FACIAL RECOGNITION

An in-depth look into how we recognize familiar faces

By using the visual information seen & previous knowledge, we are able to recognize faces. Noses and eyes are the main facial features used in facial recognition.

Key brain areas involved in facial recognition:

- Occipito-temporal cortex & the fusiform face area.

- Anterior temporal cortex, amygdala, hippocampus, & superior colliculus

RECOGNITION DEFICIT

PROSOPAGNOSIA

Cognitive disorder of facial perception & recognition

- Can be acquired or developmental
- Deficits are on a spectrum from no ability to make distinctions between faces & ability to make distinctions but not identify individuals
- Alzheimer's, Autism, & Non-verbal Learning disorder all have prosopagnosia components

TREATMENT

Current therapy is targeted to help patients recognize individuals based on non facial cues

- Online face-training program
- Inhalation of oxytocin

DR. BEHRMANN'S RESEARCH

Brain area studies

Volume is increased in the fusiform face area with age

Congenital prosopagnosia

Results from an abnormal communication between the facial recognition brain structures

- Many of those affected also experience deficits in object recognition

- Studies suggest a single mechanism for recognition of more than one visual class