

Tactual defensiveness of blind children and possible interventions – a single case study of a blind infant

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Tactual Defensiveness

- Definition:

“Tactual defensiveness is a permanent avoidance or reduction of touching something caused by negative experiences.” (Frenz 2011, p. 20)

Effects of tactual defensiveness

The handicapped tactile perception has negative effects on:

- Exploration competencies
- Concept formation
- Cognition
- Motor activity
- Orientation and mobility
- Eating on his own (*LPF*)
- Reading braille
- ...

→ The whole development of the child can be at risk!

Investigation

- 4 Videos of the child playing with Mr. Wagner
- Analysis of different tools
 - able or not to motivate the use of the hands?
- Outcome:
 - Different tools motivate doing different tactile activities
 - different thesis were analyzed

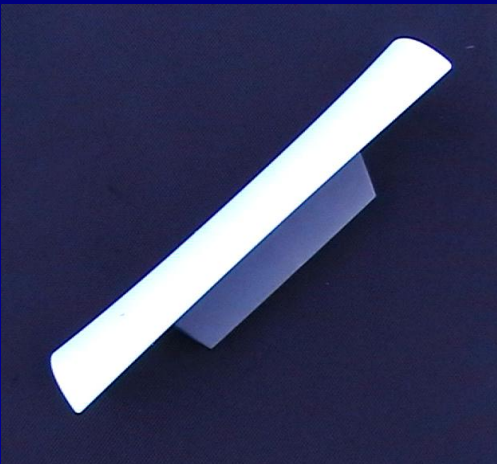
Thesis

1. Illuminated tools don't motivate touching.
2. Big tools motivate touching with both hands.
3. Small tools as big as a child's hand motivate grabbing.
4. Tools with different tactile materials motivate to compare the structure. This stimulates using different strategies (touching, grabbing, pushing, knocking, pulling).
5. With new tools that offer a lot of possibilities, the child explores them more intensively.

These 1

“Illuminated tools don’t motivate touching”

- Light-stick
- Vibration beetle



These 2

“Big tools motivate touching with both hands.”

- Book
- Keyboard
- Mirror
- Smooch-pillow

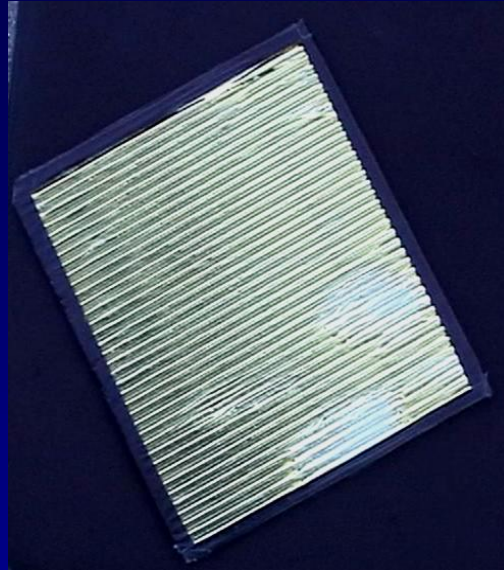
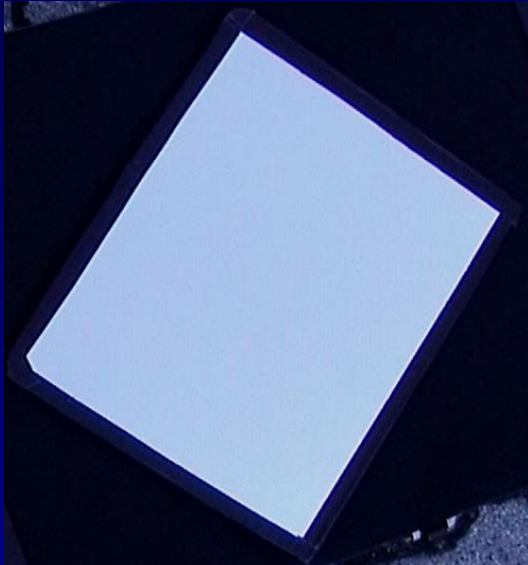
Book

- The aim of using the book is visual stimulation, catching visual attention and fixation. / it is mainly made for visual stimulation.
- Each page has different stimuli:
 - high contrasts
 - Faces, dots, illustration
 - different shapes, patterns, colours

Keyboard

- The keyboard motivates touching because of its connection to every day life. The child hears his parents typing on the keyboard.

Mirror



This tool is a board with both sides reflecting the light. You can use it to reflect the light at the child's face so you can be sure the child sees the visual impression. On one side you can produce a sound scratching on it with your fingers.

Smooch-pillow



This pillow is neon-green and on one side it has a face of a frog in the middle. The child really liked to touch the pillow, because of the different impressions of the firm frog in the middle and the flexible outer part.

These 3

“Small tools as big as a child’s hand motivate grabbing”

- Smooch-pillow
- Bell
- Squeaking ball
- Ring-bowl
- Lid-can
- Treasure-box II

Bell, Squeaking ball, Ring-bowl



Lid-can



This tool is a can with lids on it that the child can take off. This activity causes a sound because of the velcro strips.

Inside the can is another lid. The child can grab with the whole hand inside the can to take off the lid.

You can shake and scratch it to motivate touching.

Every activity with the can gives acoustic feedback.

Treasure-box II

- This is a box with different surfaces. The surfaces are fleecy, reflecting, non-reflecting, plane, etc. Some of them produce a sound if you touch them.
- At one of the sides you can grab some little toys.
- There is a yellow and fleecy hole at the top of the box. You can put your hand inside, explore it and grab things.
- The bottom of the box is tiled. There you can feel its cold temperature in comparison to the rest of the box.
- You can use it as a drum if you want.
- Close to the hole a bell is connected to the box with an elastic band.

These 4

„ Tools with different tactile materials motivate to compare the structure. This stimulates using different strategies (touching, grabbing, pushing, knocking, pulling“

- Treasure-box I and II
- Shaking-board (Essef-Board)
- Balls
- Book
- Lid-can
- Story
- Vibration beetle
- Mirror
- Smooch-pillow

Treasure Box I

This treasure box is similar to the other one.
It has different surfaces and a hole.

Shaking-Board

- This tool is the Esfef-Board from Lilli Nielsen with six springs between the two wooden boards for giving kinesthetic feedback.
- It is made for
 - Training the general activity of the child
 - Training the muscles of the legs when the child is sitting on it.
 - Training the back muscles if the child is lying on it.
 - Training the tactile exploration if it is sitting next to the board.
 - Training the balance in every position.
- Mr Wagner adapted it with different tactile stimuli on the top and a little mouse that can walk on it.

Story

- Tool for initiating basic communication. (BIG-Step-by-Step)
- First you have to record a story on it and if you push the button it will play a story for about 10 seconds. Then it stops and the child has to push the button again to continue the story. It can learn there is a connection between his own action and the reaction (intentionality).
- On top of it is a silver reflecting structure create tactile discrimination competencies and visual stimulation.

These 5

- “With new tools that offer a lot of possibilities, the child explores them more intensively”
- For example: Shaking-board (12 minutes) the first time he saw it!

The whole development of the child can be at risk!

- We have to be sensitive whether a child wants being touched or not.
- We have to be sensitive which tools are able motivate touching.
- We have to adapt new tools with familiar materials.

References

- Frenz, Regina (2011): Tasthemmung bei blinden Kindern und mögliche Interventionsmaßnahmen – Konkretisierung am Beispiel eines blinden Kleinkindes. Wissenschaftliche Hausarbeit zur ersten Staatsprüfung für das Lehramt an Sonderschulen. Pädagogische Hochschule Heidelberg
- Fotos sind entnommen aus der wissenschaftlichen Hausarbeit
- Vorgestellte Materialien gehören Adalbert Wagner, Frühförderer der Frühförderstelle der Schlossschule Ilvesheim