

Narrative Competences of Deaf Children in German Sign Language

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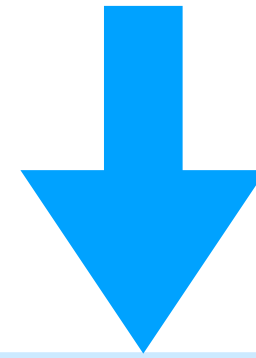


Research Questions

Cognitive factors

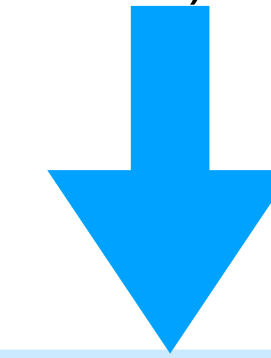
Narrative development is mainly determined by cognitive processes and becomes manifest in the semantic structure of children's stories which reflects the state of their mental representation of the story scheme:

1. 5 - 7 years: Elaboration of the story
2. 9 - 14 years: Dramatizing the story (cf Boueke 1995, Reilly 2001)



Social factors

Story telling is an interactive task that is carried out jointly by both conversational partners. Children achieve narrative proficiency primarily on the basis of their experiences in dyadic interactions with adults who support children in reaching the next stage of development. (cf McCabe & Peterson 1991; Hausendorf & Quasthoff 1996)



Question 1

Do deaf children who learn German Sign Language (DGS) follow the same developmental stages as hearing children who learn a spoken language?

Question 2

Has limited conversational experience in DGS an impact of the acquisition of narrative discourse competences? If so, in which areas of narrative discourse do deaf children of hearing parents (DoH) differ from deaf children of deaf parents (DoD)?

Method

Age	DoH	DoD
5 years		4
7 years	8	8
10 years	8	8
14 years	8	8
17 years	8	

60 children

- Deaf
- No other impairments
- DGS as dominant language
- Access to DGS from birth or kindergarten/primary school

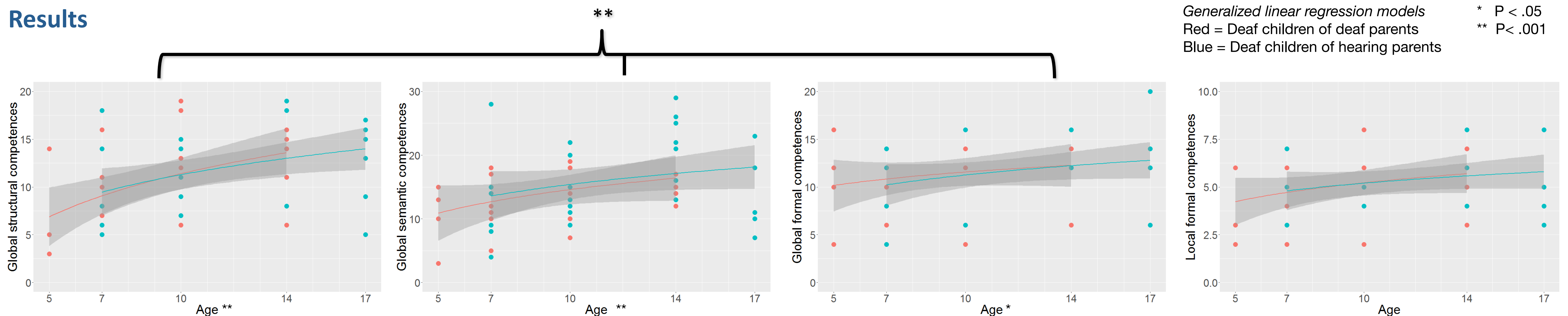
Narrative Discourse - authentic, but standardized

Personal experience narratives embedded in authentic interactions (adaption of Quasthoff et al 2011):

1. Two investigators pretend that they want to interview pupils about their experiences with DGS. Investigator 1 (deaf) left the classroom pretending that she has to prepare the video technique.
2. The teacher and investigator 2 initiate two mishaps that break by the normal course of events in the classroom (1. a lot of peas fall on the floor, 2. the teacher sits down on a plate with biscuits).
3. The investigator 1 picks up a child for the interview. At the beginning, she asks the child what happened in the classroom.



Results



Generalized linear regression models
 Red = Deaf children of deaf parents
 Blue = Deaf children of hearing parents
 * P < .05
 ** P < .001

Global structural
 to perceive and to comply with forces of action in conversations
 -> interdependency
 -> pragmatic correctness
 -> complexity of turns

Global semantic
 to tell all relevant information needed by the interlocutor, to linearize the events to a coherent story, and to construct them around the climax
 -> information structure
 -> perspective of events

Global formal
 to handle linguistic forms to mark the narrative structure
 -> marking of narrative structure (setting, climax, resolution)

Local formal
 to handle linguistic forms to establish coherence
 -> reference
 -> interclausal connection

Narrative Discourse Competence (cf Hausendorf & Quasthoff 1996)

Question 1

- With increasing age, DoD and DoH show significantly higher competences in three dimensions of narrative discourse, but not in the local formal abilities.
- All dimensions correlate very positively with each other, whereas the largest developmental leap takes place between the ages of 7 and 10.
- Children of all age groups already dramatize their stories by marking the climaxes with combinations of different devices. Only their preferences for the means change slightly with increasing age.

Marking of climax	Correlation with age
Focussing (e.g. eye contact)	0.328*
Modification of signs	0.323*
Detailing of events of climax	-0.296*
Repetitions	
Paralinguistic highlighting (e.g. laughing, pauses)	
Illustration (e.g. by using CA, depicting signs)	
Suddenness, unpredictability	
involuntariness	
Contrasting	

Question 2

- The interactional experience do not have an influence: DoH and DoD show comparable competences and developmental patterns in all four dimensions of narrative discourse.

Discussion

Comparison of narrative acquisition in sign languages and spoken languages:

Similarities:

- Milestones are reached in the same age
- Big development step between 7 and 10 years
- ➔ see also Reilly 2001, ASL; Rathmann et al 2007, BSL

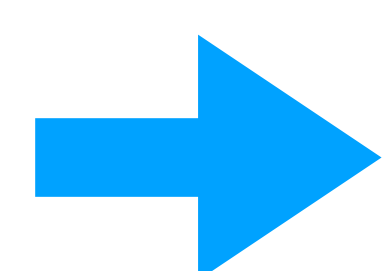
Differences:

- DoH and DoD dramatize their stories by marking the climax from age 5 on, hearing children from age 8-9
- ➔ Contradiction to Reilly 2001, ASL

Although conversational experiences have an impact on syntactic competences (DoH of the same sampling differ significantly from DoD, Becker et al. 2018), this seems not to be true for acquiring narrative discourse competences.

- ➔ see also Marschark 1994, ASL, but contradiction to Knoors 1994, NSL, and Becker 2009, DGS.

Concerning the acquisition of narrative discourse competences cognitive developmental steps seems to be more important than the quantity or quality (?) of interactive experience.



The modality might have an effect on the acquisition of dramatization. However, it could be that in research on hearing children prosody, nonverbal signals and gestures are not considered, but in sign language research.

The wide range of values in DoD and DoH might indicate a risk for developmental delays in both groups.

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