UH Universität Hamburg
DER FORSCHUNG | DER LEHRE | DER BILDUNG

LVPEI
So that all may see
L V Prasad Eye Institute

Indo-German Lab of LVPEI

Impaired rapid neural face categorization after reversing long-lasting congenital blindness

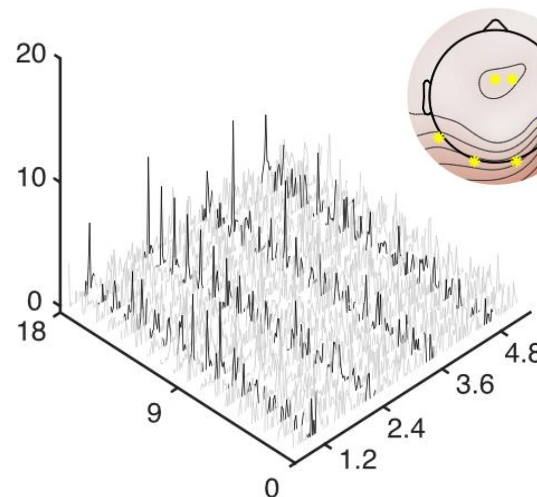*José P. Ossandón, Bruno Rossion, Giulia Dormal, Ramesh Kekunnaya, Brigitte Röder*

Participants viewed a stream of images (6 Hz presentation rate) comprising a face and other objects with the face appearing as every 5th image.
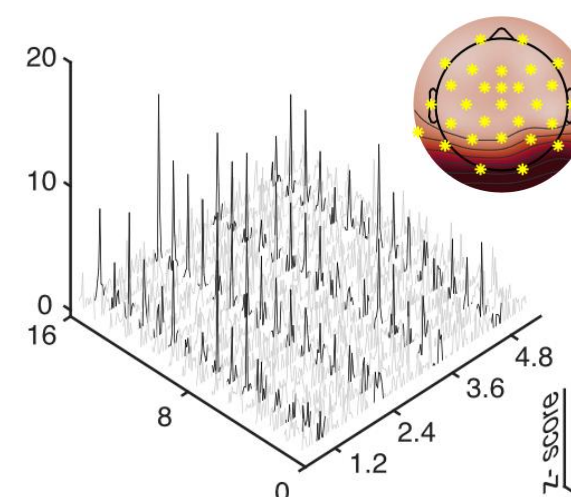
The presence of EEG responses at 1.2 Hz (and 2.4, 3.6, 4.8) over visual areas indicated that both patients and controls were able to detect the face.

Congenital cataract reversal

Developmental cataract reversal

Age-matched controls

However, individuals with reversed congenital cataracts featured an EEG response for face recognition that was lower in amplitude and delayed, suggesting incomplete recovery of the neural circuits for face categorization.
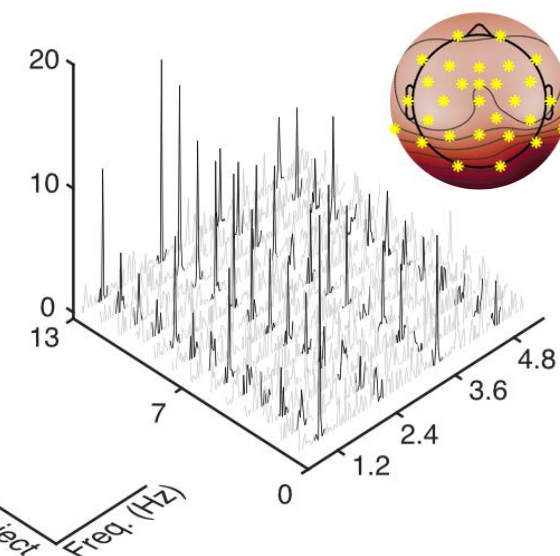
Cortex

Child Sight Institute