Shared safety prevents the recovery of learned threat

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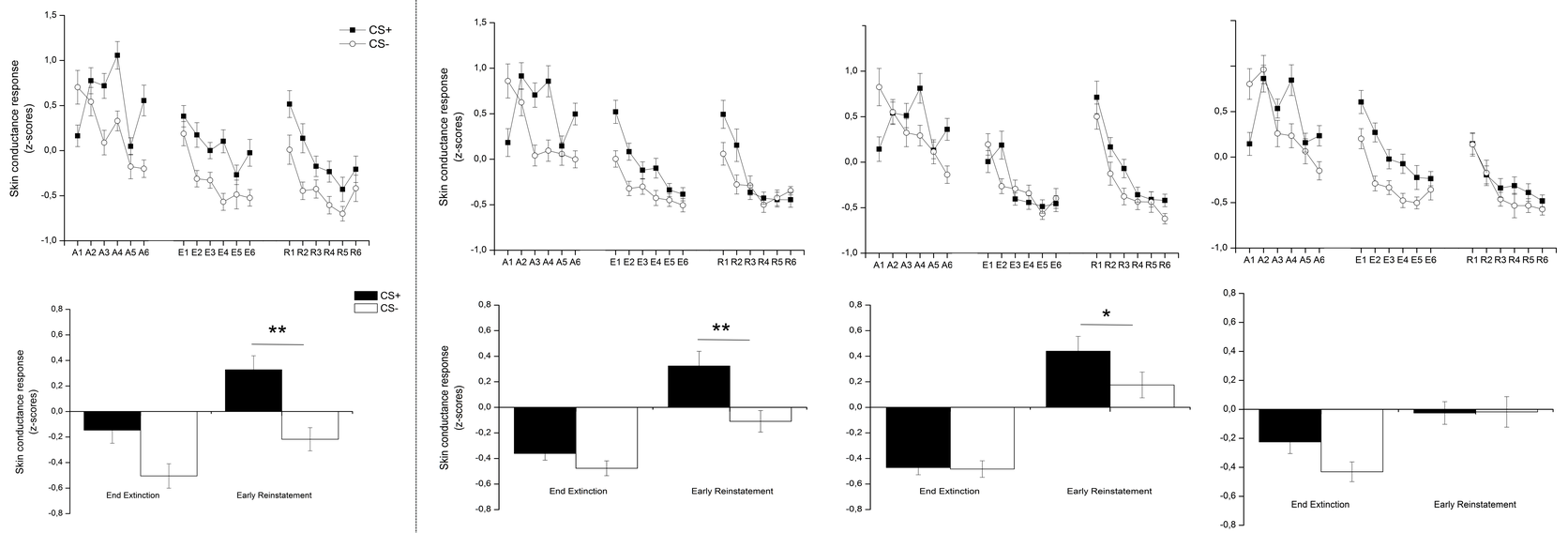
INTRODUCTION

- Humans, like other social animals, learn about both threats and safety in the environment through social signals.
- To isolate the contribution of social processes to the efficacy of social safety learning, we developed a dyadic model during which pairs of participants underwent an associative threat learning and extinction paradigm followed by a threat recovery test.
- In three separate dyadic social extinction groups, we manipulated whether safety could be acquired via own exposure (direct safety transmission), via observation of another individual's safety behavior (vicarious safety transmission) or via the combination of direct and vicarious safety information (shared safety transmission). As a control, we additionally ran a standard, asocial extinction group (asocial safety transmission).

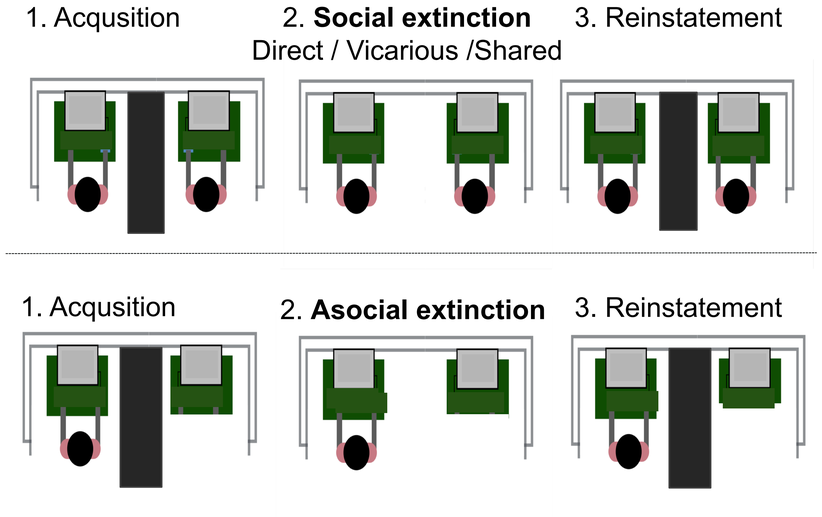
RESULTS

Asocial safety transmission | Direct safety transmission | Vicarious safety transmission | Shared safety transmission



METHODS

General setup



- During **social extinction,** we manipulated safety transmission in three separate groups by changing both CS exposure and instructions:
- **Direct safety** (N=59): Own CS exposure but informed that other person exposed to novel images.
- **Vicarious safety** (N=57): No own CS exposure, but informed that other person exposed to CSs.
- **Shared safety** (N=58): Both own CS exposure and informed that other person exposed to same CSs.
- **Asocial safety transmission:** As a control, we also ran an **asocial extinction group** (N=48) that had own CS exposure, but no social information.

CONCLUSIONS

- In line with our previous finings using video-based set-ups (e.g. Golkar et al., 2013; Golkar et al., 2016; Golkar et al., 2017), these data suggest that the efficacy of social safety learning is achieved by the *shared experience* of safety between individuals.
- These data have implications for understanding how basic social learning processes may contribute to optimizing safety learning and inform the development of more efficient exposure strategies in the treatment of threat-related disorders.

Golkar et al.,(2013). *Psychological Science,* 24(11).
Golkar et al., (2016). *SCAN,* 11.
Golkar et al., (2017). *BRAT,* 22.

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