Facing threat: Facial but not learned dominance affects learning of optimal facial expressions in incentivized social interactions.

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Introduction

• Optimal communication depends on both the situation (e.g. dangers) and the identity of your interaction partner. Learning to adjust facial expressions during communication is key to social functioning.

• Individual characteristics, such as dominance, might affect the expression and learning of facial expressions.

Question

• How do we learn to use our facial expressions in response to others’ facial expressions?

• What is the influence of facial and learned dominance on this communication process?

Methods

• A novel method based on online integration of electromyography (EMG) signals was used.

EXP. 1 Punishment, N = 60 (30 F).

We recorded signals from Corrugator Supercilii and Zygomaticus Major.

We searched for congruence between facial expressions.

In EXP. 1 participants were provided a reward for correct facial expression and shocks for error.

Participants learned the dominance hierarchy of the faces, but learned dominance did not influence performance and response time.

References


3. Yi, J., Pärnamets, P., & Olsson, A. (manuscript in prep.)


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