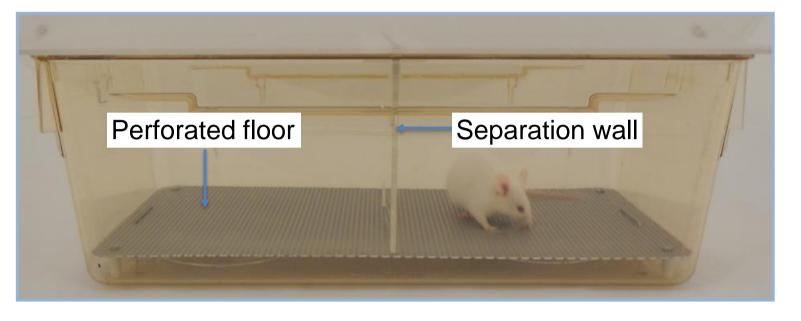
Behavioural responses of mice to predator odour components

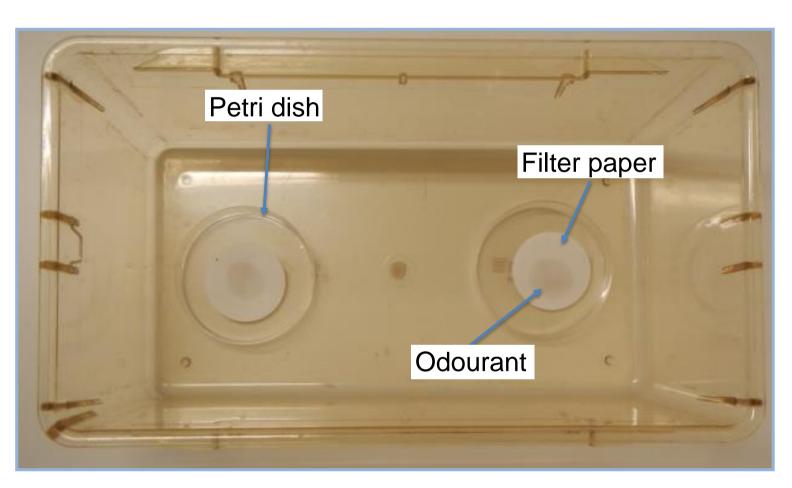


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Introduction

In order to avoid predation, prey species have developed behavioural and sensory adaptations. Most mammalian prey species are therefore able to detect predator emitted odours and display adaptive behavioural responses e.g. avoidance or freezing.





Results

Only the skunk odourant 3-M-1-BE elicited significant aversion at medium concentration. A fruity odour caused neither aversive nor attractive behaviour.

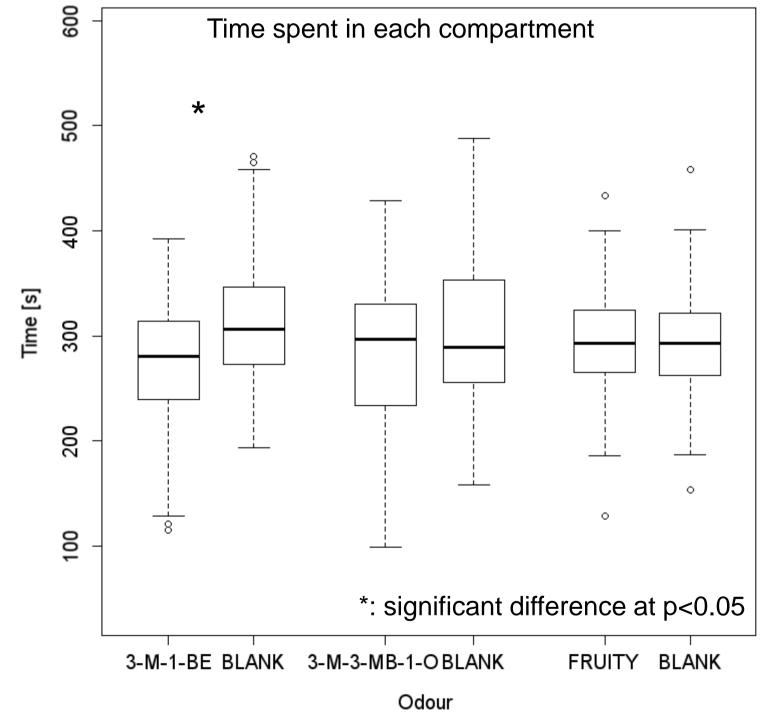
Objective

- Do single components of predator odours elicit anxiety-like behaviour?
- Is the response related to the odourant concentration?

Method

Mice were presented with six different predator odour components (plus a fruity odour and a blank control odour) in a two-compartment chamber.

The time spent in each compartment, as well as the number of switches between the compartments and the number of faecal pellets were recorded.



Conclusions

- Single components of predator odours may not be sufficient to elicit behavioural changes in mice. Rather, a combination of several components or the full odor mixture may be necessary to induce avoidance.
- Neophobia does not account for aversive behaviour in this set-up.