

Sensory Profile of Young Children with Behavioral Insomnia and Feeding Disorders*

**Sensory profile in infants and toddlers with behavioral insomnia and/or feeding disorders. Sleep Medicine. 2017.*

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The impact of BI & FD disorders



Behavioral
Insomnia
(BI)

10-30%

Difficulty falling asleep and/or staying asleep



Feeding
Disorder
(FD)

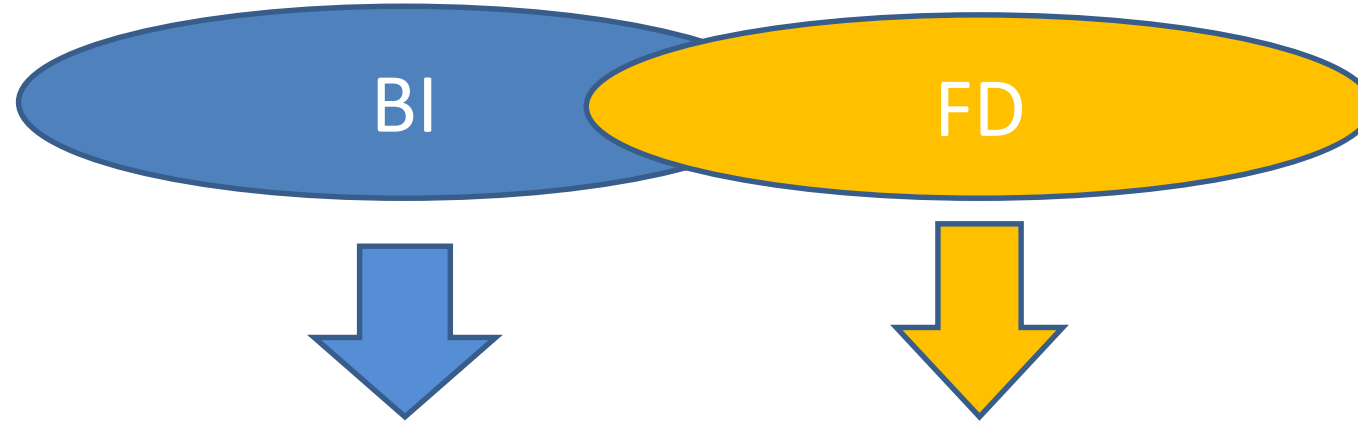
25%

Problematic eating and feeding behaviors

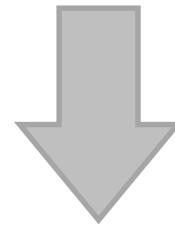
Problematic
interactions

As OT's our main goal is to improve ADL

Co-occurrence



A common mediator might play a substantial role in these two common conditions



Sensory Profile



Aim & Hypothesis

➤ **Aim:** to investigate the sensory profile of children with **BI** and children with **FD** in comparison with healthy controls.

➤ **Hypothesis:** sensory processing difficulties are more common in children with sleep and/or feeding disorders compared with children without such difficulties.

Methods

3 groups of children (7-36 months old) :-

BI

International
Classification of Sleep
Disorders (ICSD)

FD

Chatoor criteria

Controls

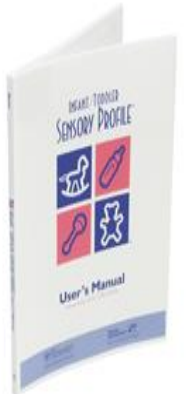
Attended the well-care
clinics in the metropolitan of
TA area for routine periodic
medical examinations

Excluded:

Children with chronic medical conditions,
Congenital abnormalities / Developmental delays

Process: The parents received 2 questionnaires to fill in:

- ✓ Demographic and socioeconomic status
- ✓ Infant/Toddler Sensory Profile (ITSP)

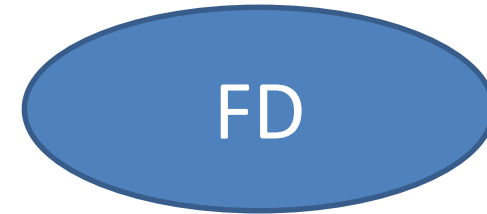
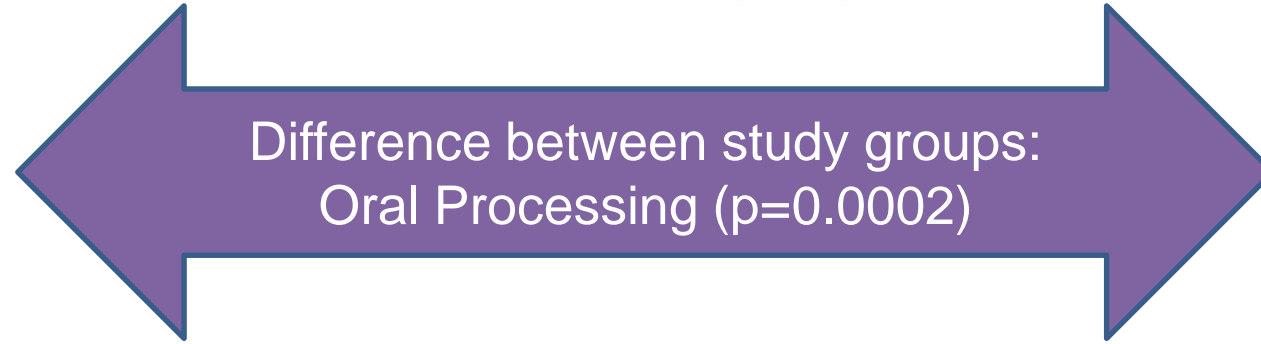
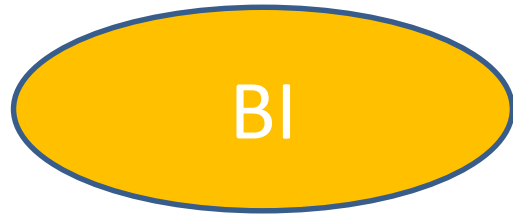


Results

Characteristics of study groups and Controls (n=85)

Socio-Economic & Demographic Variable	Behavioral Insomnia (n=25)	Feeding Disorders (n=28)	Controls (n=32)	P
Age	1.18 ± 0.55	1.31 ± 0.66	1.45 ± 0.74	0.32
Gender	68	71	47	0.11
Maternal age (years)	34.7 ± 4.6	33.3 ± 4.6	34.3 ± 4.3	0.53
Paternal age (years)	37.6 ± 5.5	37.3 ± 7.1	36.6 ± 4.5	0.81
Maternal education (years)	16.2 ± 3.0	14.6 ± 2.7	16 ± 2.4	0.08
Paternal education (years)	15.7 ± 2.9	14.8 ± 2.7	16.2 ± 3.2	0.21
Gestational age (weeks)	38.4 ± 1.8	39.5 ± 1.3	38.7 ± 2.2	0.08
Birth weight (kg)	3.10 ± 0.51	3.17 ± 0.43	3.15 ± 0.43	0.86
Number of children	1.76 ± 0.83	2.04 ± 1.26	1.58 ± 0.67	0.19
Birth order	1.88 ± 0.97	1.75 ± 0.92	1.53 ± 0.76	0.32

Differences between study groups and Control



- Oral Processing score (p= 0.0002)

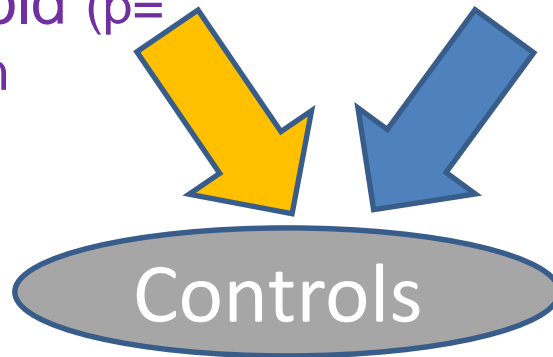
- Low Sensory Threshold (p= 0.001) includes Sensation Avoiding

- Sections
- Quadrants

- Oral Processing score (p= 0.0002)
- Auditory Processing score (p= 0.028)

- Low Sensory Threshold (p= 0.001) includes Sensory Avoiding & Sensory Sensitivity

- Low Sensory Registration (p= 0.027)



Conclusions

- Young children with either **FD** or **BI** were reported to show significantly more sensory difficulties compared with controls (**low sensory threshold**).
- These differences may partially explain the coexistence of the two disorders and might be the cause of their development.
 - Relation between **Oral processing** and FD at self-explanatory
 - Relation between **Oral processing** and BI is more complicated (sucking behavior?)
 - Relation between **Auditory processing** and FD:
 - * Noise could distract
 - * Reactivity to noise easier to notice in the young age
 - * May reflect the general sensory processing



Limitations & Recommendations



Limitations

- Small study groups
- “Subjective” questionnaires, w/o direct OT clinical evaluation
- Lack of information about parental anxiety

Recommendations

- ✓ Parental sensory questionnaire are of great value as a **possible target for intervention** (in both sleep and feeding disorders)
- ✓ Direct OT examination with objective tools
- ✓ Expand investigate on these relations