

Smiling to Smiles After Exclusion: Social Rejection Enhances Affiliative Signalling

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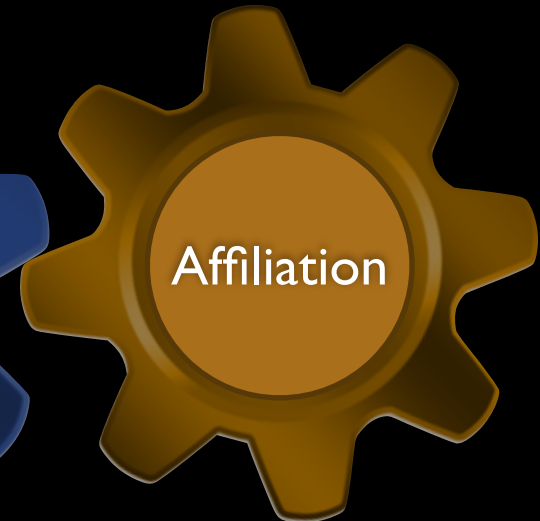


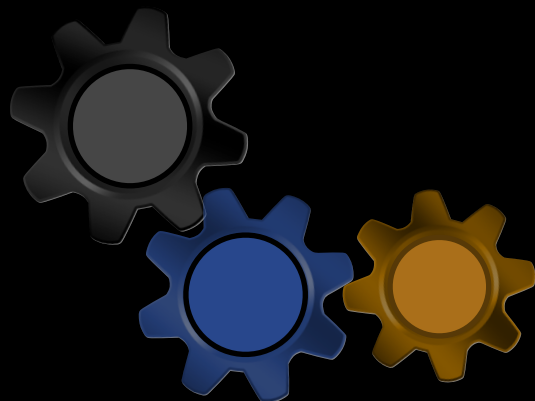


Exclusion

How does social exclusion
recalibrate social cognition?

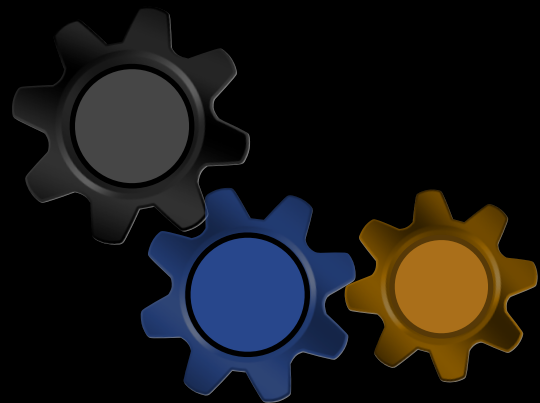
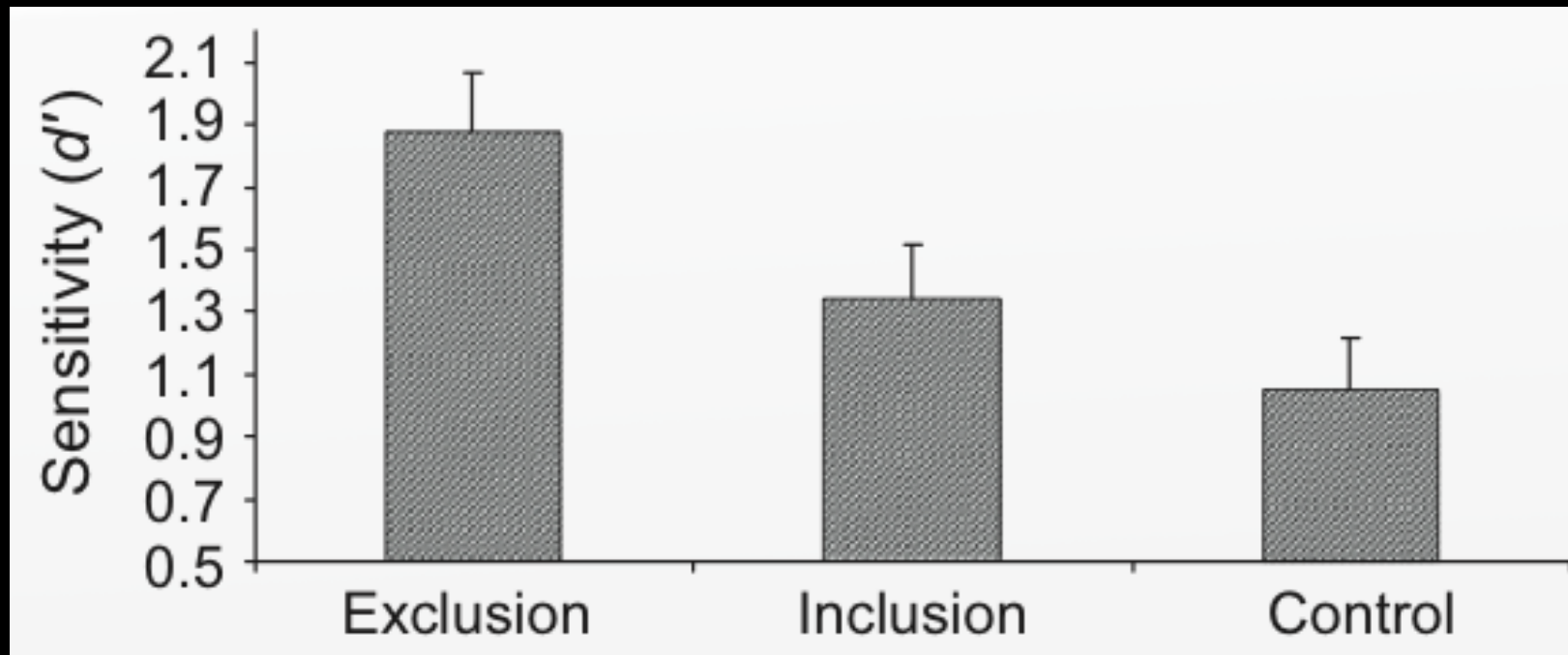






Excluded people mimic the behaviours of others more.

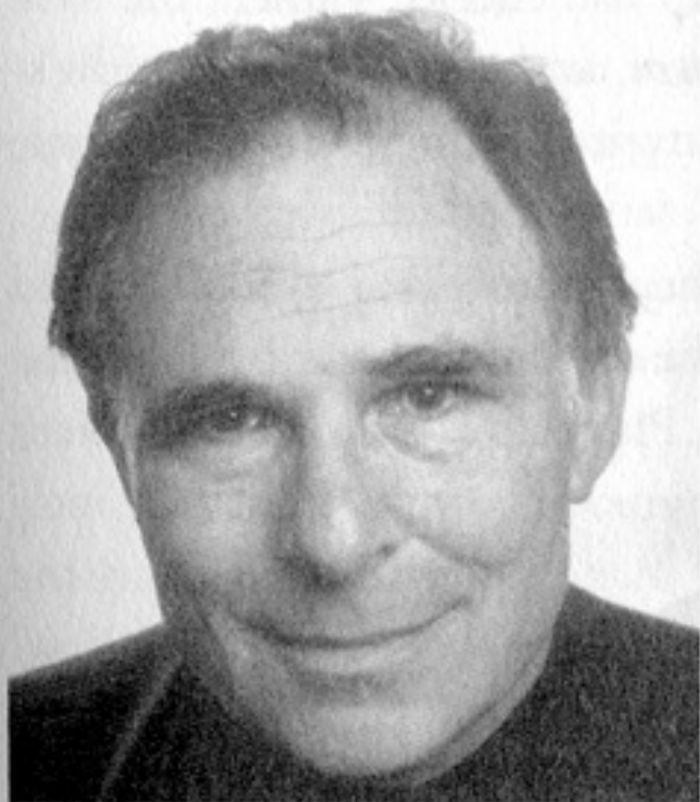
Lakin, Chartrand, & Arkin (2008)



Social exclusion enhances the ability to differentiate genuine and posed smiles.

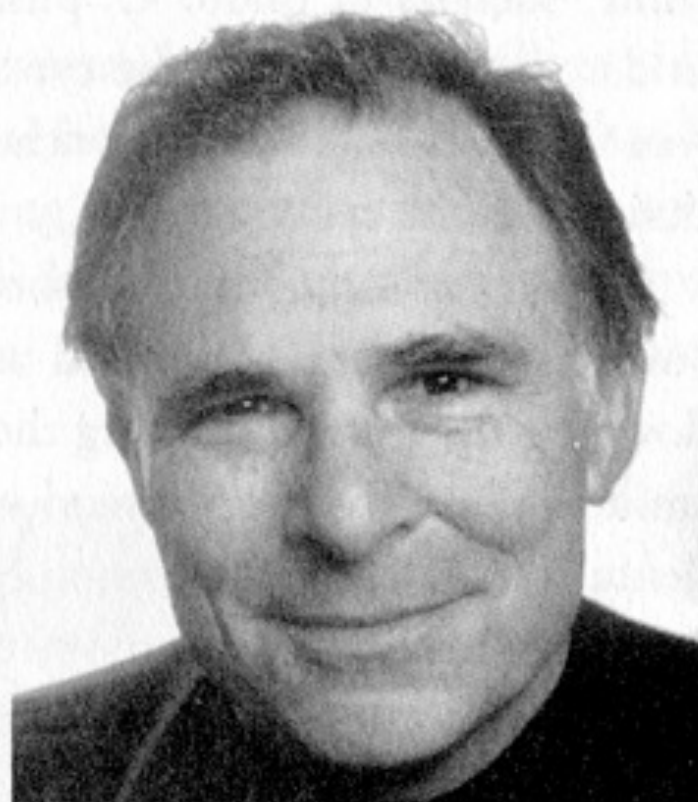
Bernstein et al., 2008

Duchenne Smile



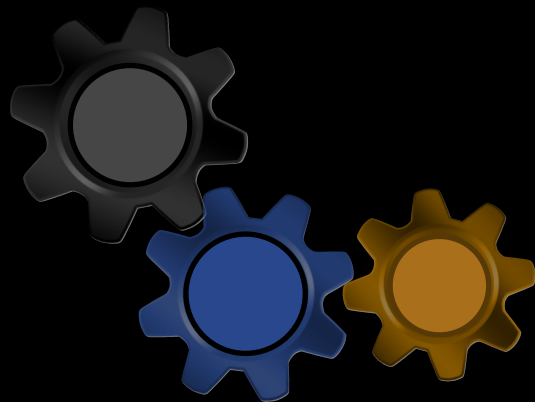
A

Posed



B

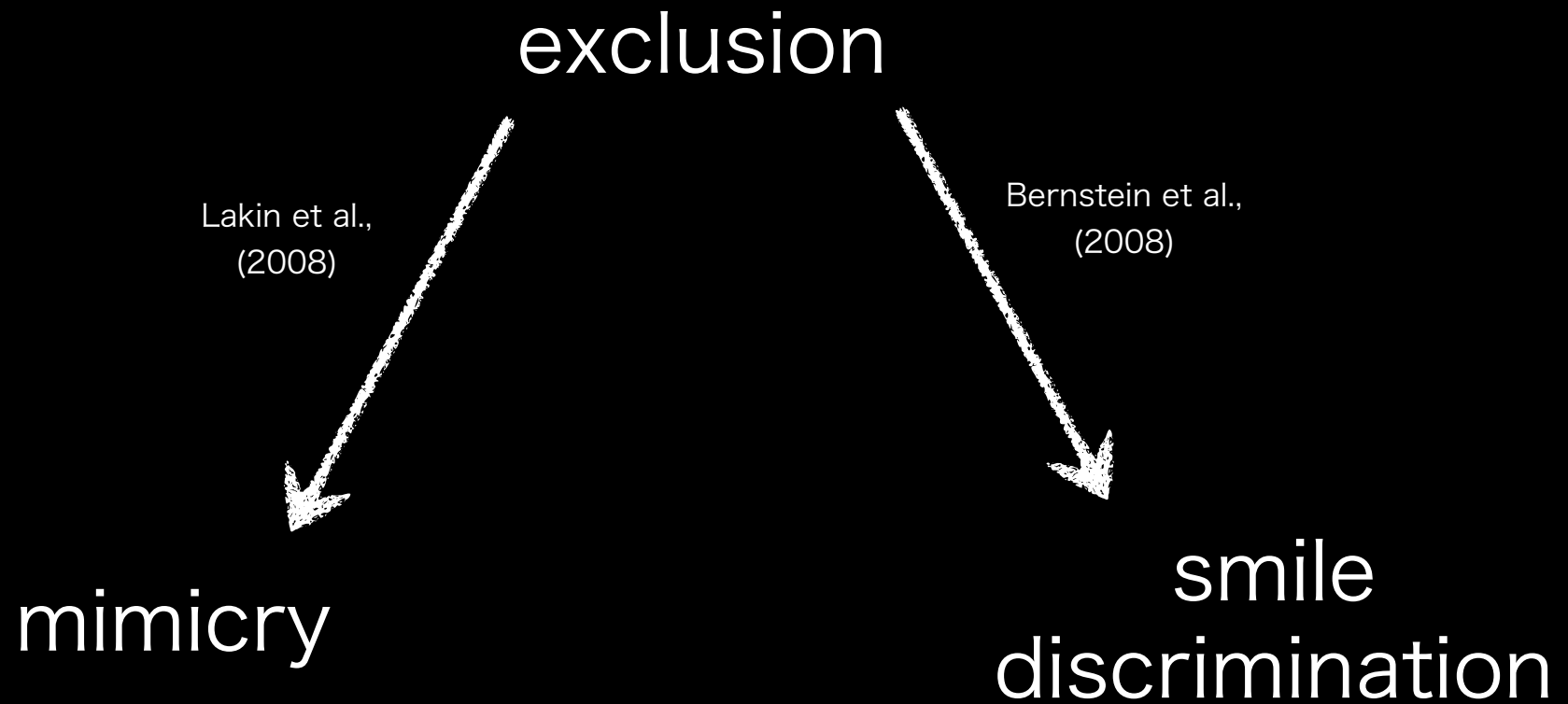
Genuine



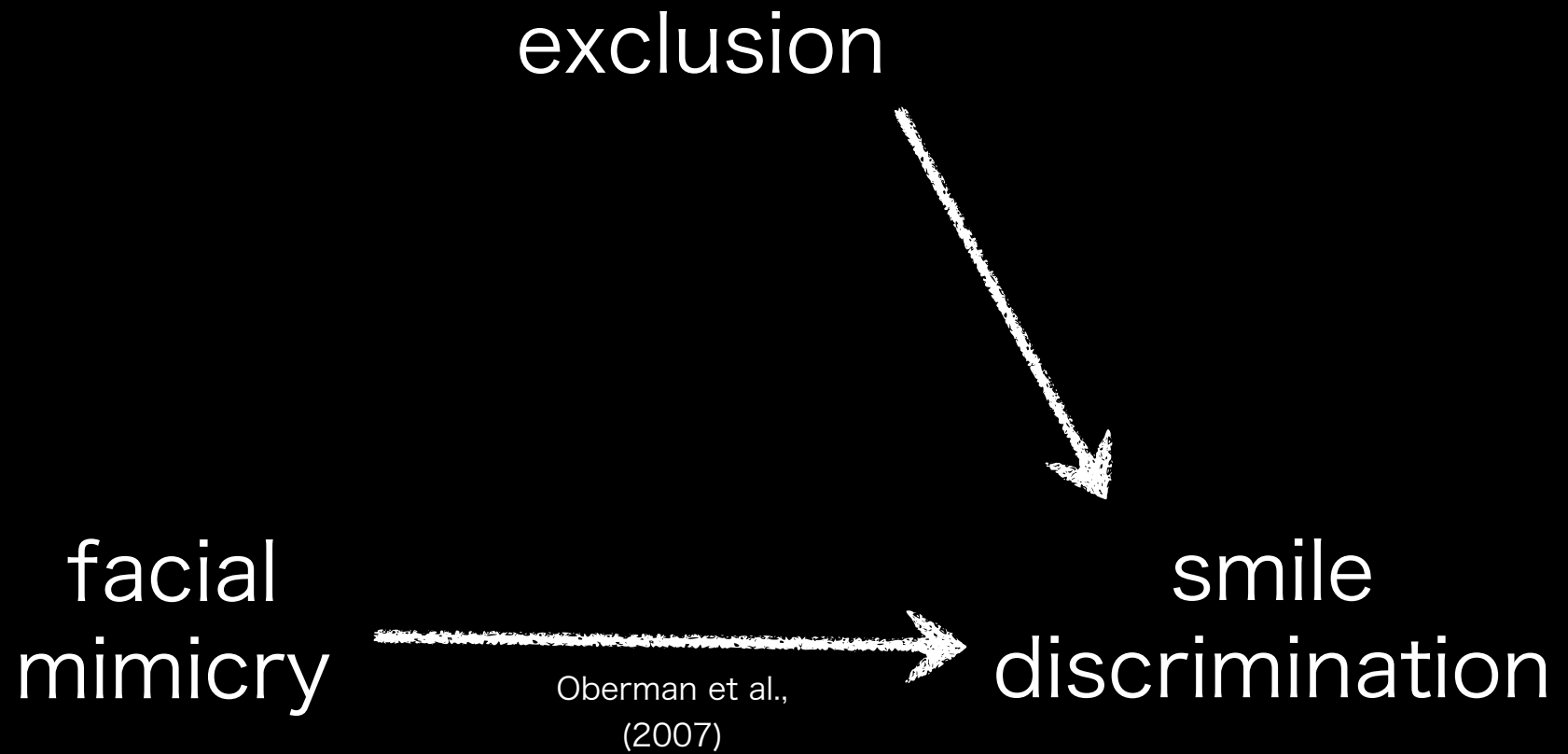
Blocking facial mimicry can
inhibit recognition of happy
expressions.

Oberman et al., 2007

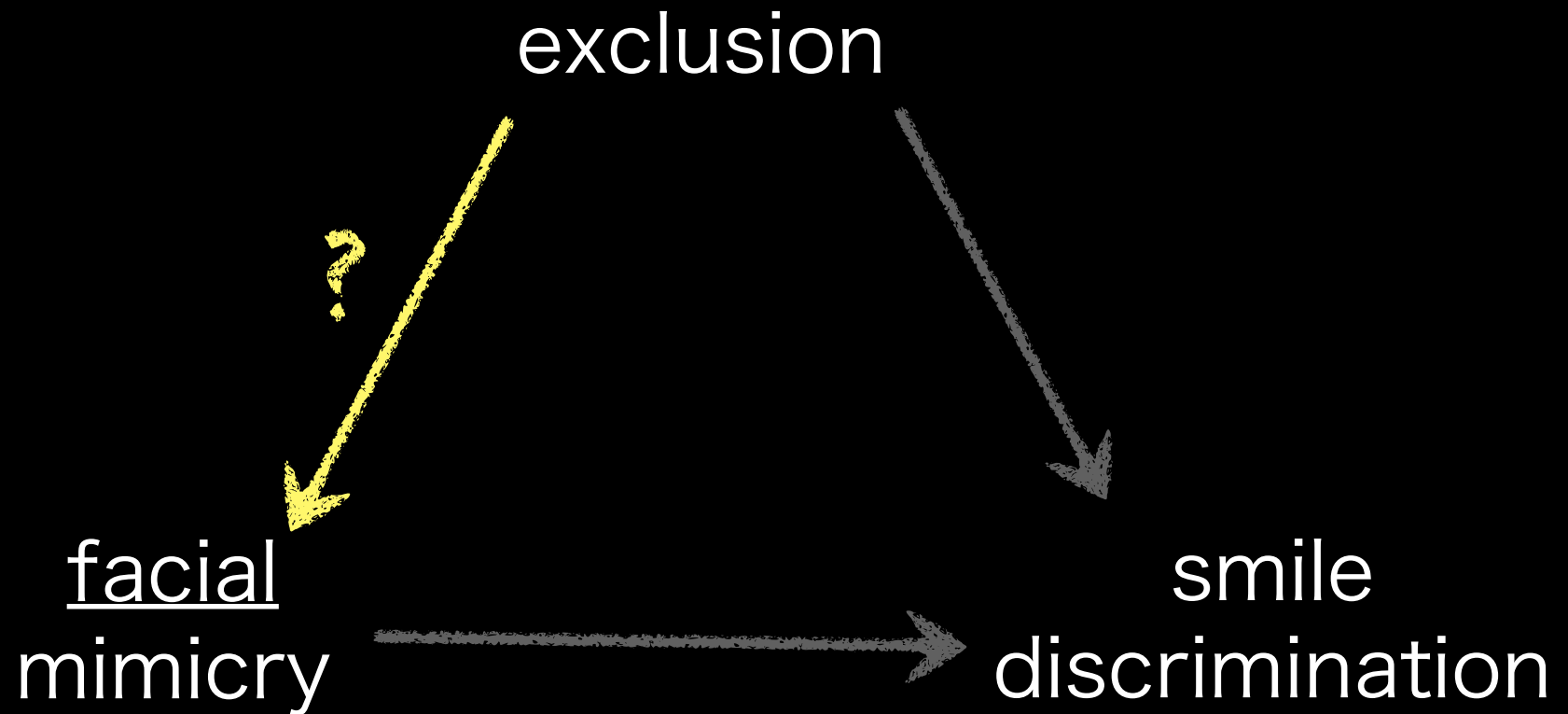
a model



a model



a model



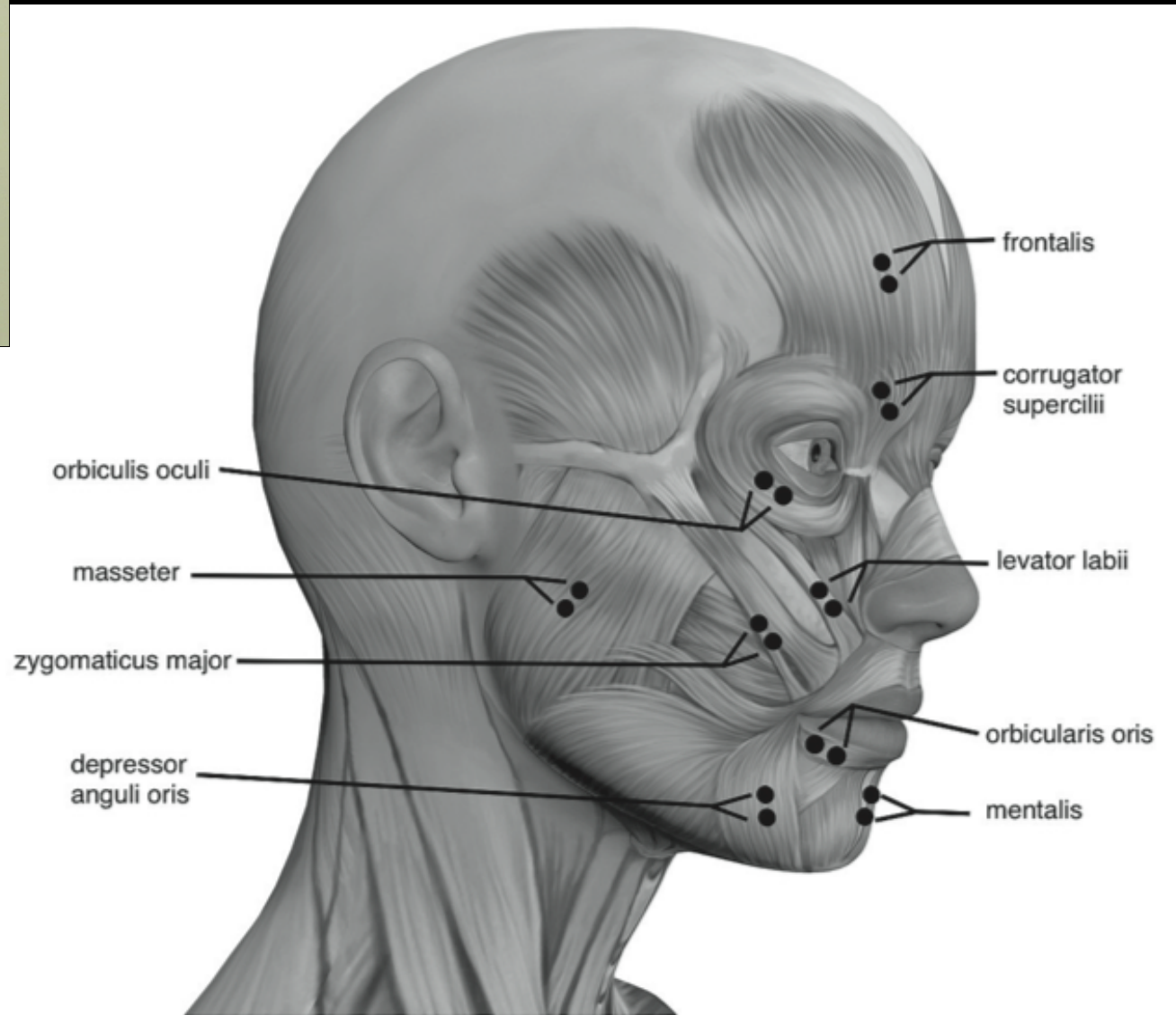
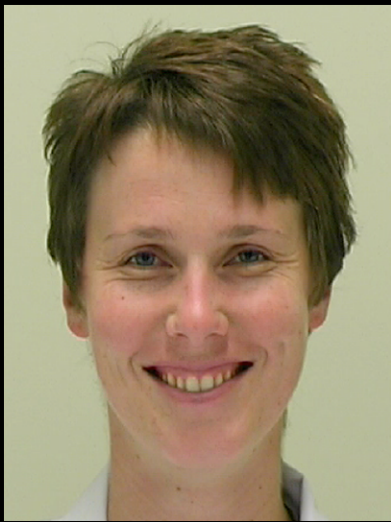
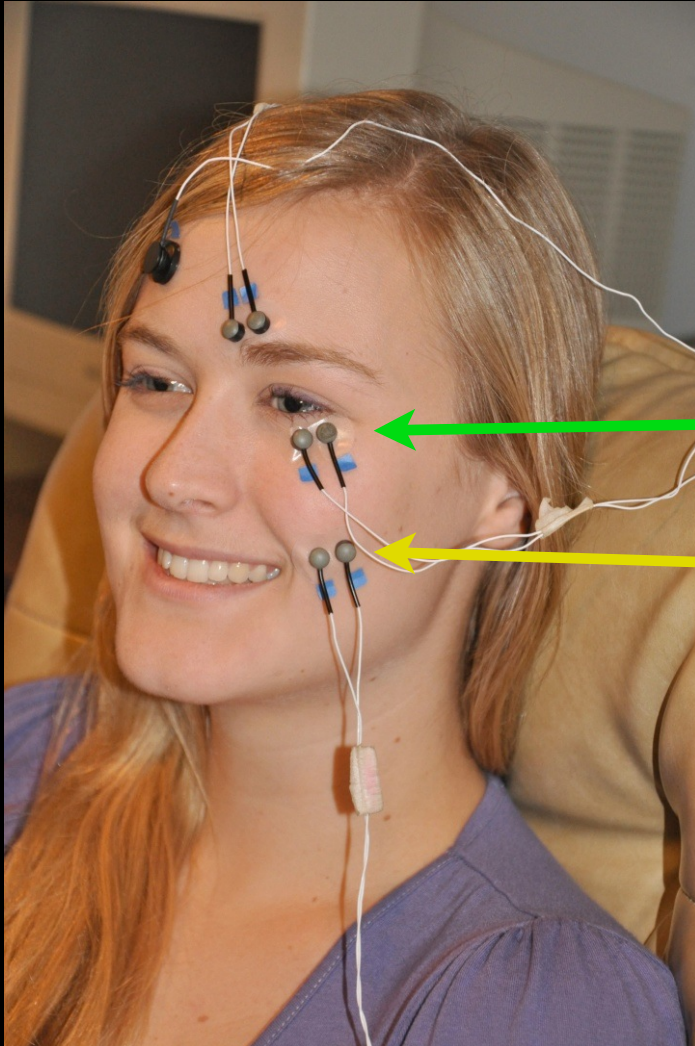
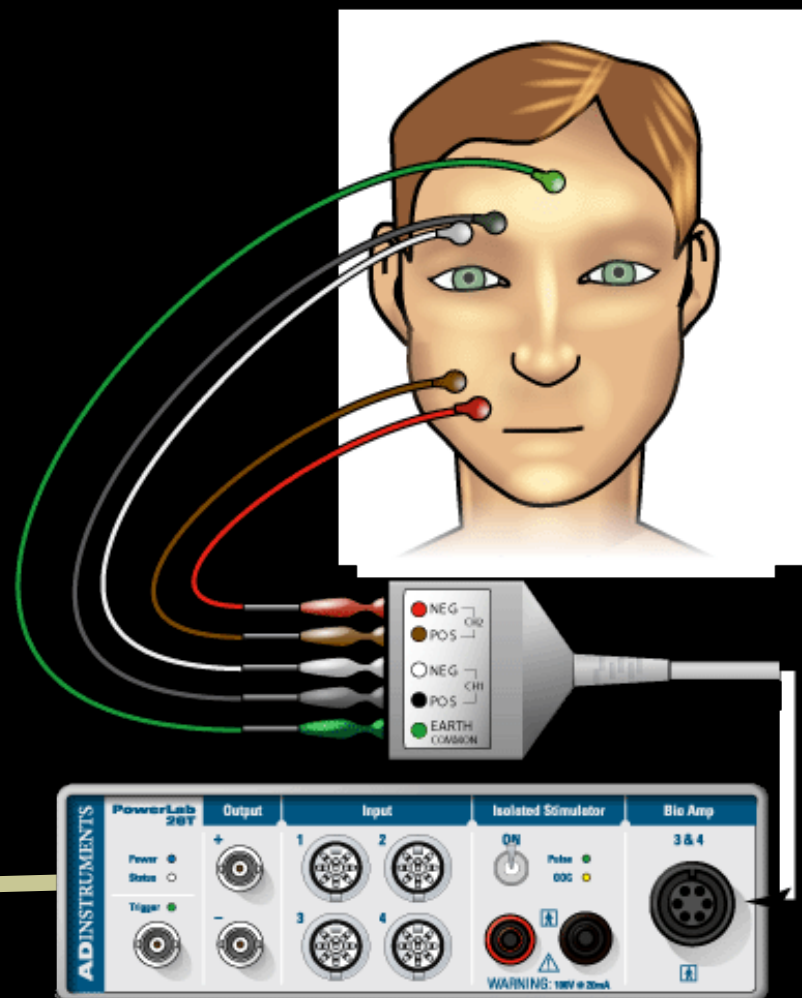
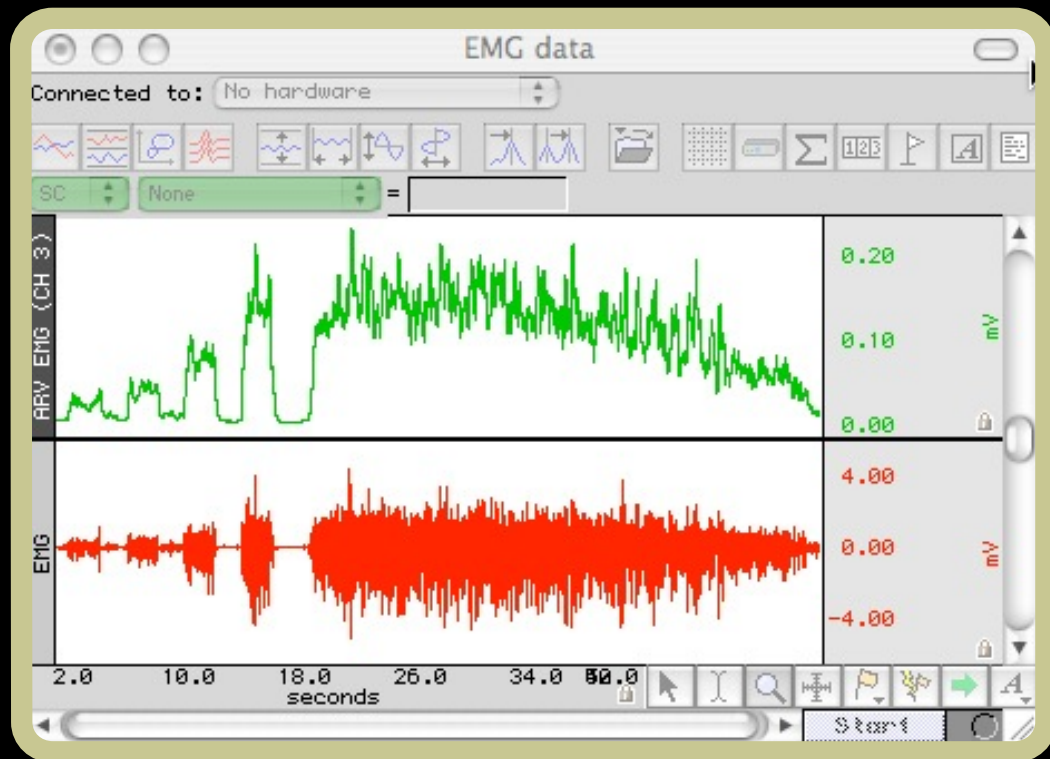


Figure 3.2 Common facial EMG placements and their corresponding muscles, based on Figure 12.4 in Cacioppo et al. (2007).



Orbicularis Oculi

Zygomaticus Major

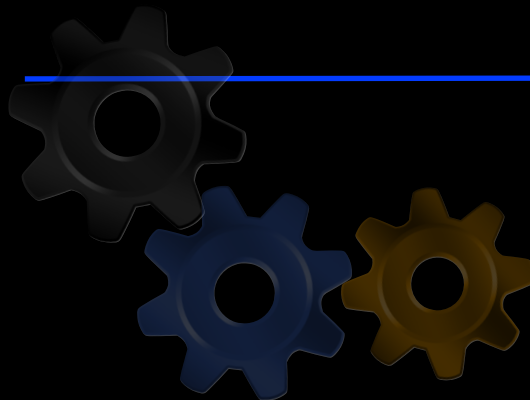




1. Exclusion induction

Write about a time you were
rejected or excluded.

Write about waking up
yesterday morning.

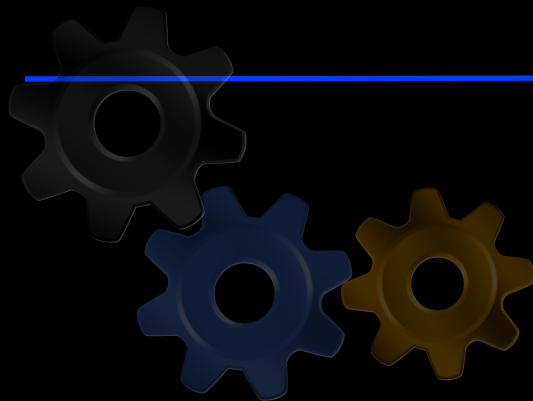


method



1. Exclusion induction

2. viewed 26 smiles (13 genuine, 13 posed)



method

1. Exclusion induction



2. viewed 26 smiles (13 genuine, 13 posed)



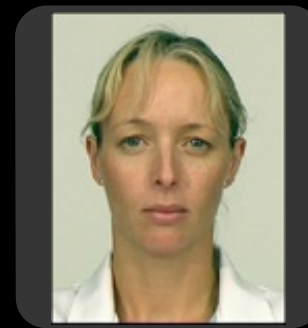
fixation
~5000 ms



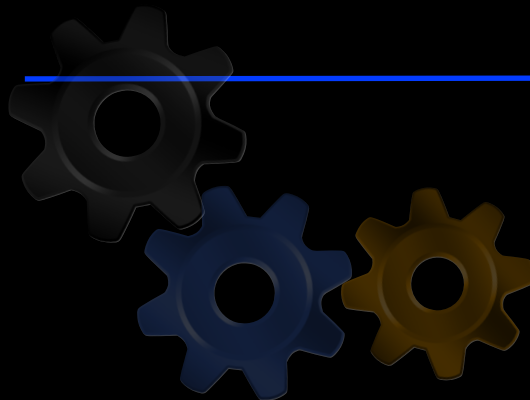
neutral
1500 ms



smile
1000 ms



neutral
4500 ms



method



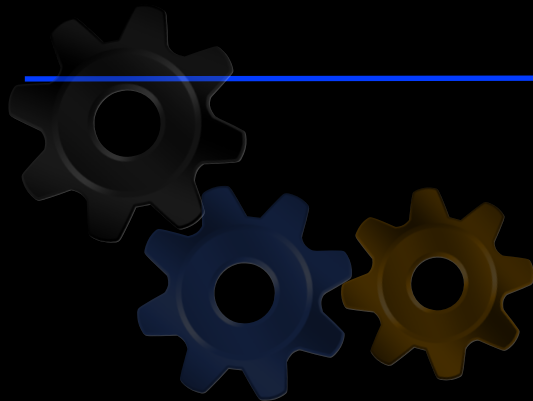
13 people,
3 expressions each

stimuli

Johnston, L., Miles, L, & Macrae, C. (2010). Why are you smiling at me? Social functions of enjoyment and non-enjoyment smiles. *British Journal of Social Psychology*, 49, 107-127.



1. Exclusion induction
2. viewed 26 smiles (13 genuine, 13 posed)
3. participants judged each smile as genuine or posed



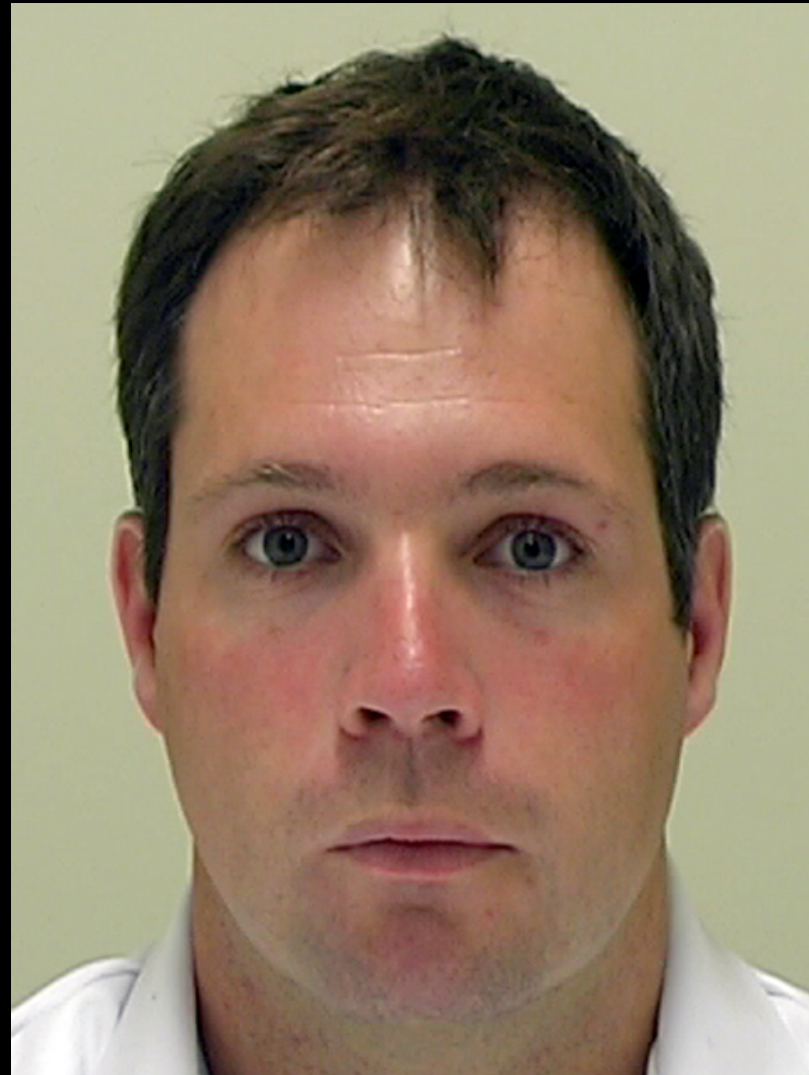
method

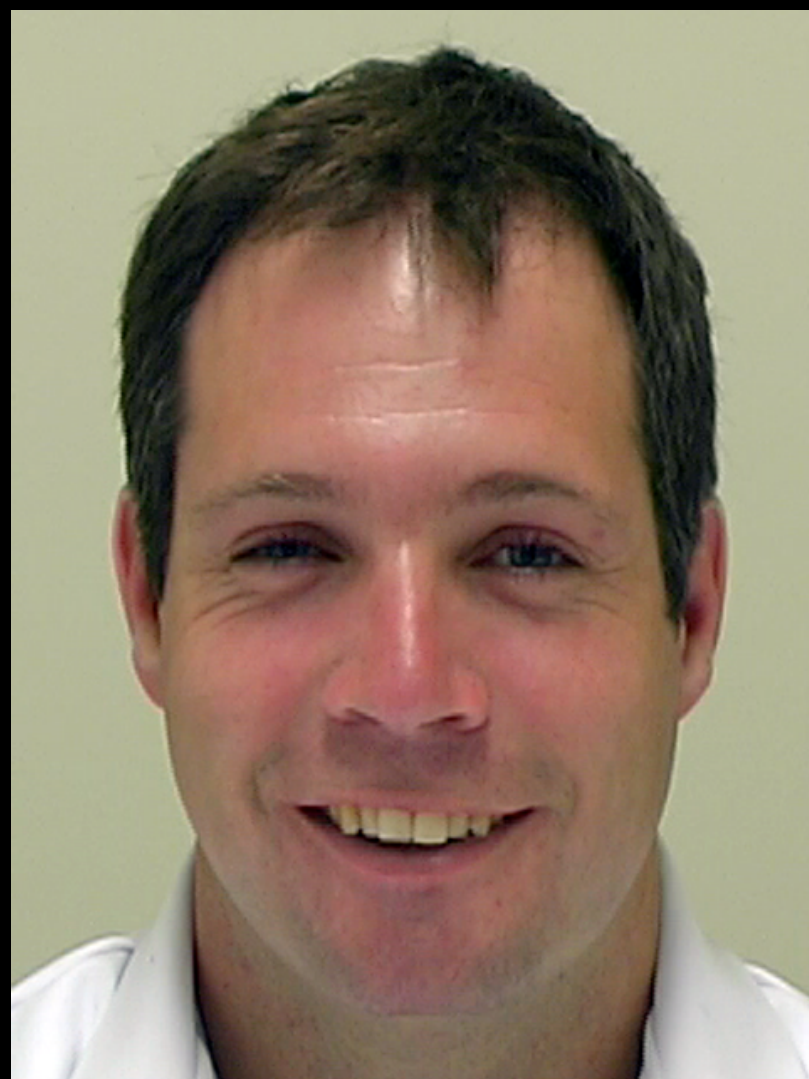


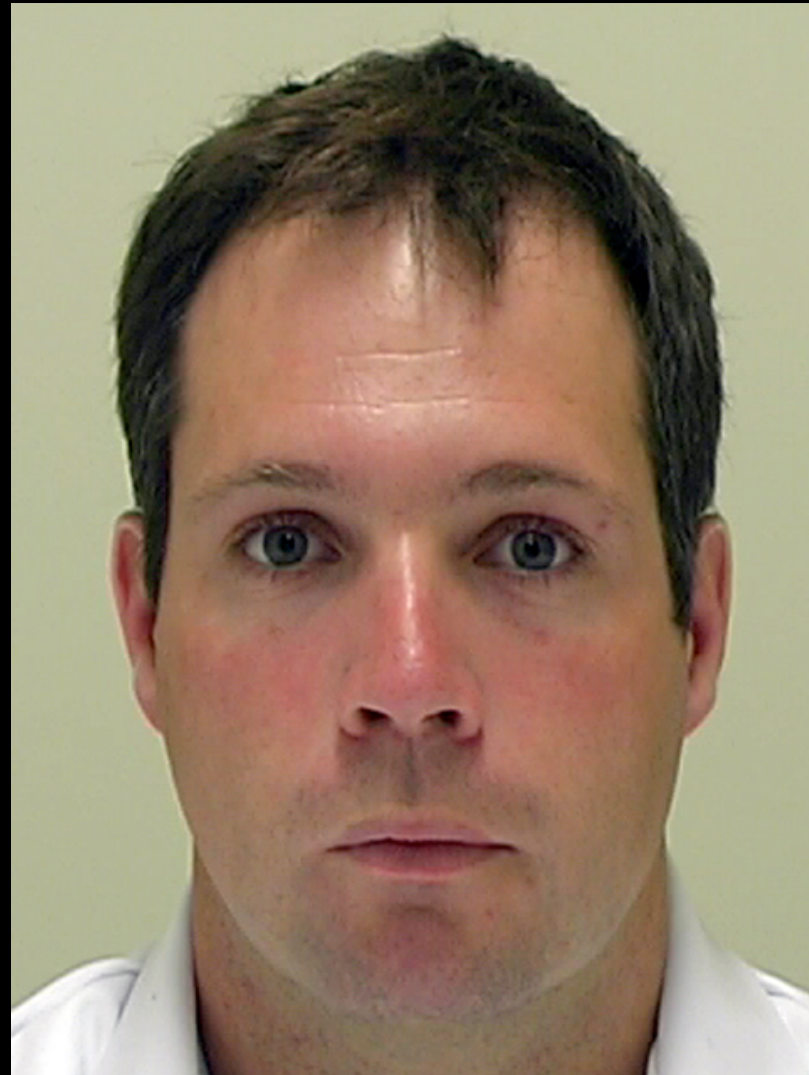




Real or Posed?

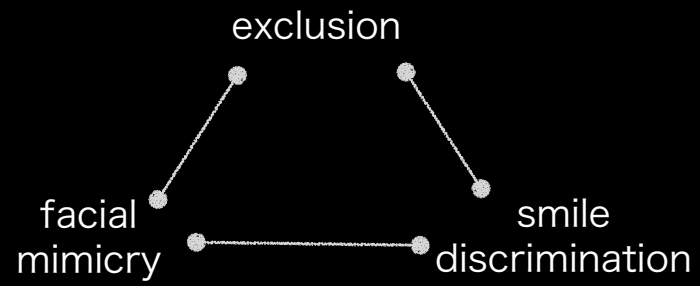




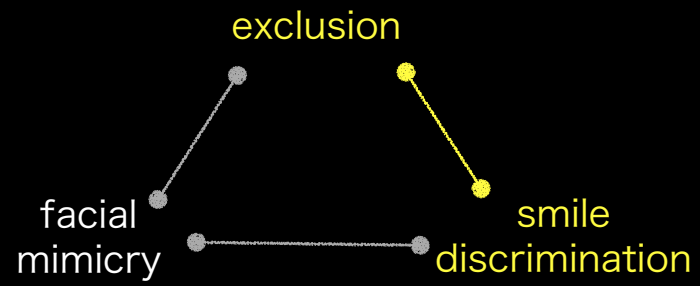


Real or Posed?

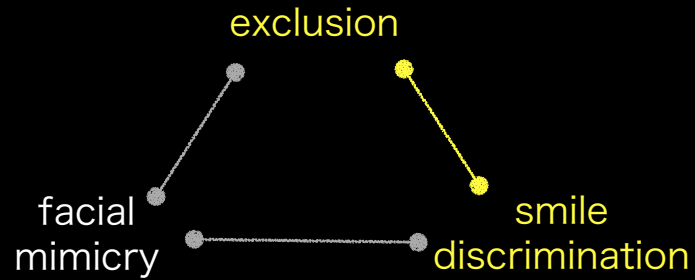
Results:



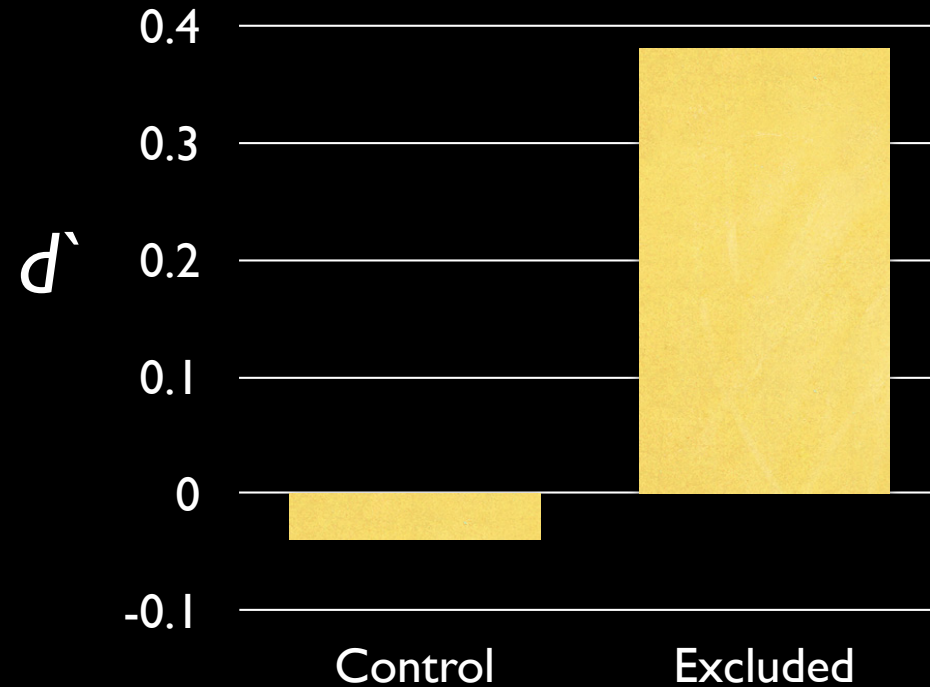
Results:



Results:



Ability to
discriminate
genuine smiles

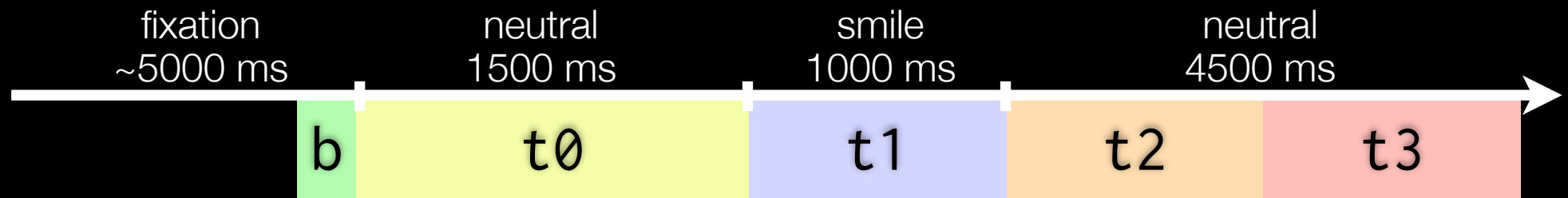


Facial muscle activity



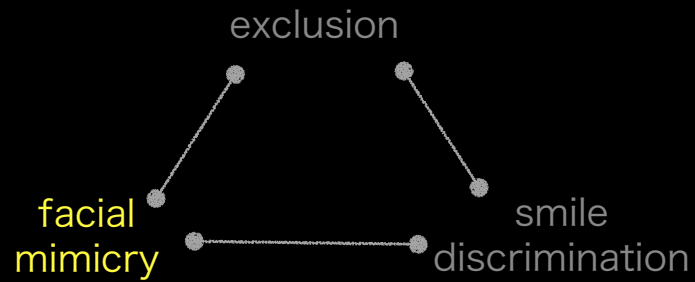
results

Facial muscle activity



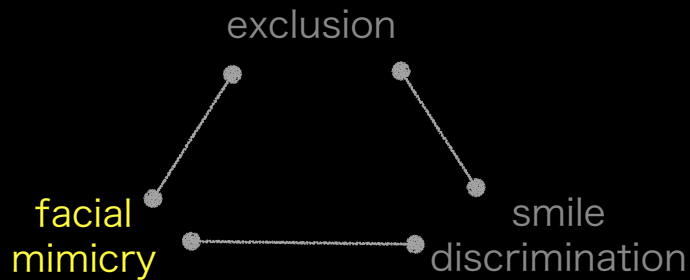
results

Results:

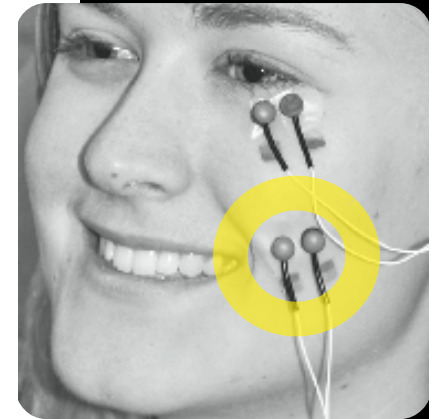
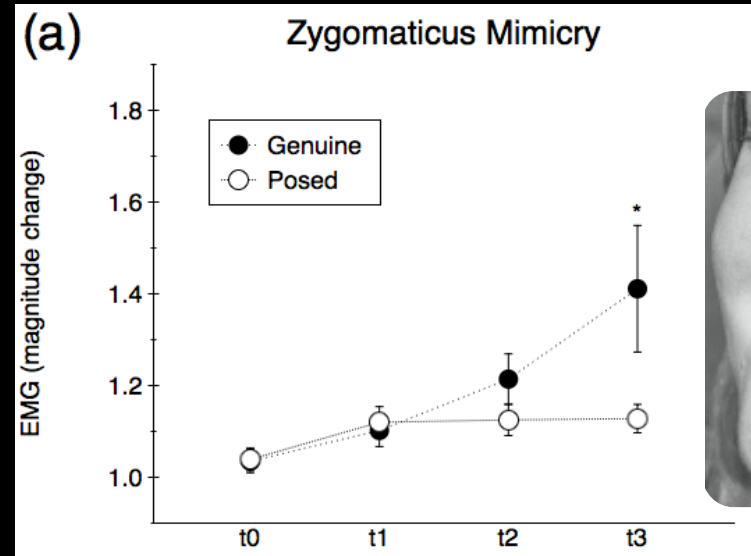


Are genuine and
posed smiles
differently
mimicked?

Results:

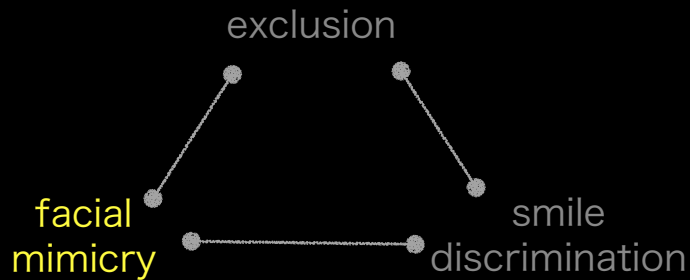


Are genuine and posed smiles differently mimicked?

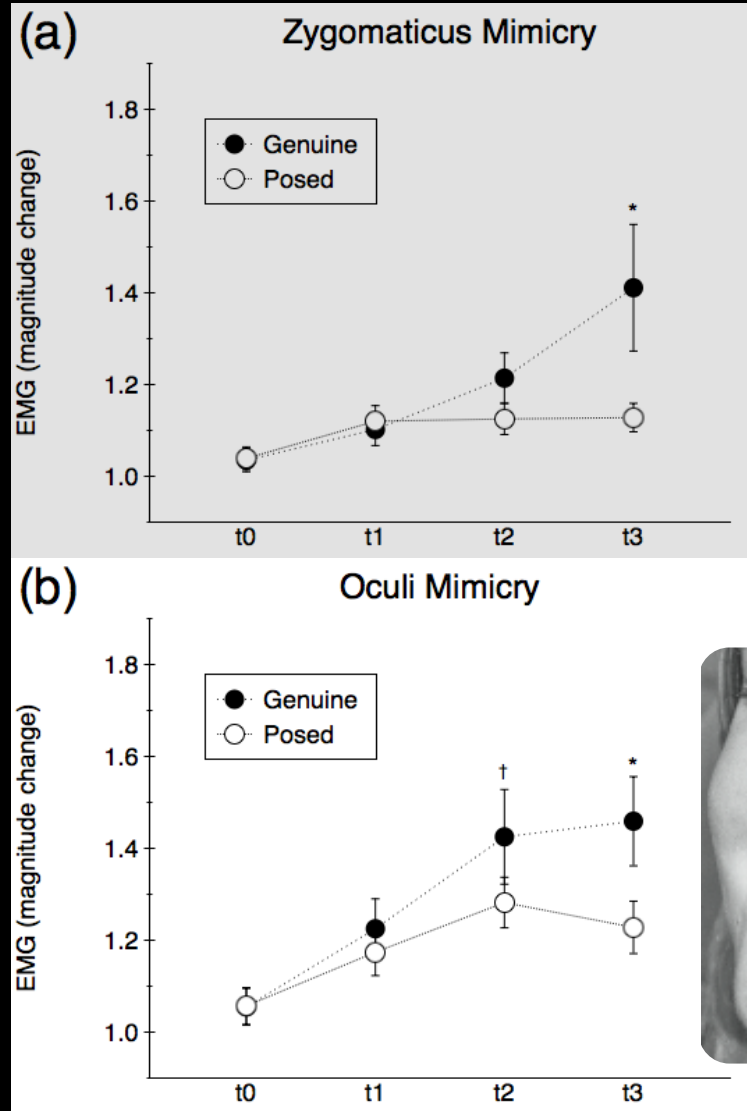


Mean EMG activity for *all* participants in response to genuine and posed smiles. All t1, t2, and t3 data points differ from the respective treatment's t0 data point at $p < .05$. (a) Pairwise comparisons between treatment conditions revealed Genuine smile evoked greater zygomaticus activity at t3 ($*p < .05$).

Results:

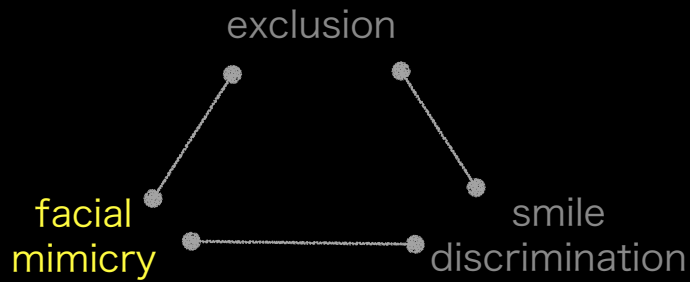


Are genuine and posed smiles differently mimicked?



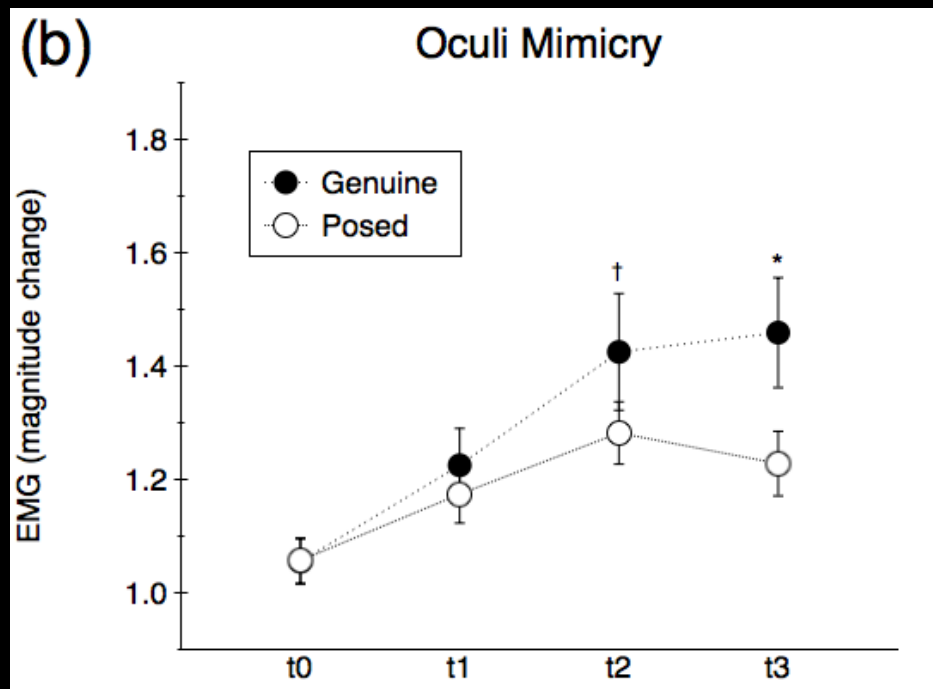
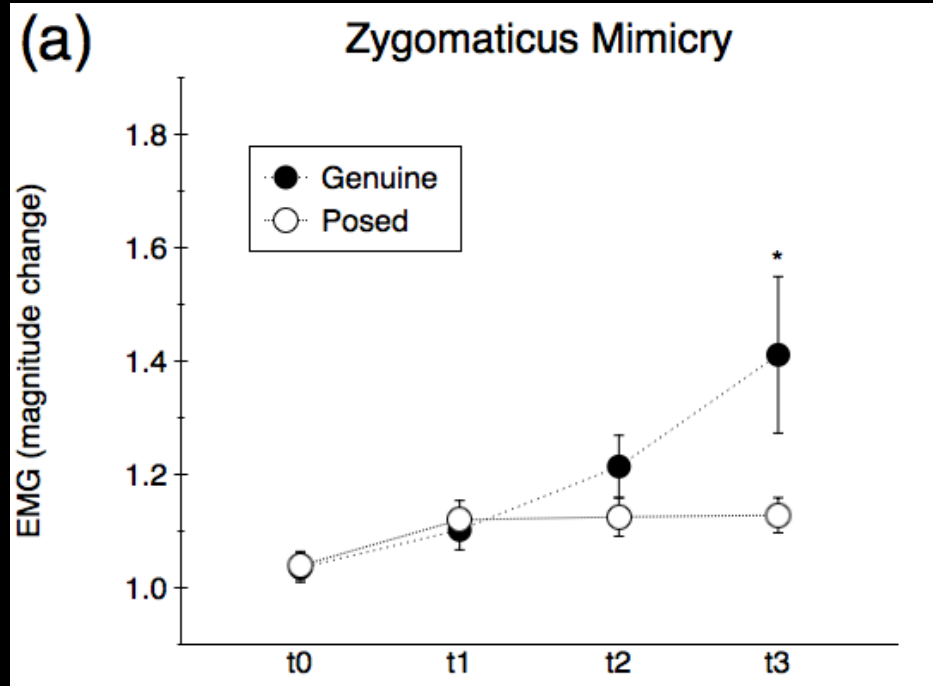
Mean EMG activity for *all* participants in response to genuine and posed smiles. All t1, t2, and t3 data points differ from the respective treatment's t0 data point at $p < .05$. (a) Pairwise comparisons between treatment conditions revealed Genuine smile evoked greater zygomaticus activity at t3 ($*p < .05$). (b) Pairwise comparisons between treatment conditions revealed Genuine smile evoked greater oculi activity at t2 ($†p < .10$) and at t3 ($*p < .05$). *Note:* Error bars represent ± 1 SEM.

Results:

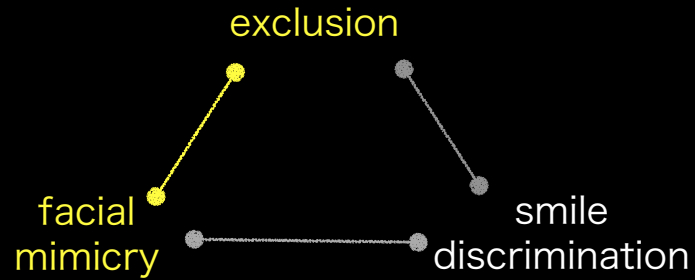


Are genuine and posed smiles differently mimicked?

Seems like it.

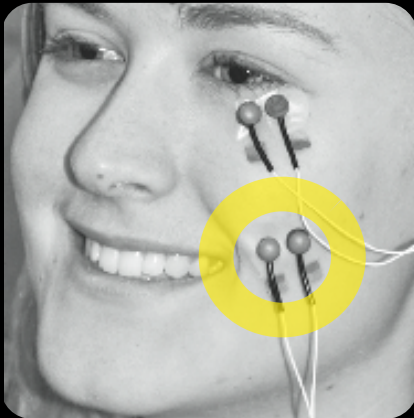
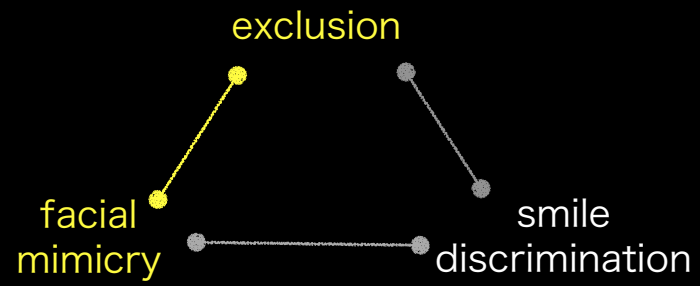


Results:

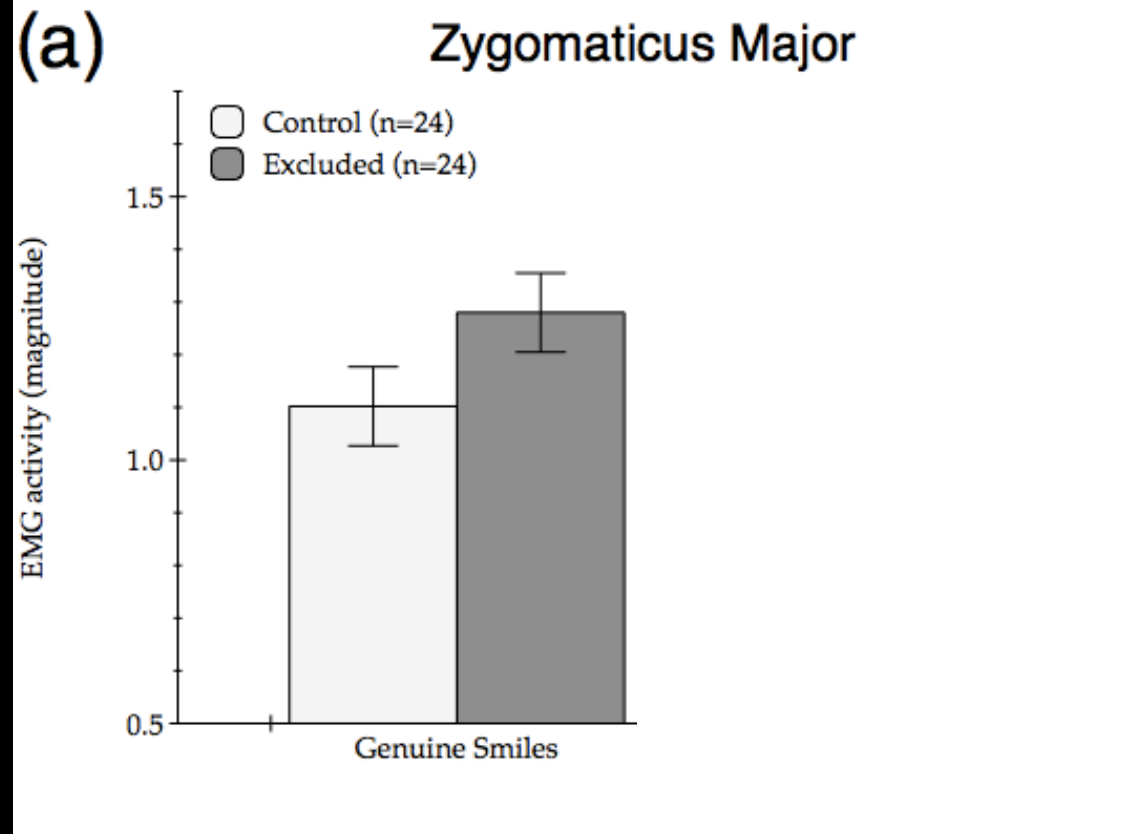
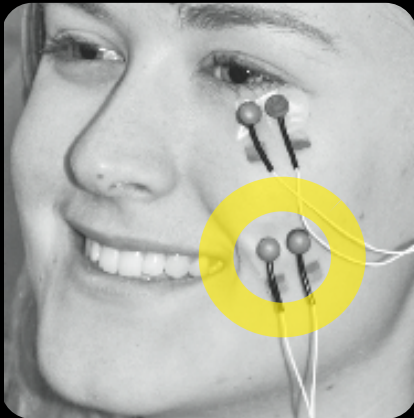
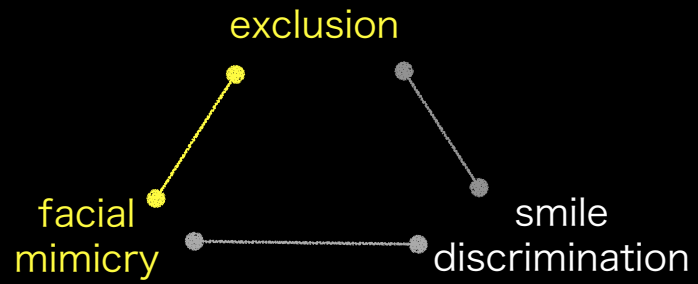


Does social
exclusion affect
facial mimicry?

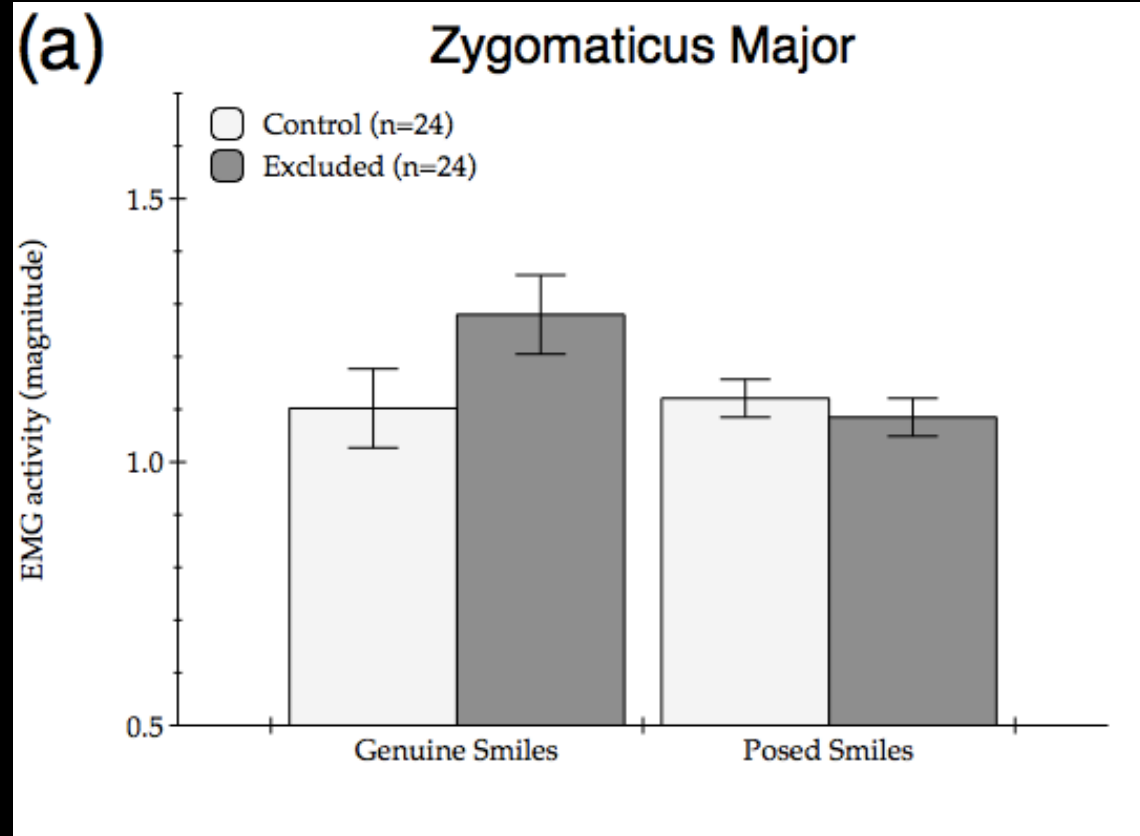
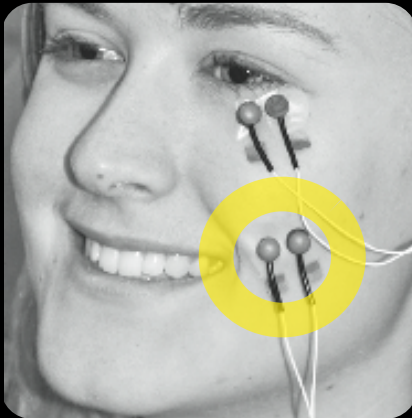
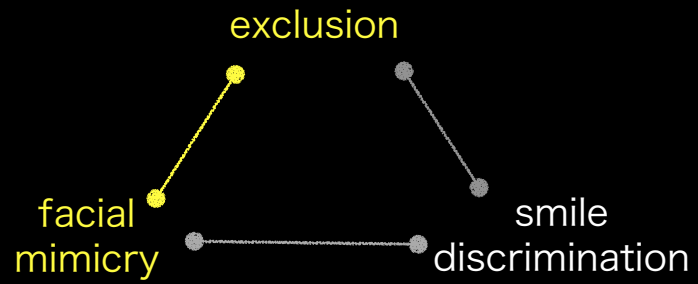
Results:



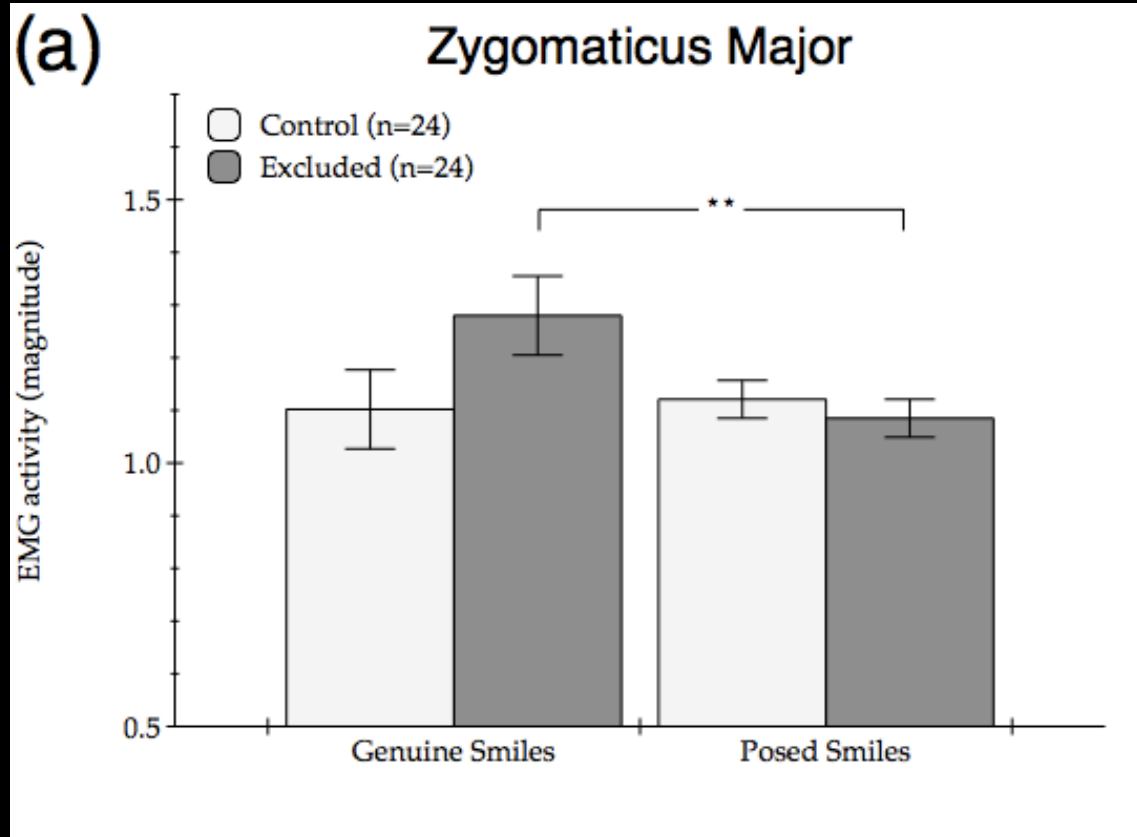
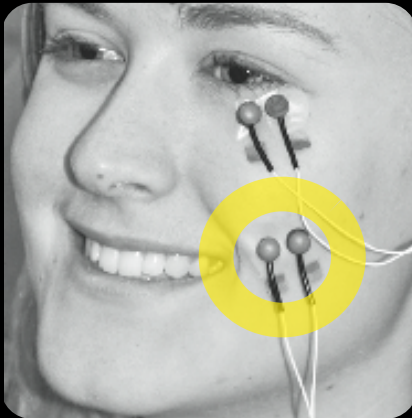
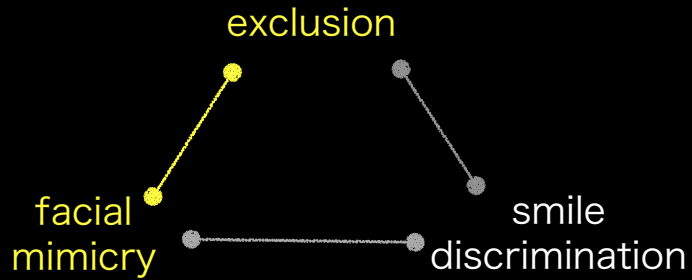
Results:



Results:

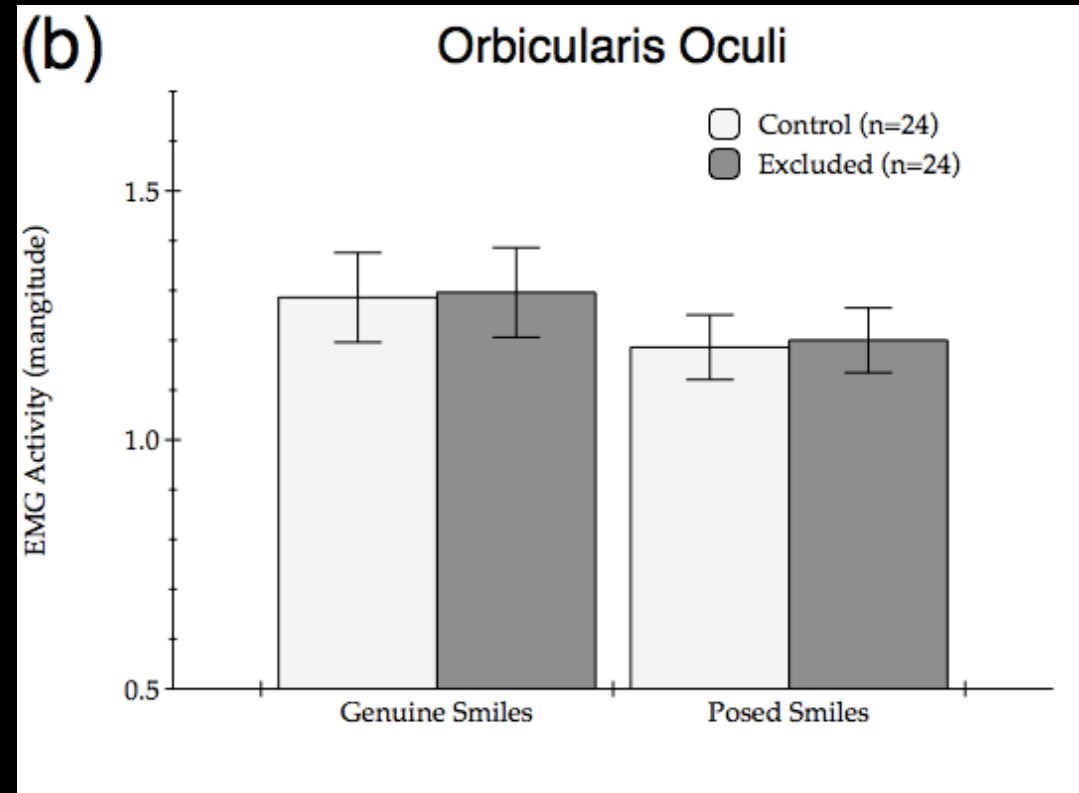
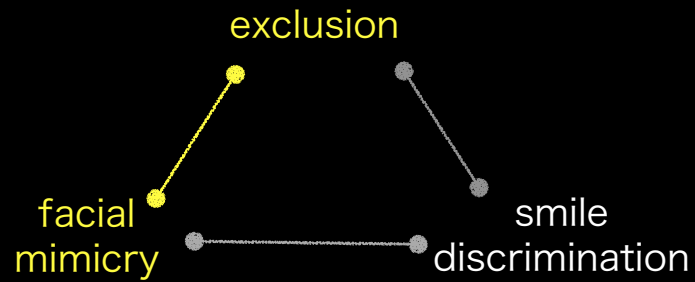


Results:



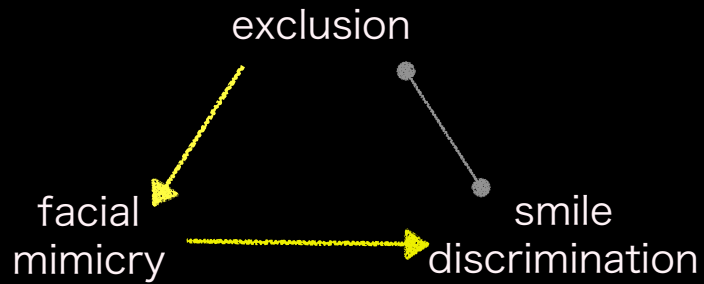
Mean EMG activity by Condition and Smile type (error bars ± 1 SEM). (a) Pairwise comparisons revealed that only Excluded participants showed more zygomaticus activity when viewing genuine smiles compared to posed smiles (** $p = .01$). (b) There was no effect of exclusion on orbicularis oculi activity.

Results:



Mean EMG activity by Condition and Smile type (error bars ± 1 SEM). (b) There was no effect of exclusion on orbicularis oculi activity.

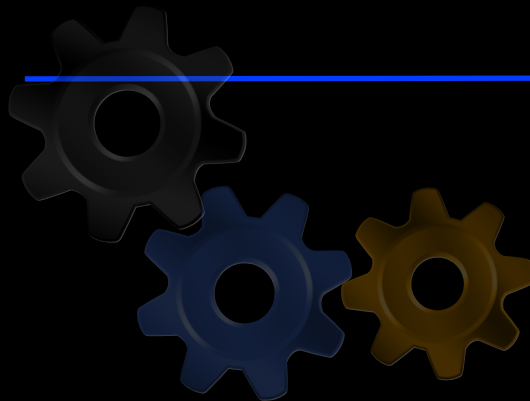
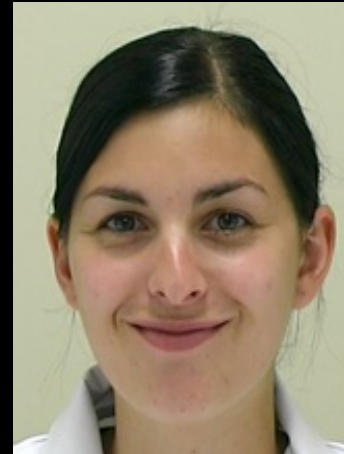
Results:



Does facial mimicry of emotional expression explain the changes in smile discrimination?

No.

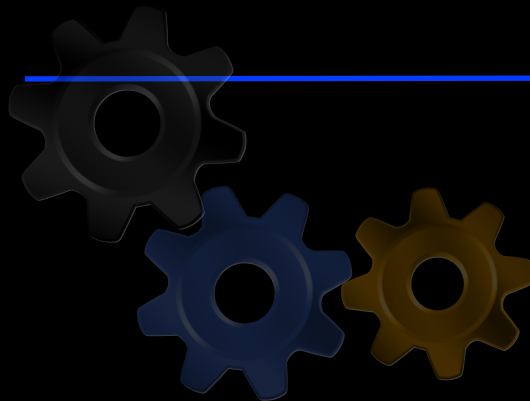
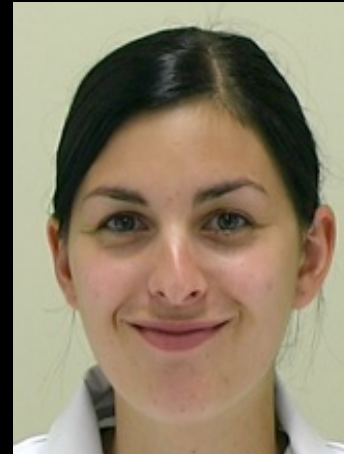
Social exclusion selectively affects
reciprocation of facial gestures.



conclusions

Social exclusion selectively affects
reciprocation of facial gestures.

why?



conclusions