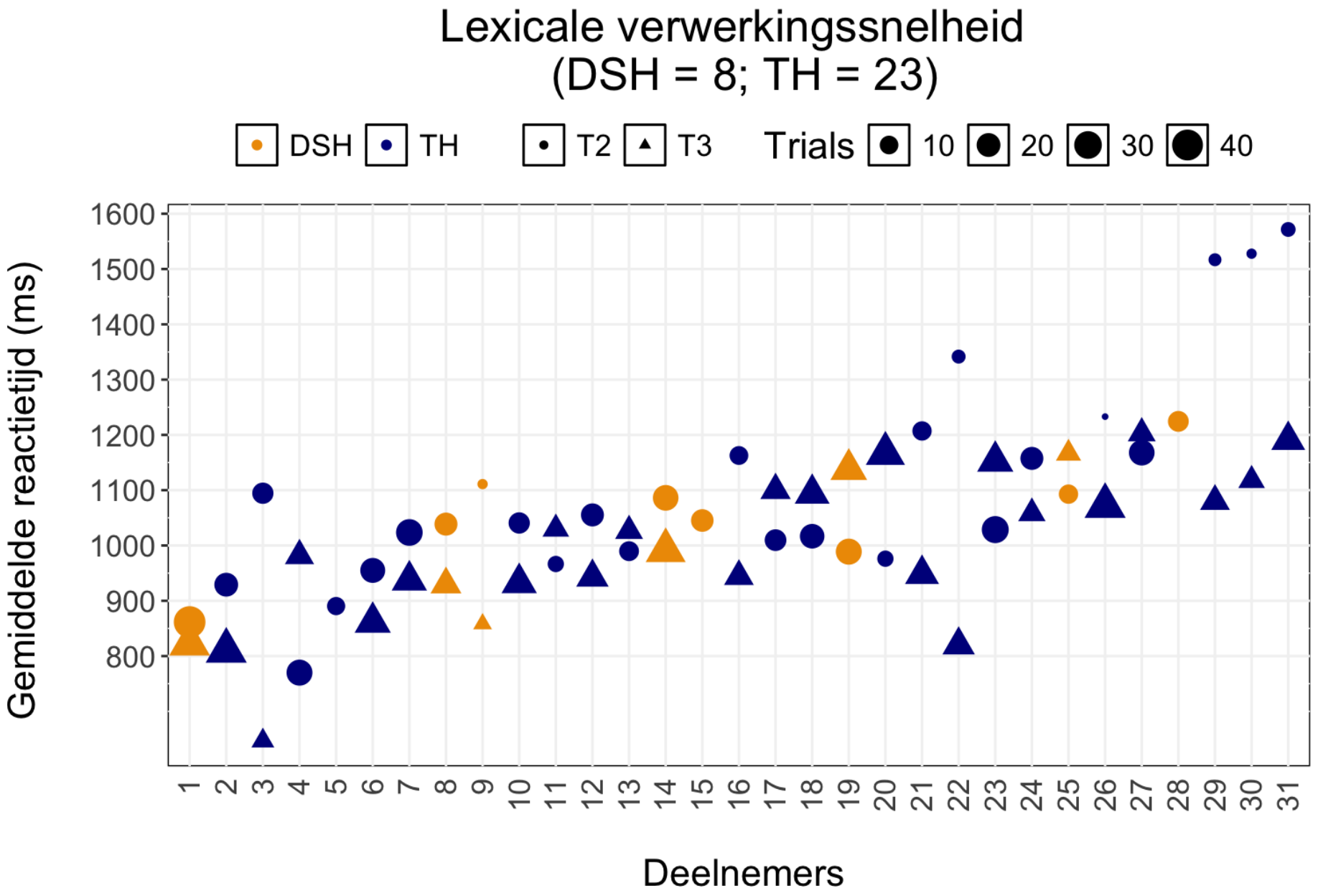
DSH deelnemers



Experiment: lexicale verwerkingssnelheid



Dataverzameling


Lexicale verwerkingssnelheid
(DSH = 8; TH = 23)
DSH
TH
T2
T3
Trials
10
20
30
40
Gemiddelde reactietijd (ms)
1600
1500
1400
1300
1200
1100
1000
900
800
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
Deelnemers

Conclusies lexicale verwerking

- Woordenschat met 14 maanden waarschijnlijk groter: meer trials op T3 dan T2
- Lexicale verwerking met 14 maanden sneller
- Geen verschillen in lexicale verwerking tussen DSH kinderen en horende kinderen met dezelfde hoorleeftijd

WOLC

Woord Leren in Context: ouder-kindinteractie

Evelien Dirks, Susan van de Boogaard & Lynn Rood

NSDSK

Koninklijke Kentalis

Radboud University

Behavioural Science Institute

Kijken door de ogen van

NoMachine - pre-prop

Graphs and Events

File Plot

Detail Plot Number | Curve-Event Plot Number | Gray Level Plot Number

Independent Curve | Curve-Event Compare | Gray Level Compare | Area Graph

Variables | Events | Right click for color selection dialog and histogram options

eye roi child (cstream)
eye roi parent (cstream)
inhand left-hand obj-all chil
inhand left-hand obj-all pare
inhand right-hand obj-all ch
inhand right-hand obj-all pa

505.000 510.000 515.000 520.000 525.000

Variables | Events | Right click for color selection dialog and histogram options

eye roi child (cstream)
eye roi parent (cstream)
inhand left-hand obj-all chil
inhand left-hand obj-all pare
inhand right-hand obj-all ch
inhand right-hand obj-all pa

505.000 510.000 515.000 520.000 525.000

Variables | Events | Right click for color selection dialog and histogram options

eye roi child (cstream)
eye roi parent (cstream)
inhand left-hand obj-all chil
inhand left-hand obj-all pare
inhand right-hand obj-all ch
inhand right-hand obj-all pa

derived
add_frar
cevent_t
cevent_t
coding_
cstream
cstream
cstream
cstream
cstream
cstream
original
extra_p
position_se
reliability
speech_trai
supporting
vis_77.m
vis_streams

Check selected

Overview Variable: eye roi parent (cstream) | Right click for color selection dialog and histogram options

10.0 8.0 6.0 4.0 2.0 0.0

Video Playback

Video

|<< <F || Play F> >>| Normal time range | Track Overview | Track event browser

Playback position 522.154

Frame Number 14765 | Playback speed -1x -.5x -.25x .25x .5x 1x 1.5x 2x

Audiolistic

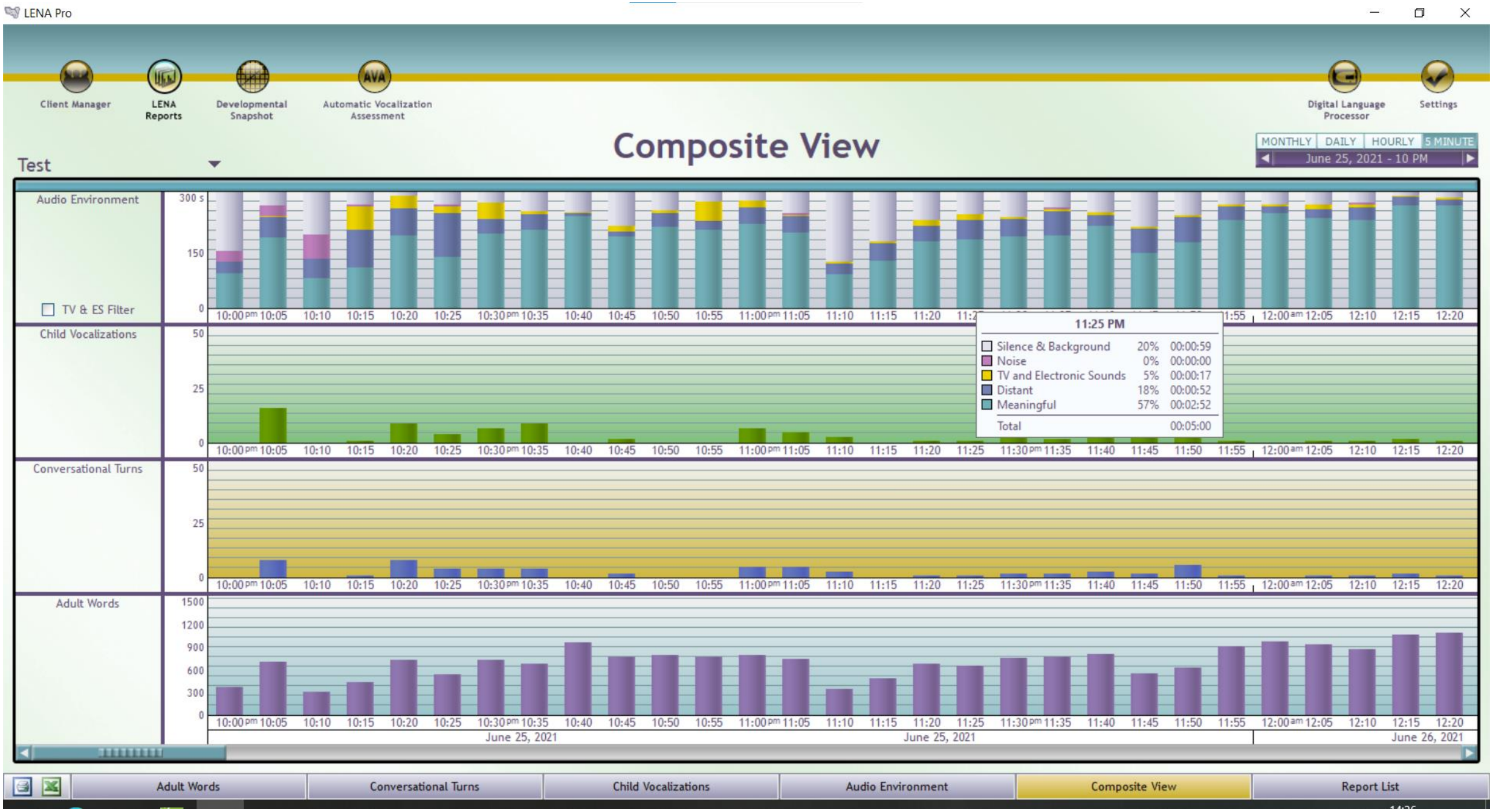
de akoestische en linguïstische omgeving van slechthorende kinderen

Talige omgeving Lena

Automatische analyse:

- Auditieve omgeving
- Vocalisaties kind
- Woorden volwassenen omgeving
- Beurtwisselingen volwassene – kind

- Handmatige analyse:
  - Transcriberen


LENA Pro
Client Manager
LENA Reports
Developmental Snapshot
Automatic Vocalization Assessment
Digital Language Processor
Settings
Composite View
MONTHLY
DAILY
HOURLY
5 MINUTE
June 25, 2021 - 10 PM
Test
Audio Environment
TV & ES Filter
Child Vocalizations
Conversational Turns
Adult Words
11:25 PM
Silence & Background 20% 00:00:59
Noise 0% 00:00:00
TV and Electronic Sounds 5% 00:00:17
Distant 18% 00:00:52
Meaningful 57% 00:02:52
Total 00:05:00
June 25, 2021
June 25, 2021
June 26, 2021
Adult Words
Conversational Turns
Child Vocalizations
Audio Environment
Composite View
Report List

METHODE (1)

BEURTWISSELINGEN

12 matig slechthorende kinderen

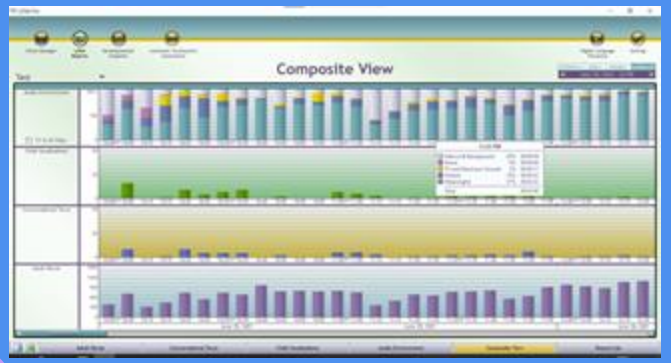
Hoortoestel gebruikers

18-47 maanden oud

2 Lena dagen (weekend en doordeweeks)

Gerichte vs. Algemene interacties

METHODE (2)



BEURTWISSELINGEN

Fragmentselectie:

Vier 5-minutenfragmenten per kind met LENA-software (CTC-variabele)

Gerichte (hoogste beurten) en algemene (mediaan beurten) interacties

Criteria: Alleen 1-op-1 gesprekken met één ouder

Taalinput: Kwaliteit & Kwantiteit

BEURTWISSELINGEN

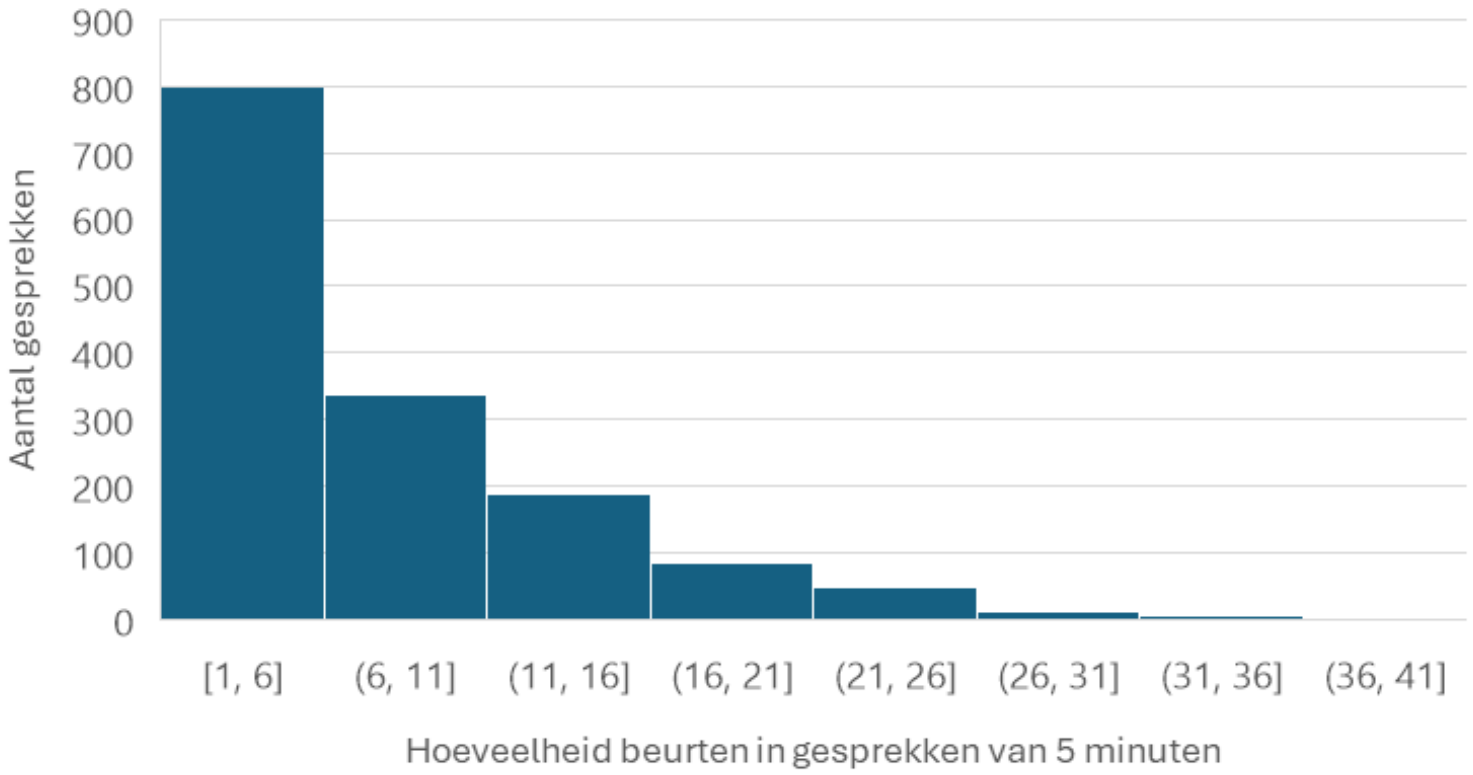
In de LENA-software (Language ENvironment Analysis) wordt een **beurtwisseling** gedefinieerd als een interactie waarbij een spraaksegment van een kind (bijvoorbeeld een vocalisatie) wordt gevolgd door een spraaksegment van een volwassene (bijvoorbeeld een woord of een zin), of vice versa, binnen een tijdsinterval van **5 seconden**.

Conversational duet

Roberta Golinkhoff:

"If you can get the child to participate, not just listen, that will allow the child to have a better language outcome."

Beurtwisselingen gedurende de dag



1475 x 5-minuten fragmenten over 2 dagen

Dagelijks gemiddeld 61 gesprekken, 5 uur gesprekstijd

Gerichte interacties

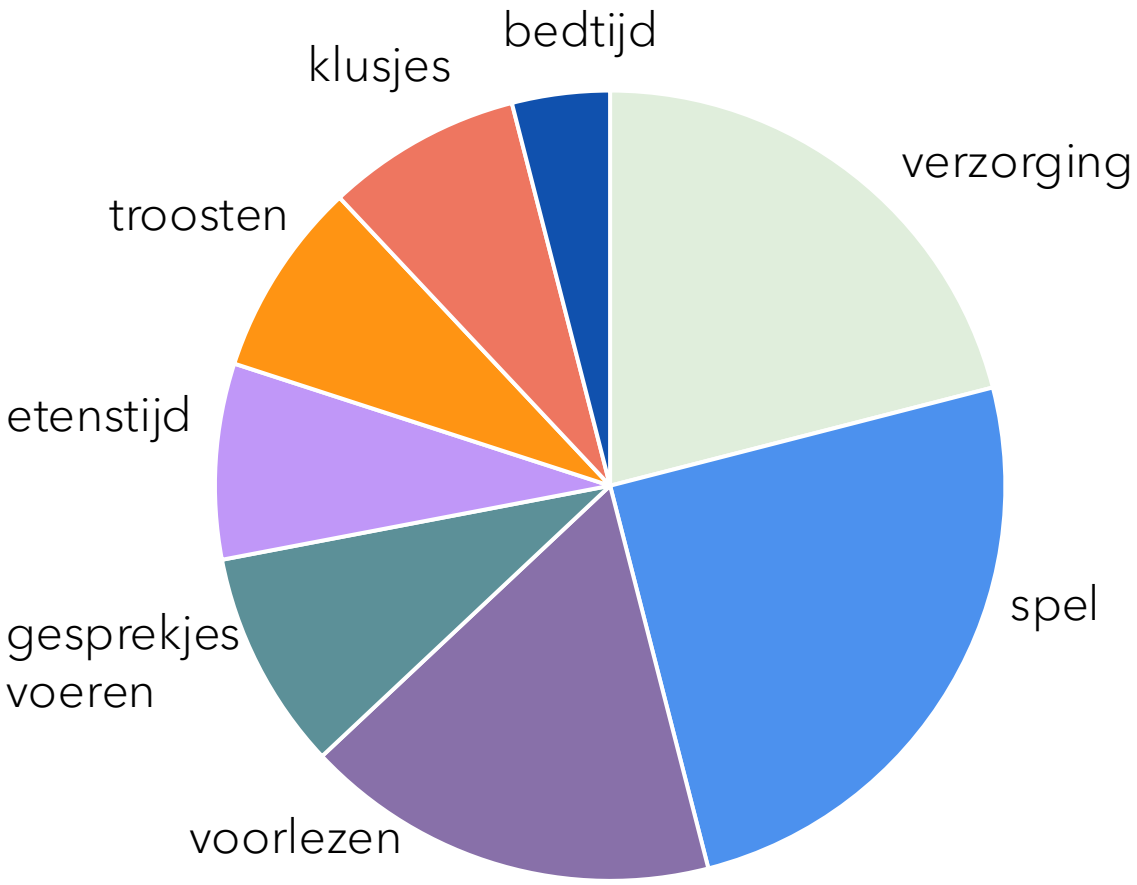
Interacties met een groot aantal beurtwisselingen.

Meer beurtwisselingen weerspiegelen een hoger niveau van betrokkenheid en responsiviteit.

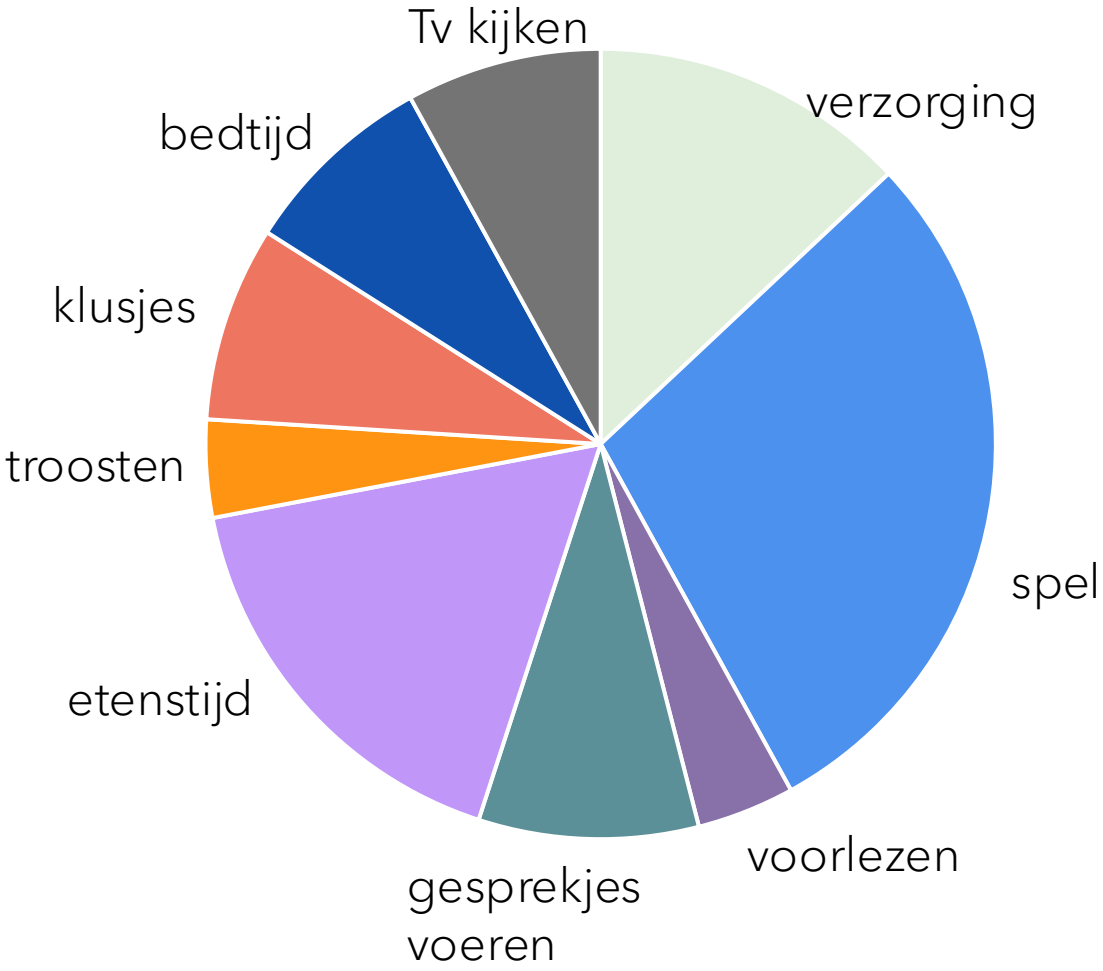
Algemene interacties

Interacties met minder aantal beurtwisselingen.

Gerichte interacties



Algemene interacties



Gerichte Interacties

Ouder: 213 woorden
TTR= .49

Kind: 83 woorden
TTR= .50

Algemene Interacties

Ouder: 106 woorden
TTR= .66

Kind: 48 woorden
TTR= .59

MLU ouder hangt samen met MLU kind in beide type interacties

languages

MDPI

Article

Are All Conversational Turns Equal? Parental Language Input and Child Language in Children with Hearing Loss during Daily Interactions

Hiltje P. Muller [1], Michel R. Benard [1,2], Annerenée Meijer [1,2], Deniz Başkent [2,3] and Evelien Dirks [4,5,*]

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2 Department of Otorhinolaryngology, University Medical Center Groningen, 9713 GZ Groningen, The Netherlands; d.baskent@rug.nl
3 Research School of Behavioral and Cognitive Neuroscience, Graduate School, University of Groningen, 9712 CP Groningen, The Netherlands
4 Dutch Foundation for the Deaf and Hard of Hearing Child (NSDSK), 1073 GX Amsterdam, The Netherlands
5 Department of Psychology, Utrecht University, 3584 CS Utrecht, The Netherlands
* Correspondence: edirks@nsdsk.nl

Abstract: (1) Background: Conversational turns between parents and children contribute to the language development of children. This study aimed to examine parental language input during interactions with high numbers of conversational turns (focused interactions) and those with fewer turns (regular interactions) in children with hearing loss at home. (2) Methods: Twelve children (aged 18–47 months) with hearing loss and their parents participated. Each child wore a Language ENvironment Analysis system digital language processor for 2 days to record all conversations between the parent and child. Focused interactions were characterized by high conversational turns, while regular interactions were defined by median conversational turns. The quantity of language input was reflected by the number of words parents used during the interaction, and the quality was reflected by the mean length of parental utterances, the use of low- and high-level facilitative language techniques, lexical diversity, and the use of (de)contextualized talk. (3) Results: During focused interactions, parents exposed their children to more words than during regular interactions, while the opposite was found for lexical diversity. The quality of parental language input did not differ between the two types of interactions. Parental language input was associated with children's spontaneous language. (4) Conclusion: Not all conversational turns are equal but are nonetheless associated with children's language development.

Keywords: hearing loss (HL); parental language input; speech- and language development (SLD); children; LENA

check for updates

Citation: Muller, Hiltje P., Michel R. Benard, Annerenée Meijer, Deniz Başkent, and Evelien Dirks. 2024. Are All Conversational Turns Equal? Parental Language Input and Child Language in Children with Hearing Loss during Daily Interactions. *Languages* 9: 287. https://doi.org/10.3390/languages9090287

Academic Editor: Claudine Bowyer-Crane

Meer weten?

Scan mij!

BEDANKT!