

# The assessment of socio-emotional development in deaf and hard of hearing toddlers

First data from a study with the Social-Emotional Assessment/Evaluation Measure (SEAM™)

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# Role of social-emotional development in child development

## **Healthy social-emotional development includes the ability to:**

- form and sustain positive relationships
- experience, manage, and express emotions
- explore and engage with the environment

## **Children with well-developed social-emotional skills are also more able to:**

- express their ideas and feelings
- display empathy towards others
- manage their feelings of frustration and disappointment more easily
- feel self-confident
- more easily make and develop friendships
- succeed in school



# Social-emotional development in DHH children

**The fact** = DHH children's social cognitive and social-emotional development is at risk (c.f. Theory of Mind, executive functioning, emotional labeling, self esteem, behavior problems ...)!

**The challenge** = to evaluate not only language progress after UNHS, but also to identify social-emotional competencies in DHH toddlers very early!

**The problem** = not too many measures are available to evaluate social-emotional development in DHH children at this very early age!

# Instruments to evaluate social-emotional development very early

## **Infant Toddler Social and Emotional Assessment (Carter & Biggs-Gowan, 2006):**

- Research based clinical tool for identifying social-emotional problems and competencies
- Parent Form and Childcare Provider Form
- age 12-36 months
- Four domains: internalizing behaviors, externalizing behaviors, dysregulation behaviors, competences; 17 subscales
- Standardized and norm based
- First results with DHH toddlers (c.f. Dirks, Uilenburg & Rieffe, 2016; Stika et al., 2015)



# Instruments to evaluate social-emotional development very early

## **Social-Emotional Assessment/Evaluation Measure (Squires et al., 2013):**

- Functional tool for assessing and monitoring social-emotional and behavior development in infants, toddlers, and preschoolers at risk for social-developmental delays or problems

### **Three advantages over the ITSEA measure:**

- **starts with 2 months** → really very early!
- **focuses exclusively on competencies** → comprising a broader spectrum of competencies!
- **each item contains many praxis examples** → initiating the dialogue between parents and early intervention providers!

# Instruments to evaluate social-emotional development very early

## **Information on the SEAM instrument (Squires et al., 2013):**

- Three developmental intervals: infants (2-18 months), toddlers (18-36 months), preschool (36-66 months)
- Composed of 10 benchmarks with corresponding behavioral items to be assessed and scored
- Represent social-emotional and behavioral competence skills
- Benchmark → corresponding items → examples to clear the intention of the items
- Scoring: very true (0), somewhat true (1), rarely true (3), not true (4) / concern (yes/no)
- Reliability (Cronbach alpha): .90 (infants); .91 (toddlers); .96 (Preschool)



# Instruments to evaluate social-emotional development very early

Information on the SEAM instrument (Squires et al., 2013):

## Child development benchmarks (toddler interval)

1. ... **participates** in healthy interactions
2. ... expresses a range of **emotions**
3. ... **regulates** own social-emotional responses
4. ... begins to show **empathy** for others
5. ... **attends** to and **engages** with others
6. ... demonstrates **independence**
7. ... displays a **positive self-image**
8. ... **regulates** own **attention** and **activity level**
9. ... **cooperates** with daily routines and requests
10. ... shows a range of **adaptive skills**

# Instruments to evaluate social-emotional development very early

## Information on the SEAM instrument (Squires et al., 2013):

### Toddler Benchmark 1:

Toddler participates in healthy interactions

0 = not true  
1 = rarely true  
2 = somewhat true  
3 = very true

### Items:

1. Toddler lets you know if he needs help, attention, or comfort

**2. Toddler initiates and responds to affection**

3. Toddler talks and plays with people whom he knows well

4. Toddler initiates and responds when you communicate with her

### Examples for item 2:

- Comes when you ask or gesture for her to follow
- Hugs you, smiles back at you
- Hugs and kisses people, pets, and stuffed animals
- Returns hugs, kisses, or other affectionate gestures
- Walks to you with arms out, wanting a hug



# Instruments to evaluate social-emotional development very early

Information on the SEAM instrument (Squires et al., 2013):

## SEAM Family Profile: Caregiver/Parent benchmarks (toddler interval)

1. ... **responding** to my child's needs
2. ... **providing activities** that match my **child's developmental level**
3. ... **providing predictable schedule/routines** and **appropriate environment** for my child
4. ... **providing a safe home** and **play environment** for my child

# Study on social-emotional competencies in very young DHH infants and toddlers

(Hintermair, Sarimski, Lang & Romstedt, 2016)

## Procedure:

Parent survey with 182 DHH infants and toddlers (aged 2-36 months) from 20 early intervention centers in Germany (52 children aged 2-18 months; 130 children aged 19-36 months)

## Sample:

- **Parent gender:** > 95% mothers
- **Parent hearing status:** 6 % deaf
- **Parent educational status:** ca. 50% University entrance qualification
- **Child gender:** 50% girls
- **Child age:** Mean age infants: 13 months; Mean age toddlers: 27 months
- **Child hearing status:** > 50% mild to severe; 20% profound hearing loss
- **Child cochlear implant:** ca. 20%
- **Child additional handicap:** ca. 12%
- **Child communication mode:** ca. 17% spoken and sign language



# Study on social-emotional competencies in very young DHH infants and toddlers

(Hintermair, Sarimski, Lang & Romstedt, 2016)

## Infants (2-18 months)

<b>S C O R I N G</b>	3.0	7 child benchmarks 4 caregiver benchmarks
	–	
	2.5	Empathy, positive selfimage, regulation of activities
	2.5	
	–	
	2.0	
	2.0	
	–	
	1.5	
	1.5	
	–	
	1,0	
	1.0	
–		
0.5		
0.5		
–		
0.0		

## Toddlers (19-36 months)

<b>S C O R I N G</b>	3.0	7 child benchmarks 4 caregiver benchmarks
	–	
	2.5	Empathy, positive selfimage, adaptive skills
	2.5	
	–	
	2.0	
	2.0	
	–	
	1.5	
	1.5	
	–	
	1,0	
	1.0	
–		
0.5		
0.5		
–		
0.0		

# Study on social-emotional competencies in very young DHH infants and toddlers

(Hintermair, Sarimski, Lang & Romstedt, 2016)

**Prediction of child social-emotional competencies (sum score) by parental competencies and other significant characteristics (multiple regression analysis)**

**Prediction of social-emotional competencies for infants (age 2-18 months)**

by:

**Child age\*\*\***

**Additional handicap\*\*\***

**Parental responsiveness\***

**Providing appropriate play environment \*\***

**Prediction of social-emotional competencies for infants (age 19-36 months)**

by:

**Child age\***

**Child hearing status\***

**Parent hearing status\***

**Parent educational status\*\***

**Additional handicap\*\*\***

**Parental responsiveness\*\*\***



# Study on social-emotional competencies in very young DHH infants and toddlers

(Hintermair, Sarimski, Lang & Romstedt, 2016)

**Infant Toddler Social and Emotional Assessment**

**(ITSEA; Carter & Briggs-Gowan, 2006)**

**Social-Emotional Assessment/Evaluation Measure**

**(Squires et al., 2013)**

- **Comparable results** regarding ITSEA competencies and SEAM competencies
  - **overall rather positive evaluations** in both questionnaires
  - **deaf specific challenges** apparent in both questionnaires (empathy, relations with others)
- almost constant **high significant correlations between the SEAM scales and the ITSEA scales** → speaks for **good validity!**
- the **same variables** (parent responsivity, child age, additional handicap, parent educational status) **predict social-emotional competencies** in the **SEAM measure** and in the **ITSEA measure** with comparable power (48%)

## Conclusions

- Altogether we see a **rather positive social-emotional development** of our group (effect of UNHS??)
- **deaf specific challenges** regarding empathy competencies and social relation competencies remain → **strong role of language!!**  
„... facial expressions have to be interpreted; understanding them does not come automatically. We need a social context, providing exposure and feedback, in which they are taught and trained“ (Rieffe et al., 2015, S. 378).
- **Parent responsivity** (again) shows its importance for good child development. → a family centred approach is supported by our data!
- As known **DHH children with additional handicaps are at risk** in their social-emotional development! → Also important for early interventionists!
- **parent education**: higher status may be more favourable for parent-child dialogue → more opportunities for social contacts, more support for child autonomy??
- our data concur with data from the **LOCHI study** (Ching et al., 2013) in **Australia!**
- **ITSEA** measure appropriate for **exploratory information** – **SEAM** measure more appropriated for a **differentiated view** including options for intervention!



## Limitations

- **no representative** sample
- **parent evaluation** → currently a study is going with the same instruments filled in by parents with a DHH child **and** by the early interventionst of the DHH child