

# Sensing belonging: the role of social touch in visually impaired children

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## Introduction:

It is well known that touching and being touched is crucial for neuro-cognitive development but very little is known regarding the development of social attention through touch in children, especially in visually impaired ones. This study investigates whether visual deprivation affects the ability to discriminate the source of affective touch, adapting a previous protocol.

## Methods:

We tested five typically developing and five visually impaired (VI) 9-month-old infants. Two identical brushes were used: one for tactile stimulation (experimenter 1) and one held visibly by an adult (parent or experimenter 2) to act as a potential source. Heart rate responses were recorded with a 3-lead ECG.

## Results:

Heartbeats per minute were extracted from ECG recordings. We computed mean heart rates during stimulation and baseline for each condition (parent vs. stranger), then averaged across trials. A mixed-model ANOVA with Identity (parent vs. stranger) as a within-subject factor and Group (VI vs. TD) as a between-subject factor revealed no significant effects. Nevertheless, in both groups, heart rate responses showed similar trends for the parent and the stranger.

## Conclusion:

Preliminary results suggest that visual deprivation does not affect the ability to discriminate the source of affective touch. While sighted children primarily rely on visual cues, blind children are more likely to use auditory information to interpret social touch.

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No

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