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Pet-directed speech attracts horses' attention more than adult-directed speech on video-projections

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HAL Authorization

Pet-directed speech attracts horses' attention more than adult-directed speech on video-projections

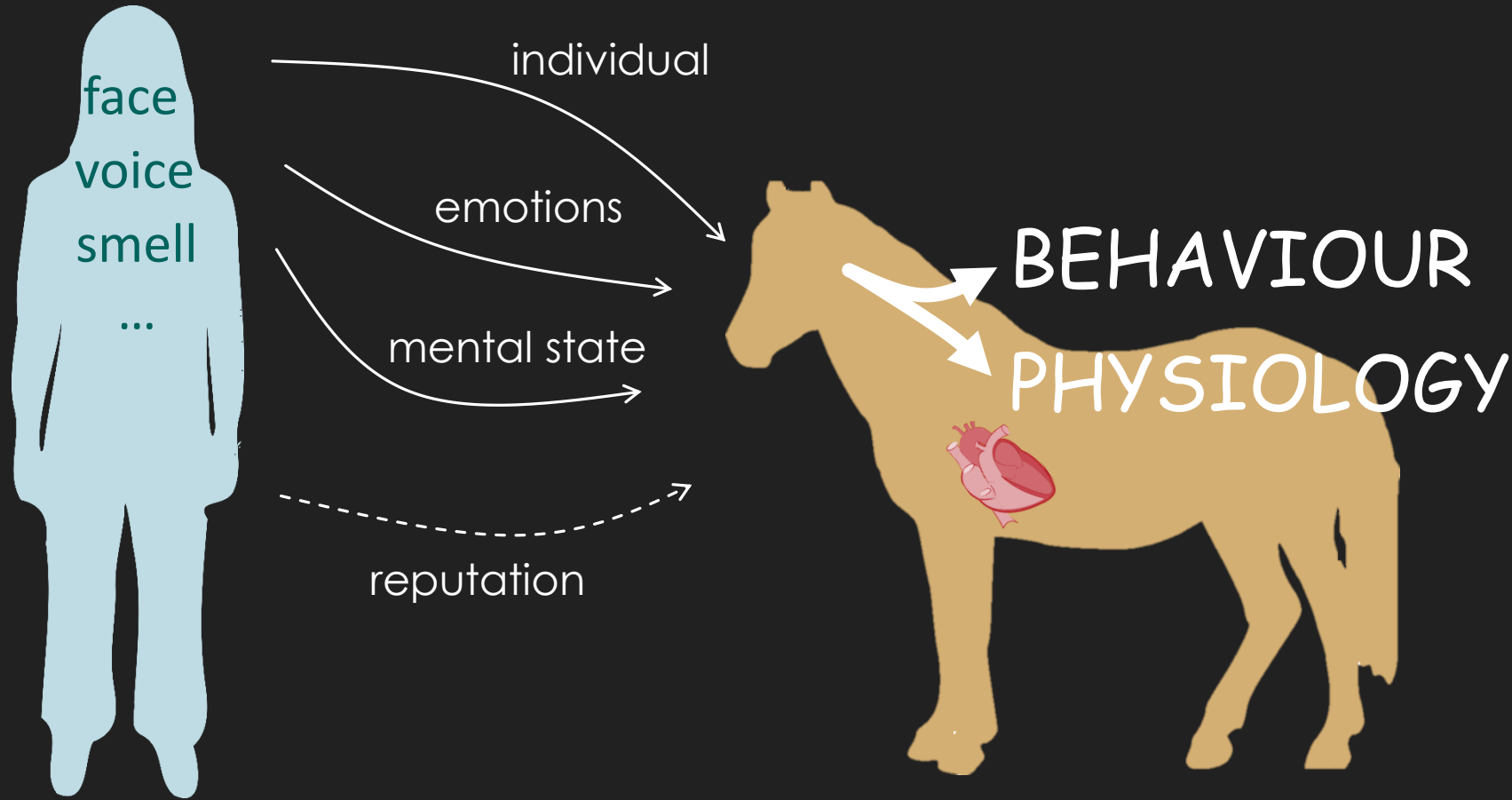


Jardat, P., Calandreau, L., Ferreira, V., Gouyet, C., Parias, C., Reigner, F., Lansade, L. Pet-directed speech improves horses' attention toward humans. *Sci Rep* **12**, 4297 (2022). <https://doi.org/10.1038/s41598-022-08109-z>



The human-horse relationship

Jardat and Lansade 2021
Proops and McComb 2010
Trösch et al. 2019
Lansade et al. 2020

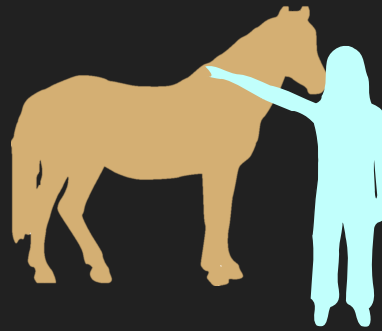


Pet-directed speech and its effects on horses

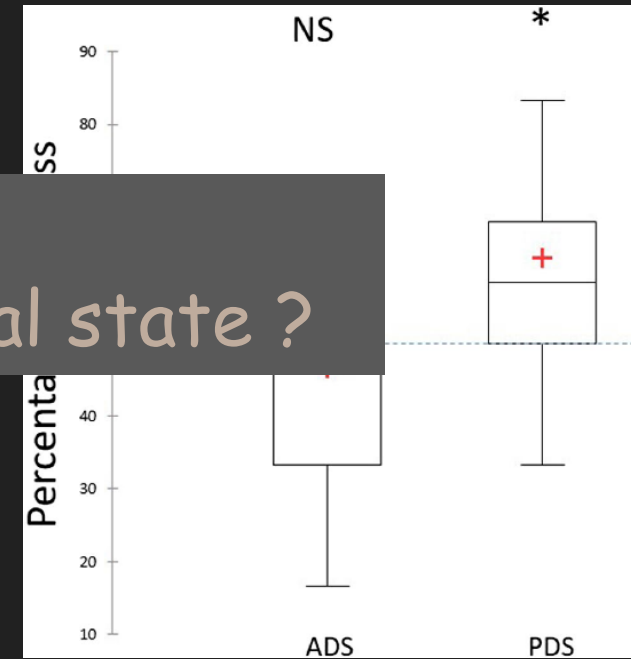
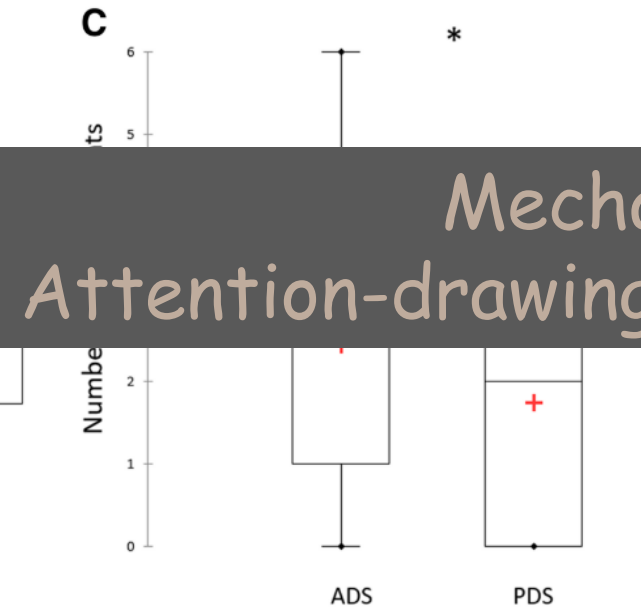
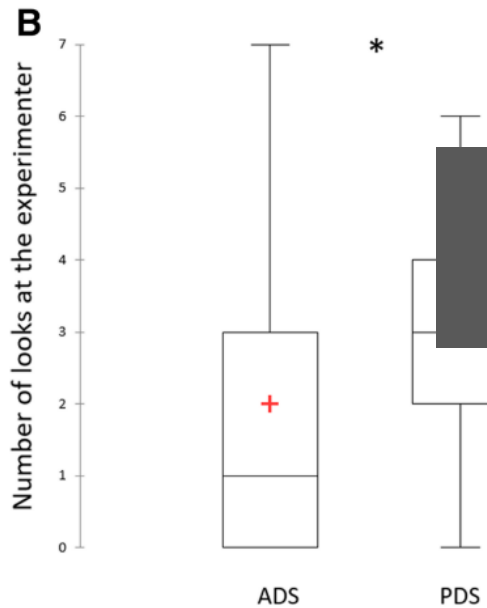
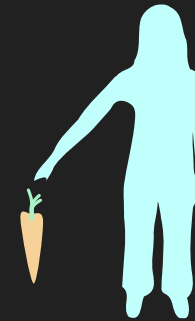
High pitch
Wide pitch range
Slow rate of speech

Lansade et al. 2021

During grooming



Pointing task



Mechanism?
Attention-drawing, emotional state?

Methods

28 female horses

Pre-registered videos of women speaking in PDS and ADS



Behaviour

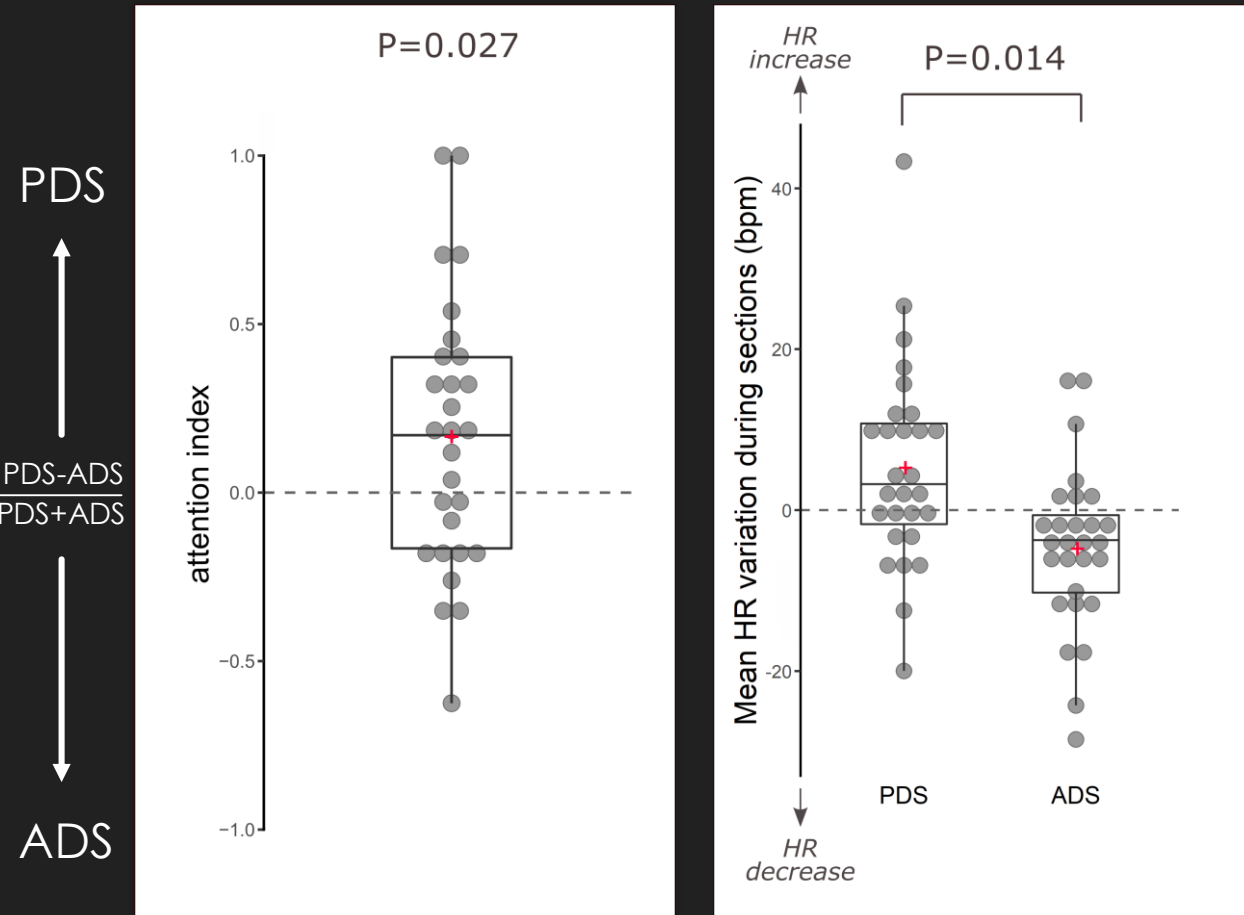
Attention to video

Alert/relaxed posture
Defecations, neighs,
snorts, shows of sclera

Heart rate

$HR_{end} - HR_{start}$

Results



→ PDS helps to **attract** horses' **attention** and has an **arousing effect** on them

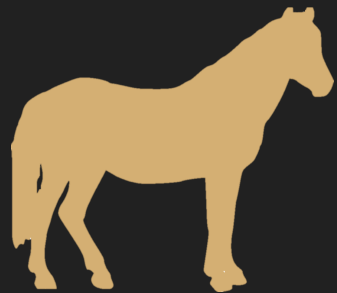
No differences in emotional indicators between PDS and ADS

Discussion: why this effect of PDS on horses?

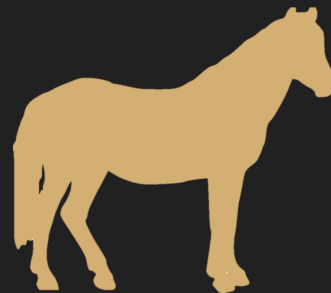
Trösch et al. 2019, 2020

Saint-Georges 2013

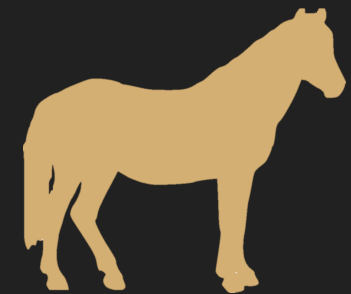
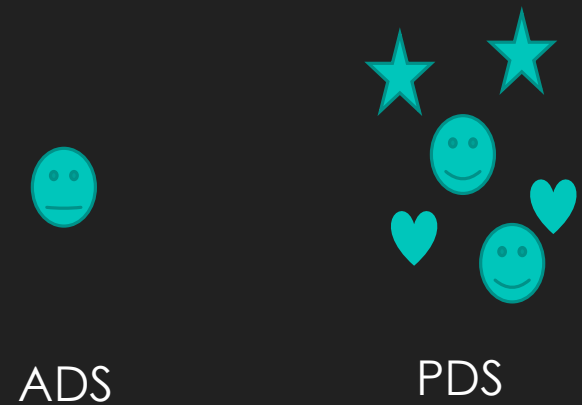
- PDS catches the ear



- PDS carries communication intent




- PDS conveys positive emotions



Conclusion

- PDS is **arousing and attention-drawing** for horses → can be used during **human-horse interactions**
- Broadcasting **pre-registered videos of humans** allows to study horses' perception of us



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