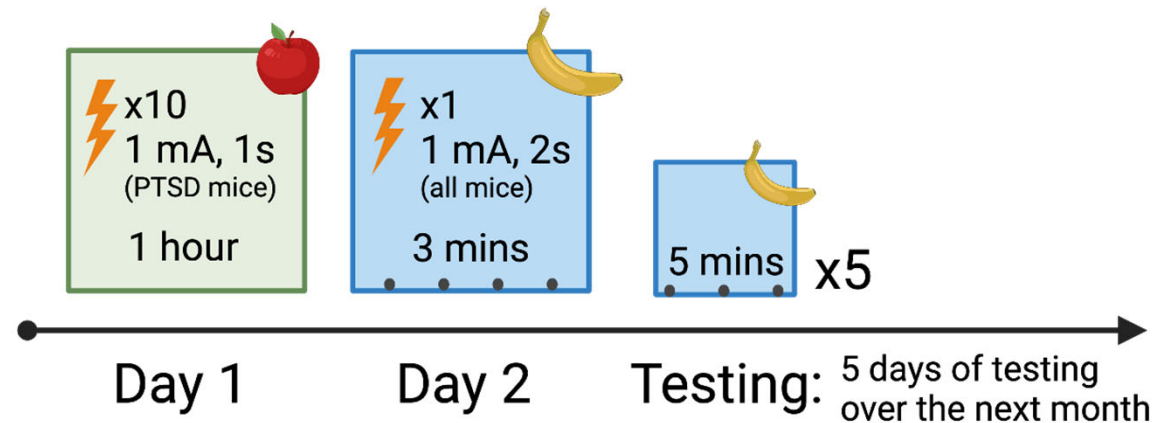


# Contextual fear conditioning

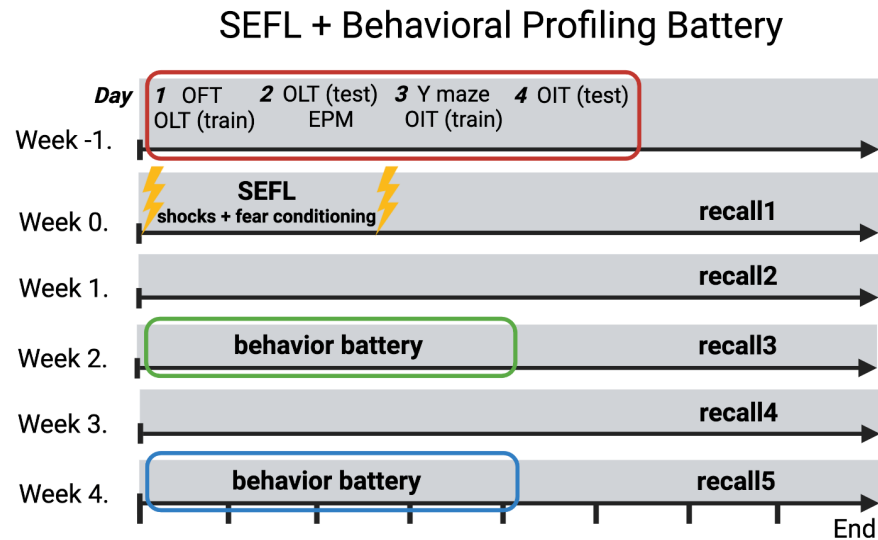
## Stress Enhanced Fear Learning (SEFL) – Rau et al. 2005

- Model for the study of PTSD
- Trauma (10 shocks in context A) plus generalization (1 shock in context B)
- Readout: Freezing in context B on testing days

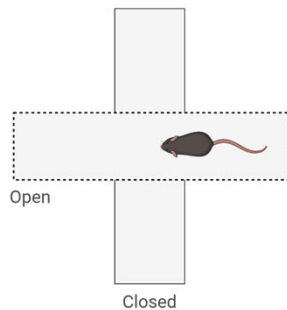
### SEFL Procedure



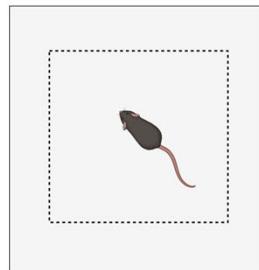
# Contextual fear conditioning



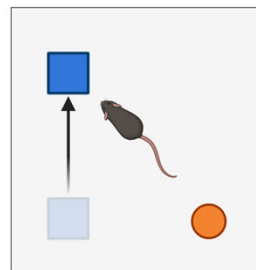
Elevated plus maze



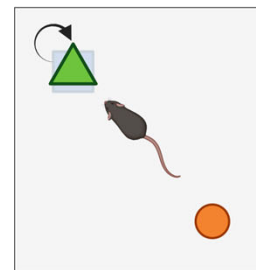
Open field test



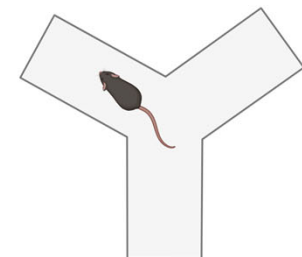
Object location task



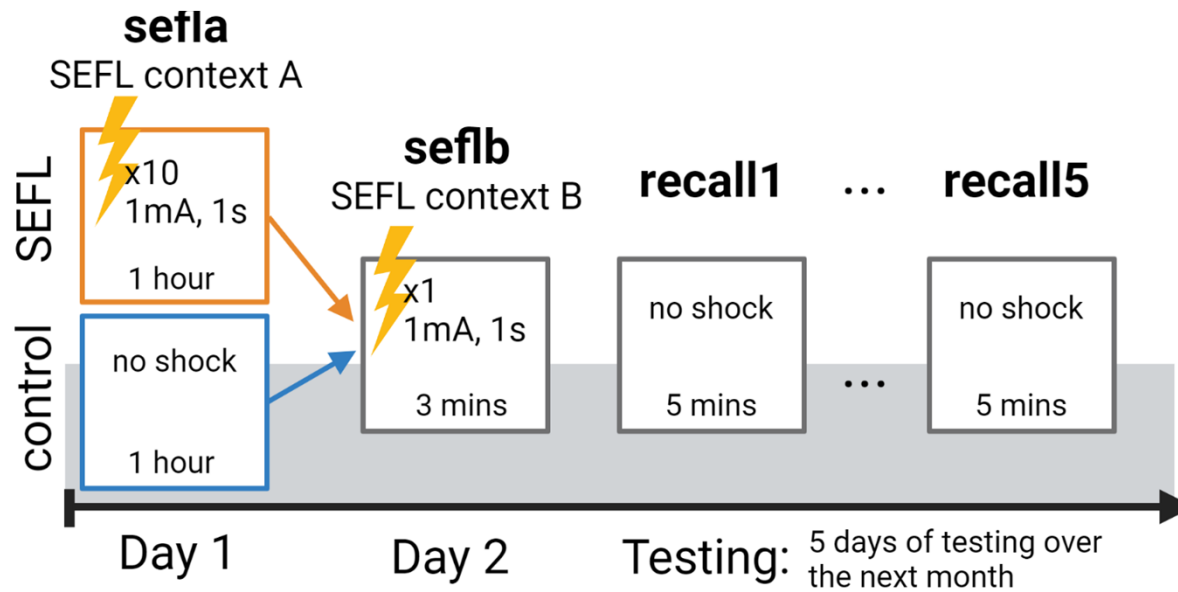
Object identity task



Spontaneous alternation Y maze



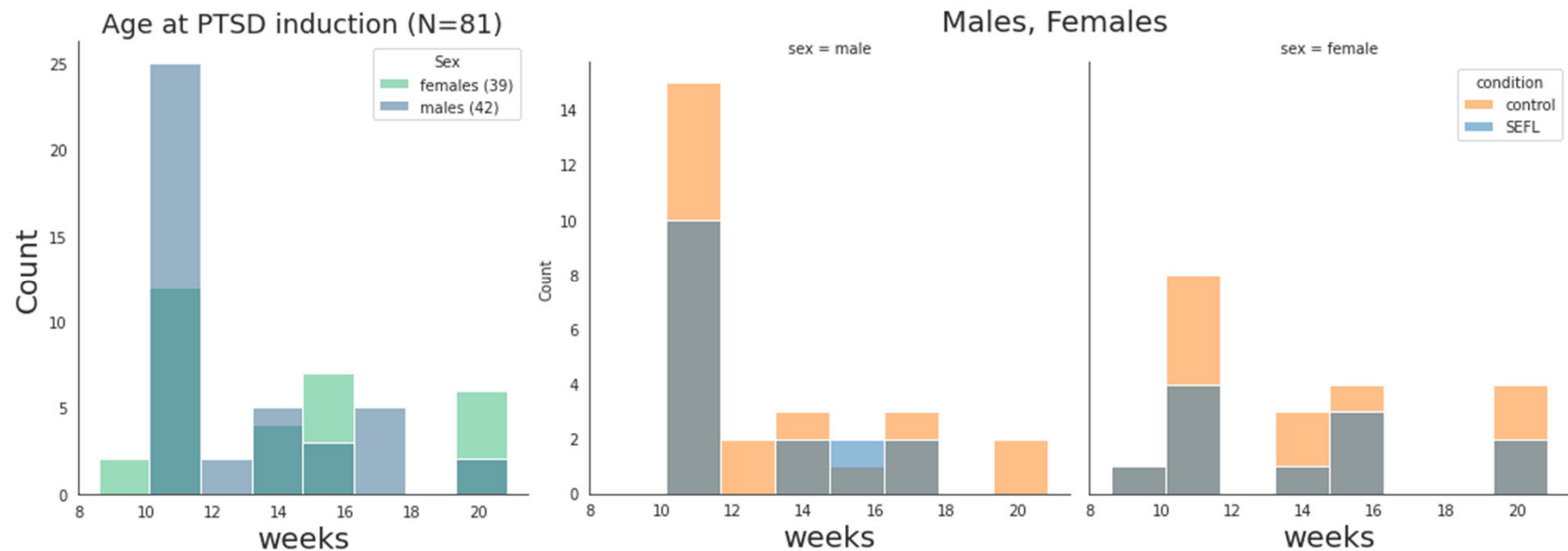
# Contextual fear conditioning



# Contextual fear conditioning

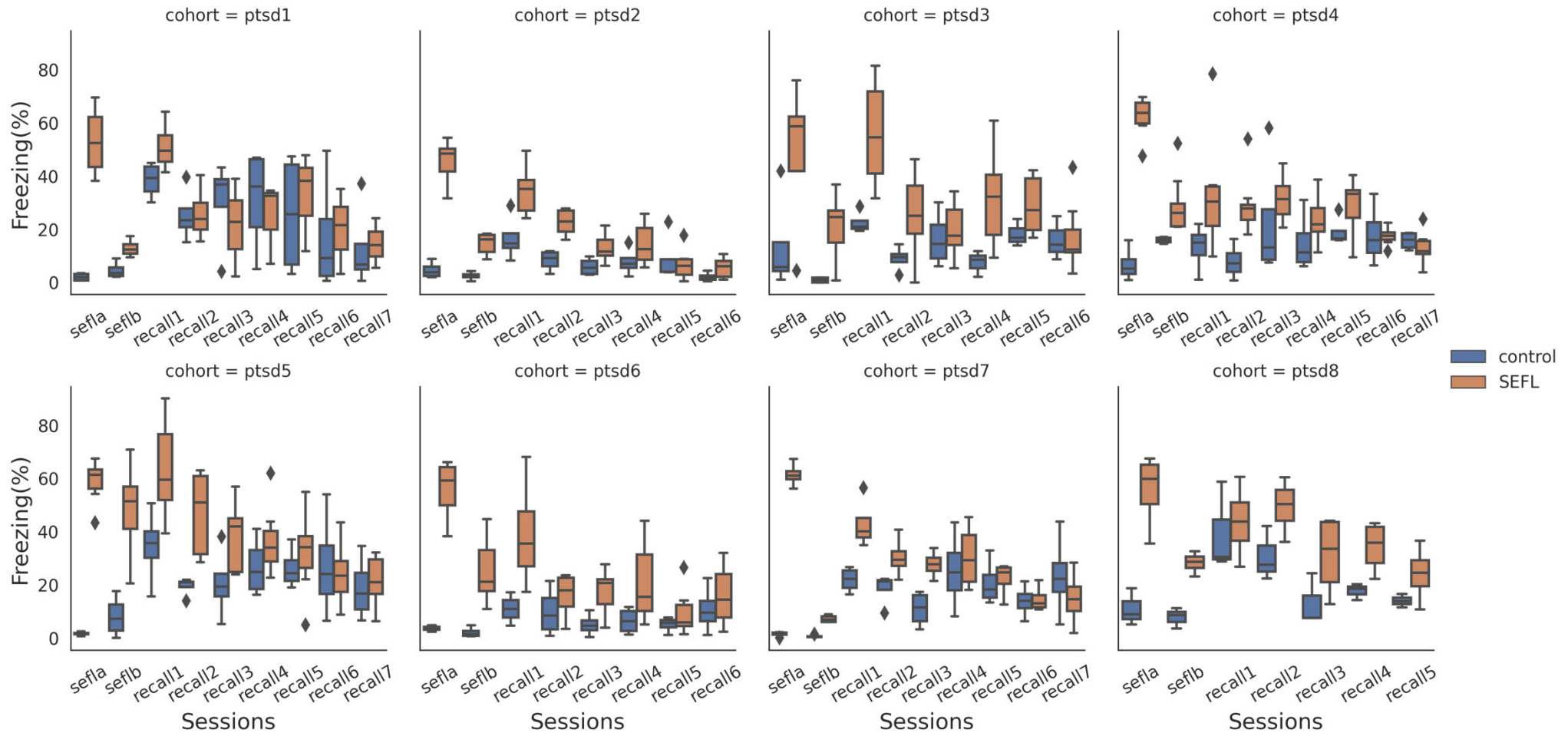
TODO: change this to just a pointplot w/ SE/SEN

## The mice



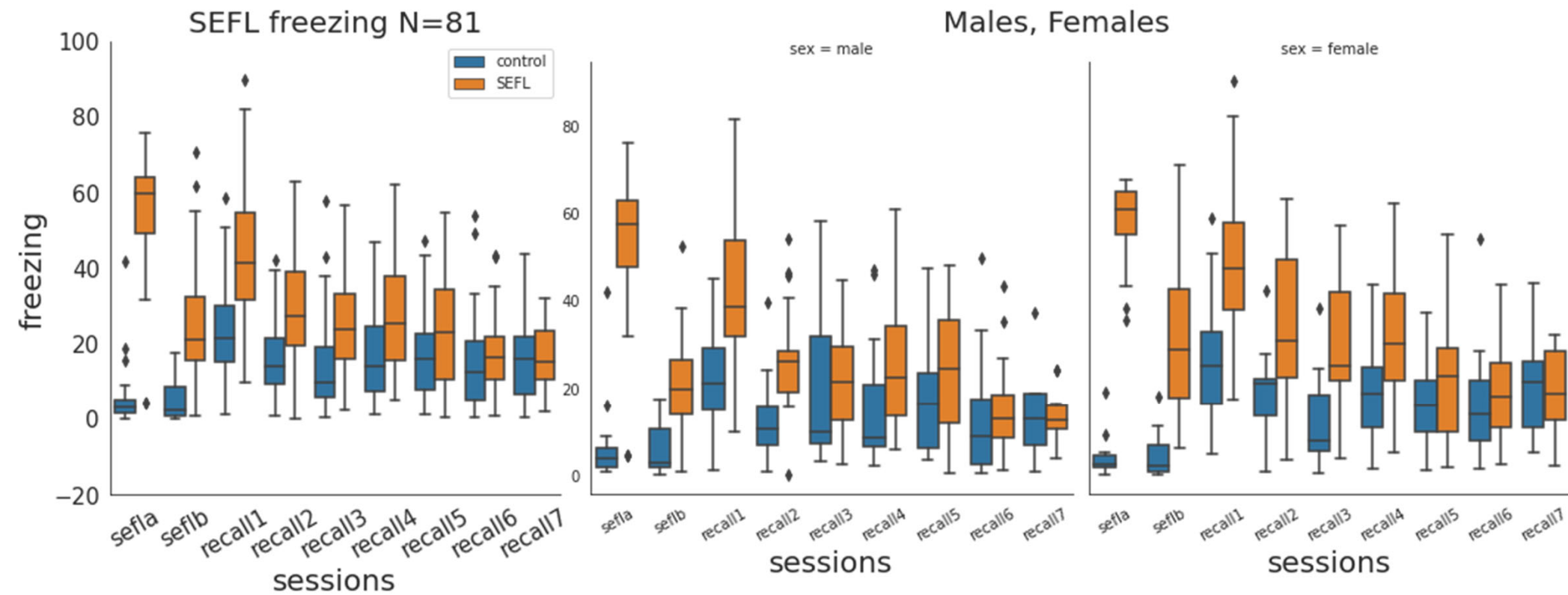
# Contextual fear conditioning

All cohort data



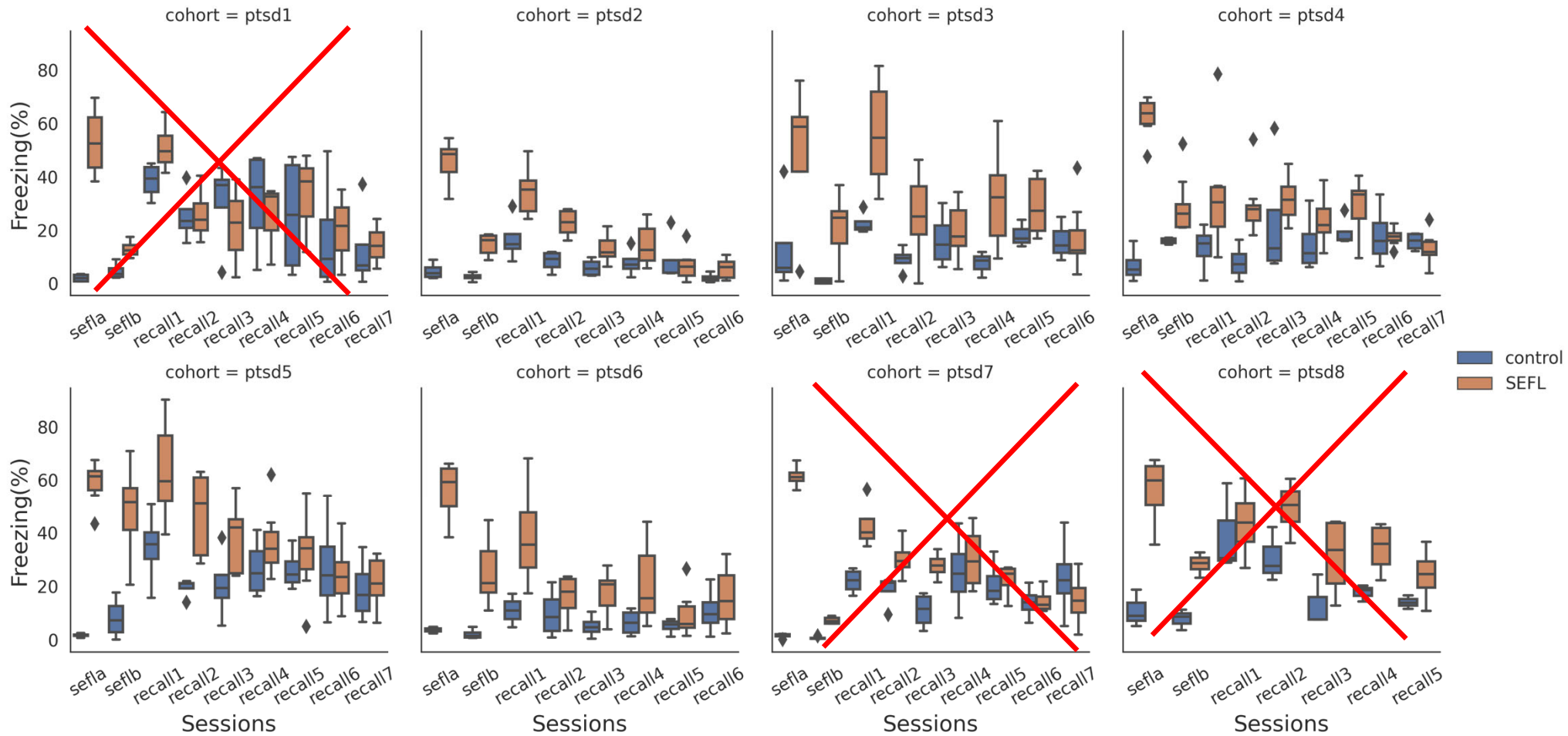
# Contextual fear conditioning

All cohorts average



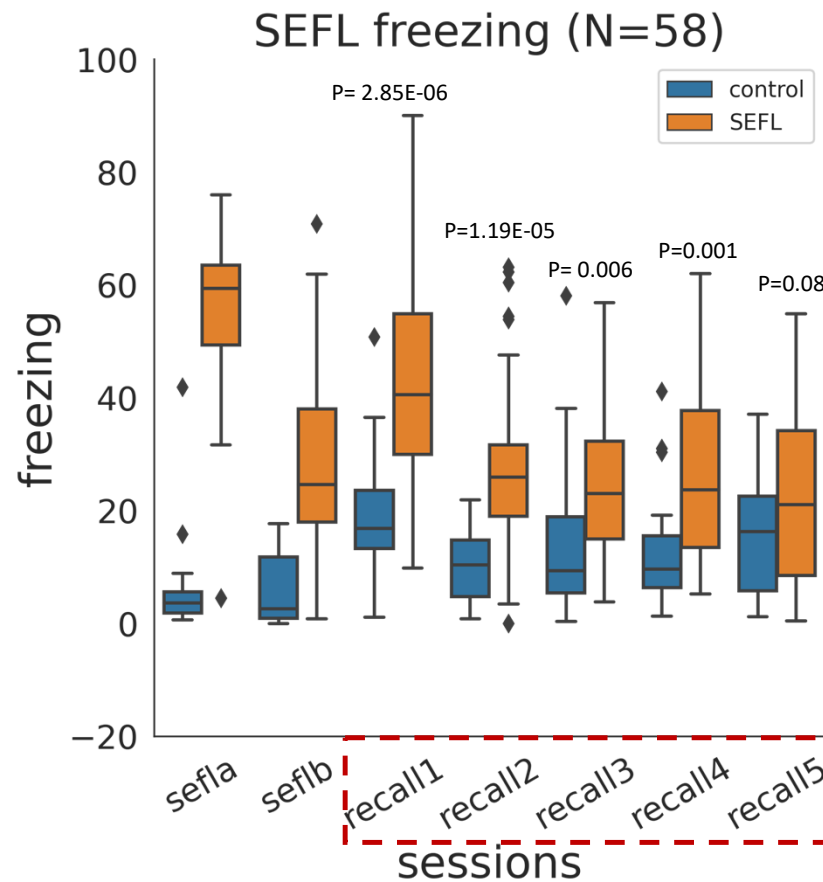
# Contextual fear conditioning

## Selected data



# Contextual fear conditioning

Average of selected cohorts

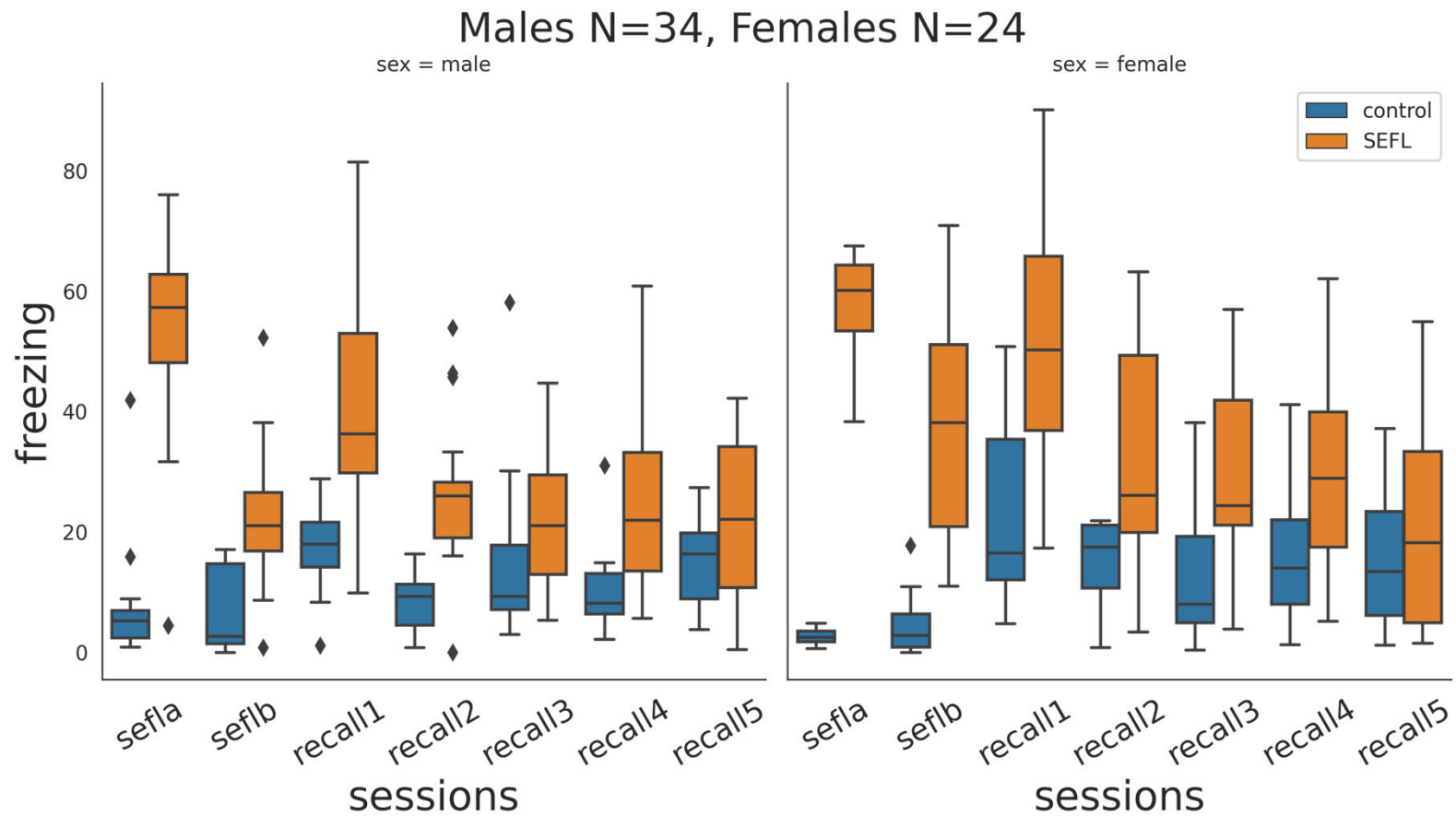


\$ANOVA

	Effect	DFn	DFd	F	p	p<.05	ges
1	sex	1	53	1.775	1.88e-01		0.018000
2	condition	1	53	23.906	9.79e-06	*	0.202000
3	day	4	212	15.843	2.32e-11	*	0.116000
4	sex:condition	1	53	0.015	9.03e-01		0.000158
5	sex:day	4	212	1.196	3.14e-01		0.010000
6	condition:day	4	212	6.255	8.91e-05	*	0.049000
7	sex:condition:day	4	212	0.374	8.27e-01		0.003000

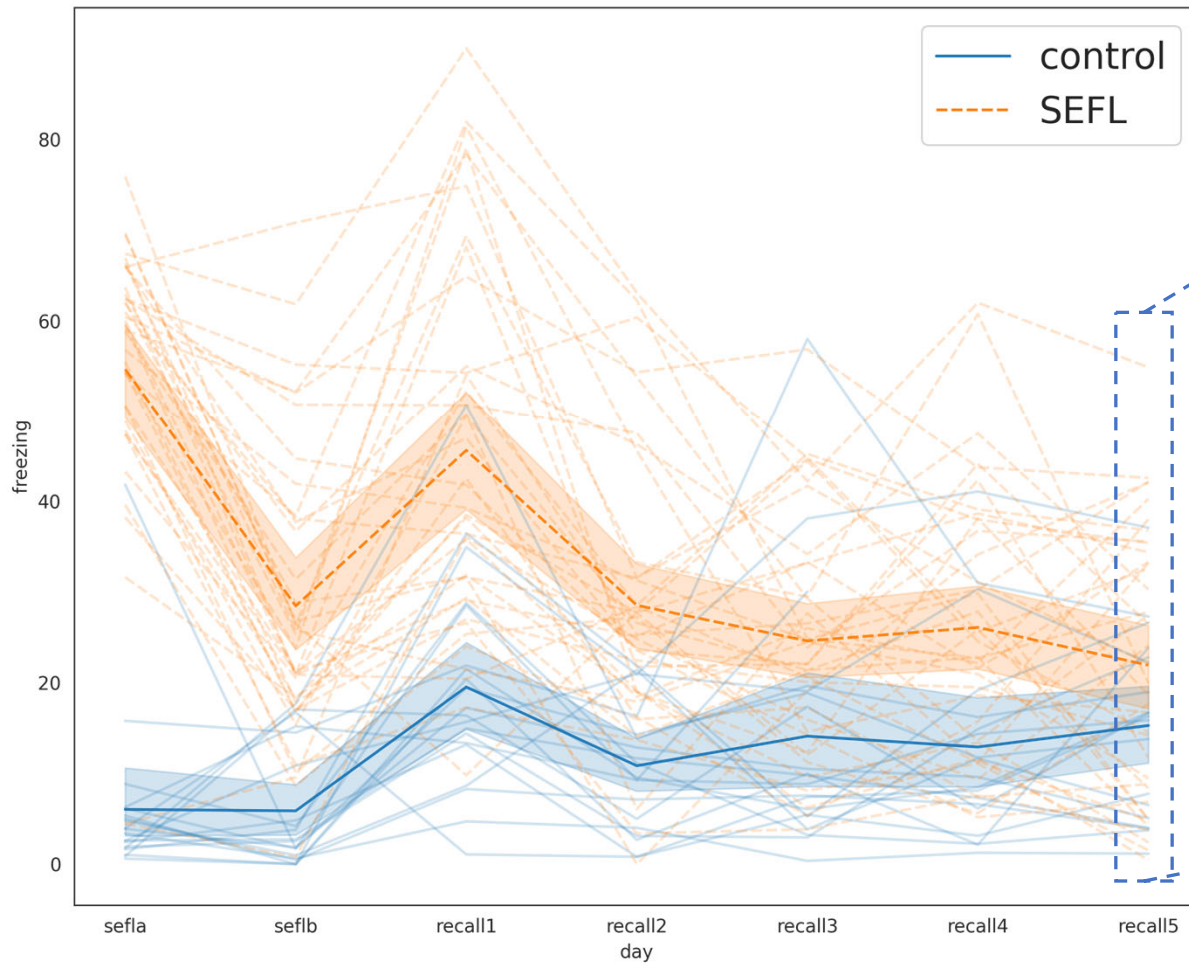


# Contextual fear conditioning

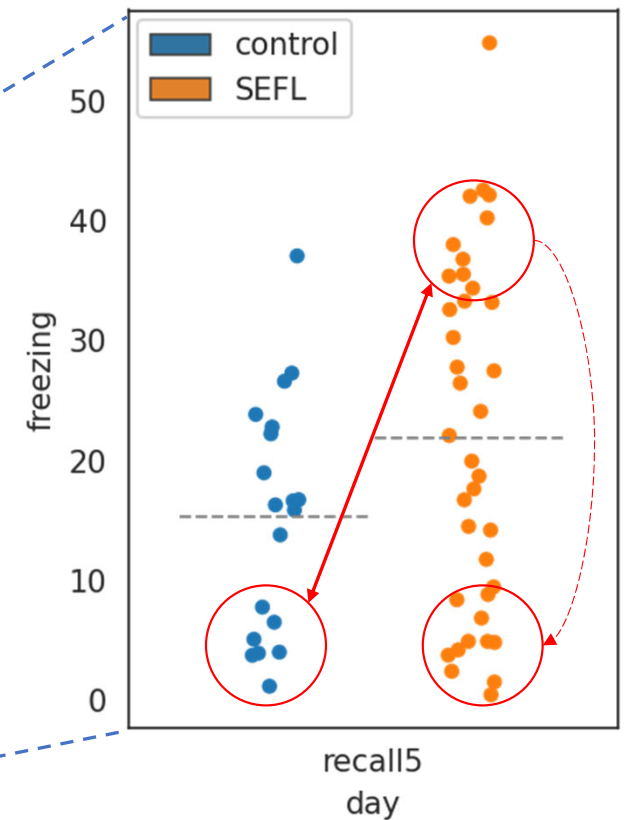


# Contextual fear conditioning

Mean freezing over time

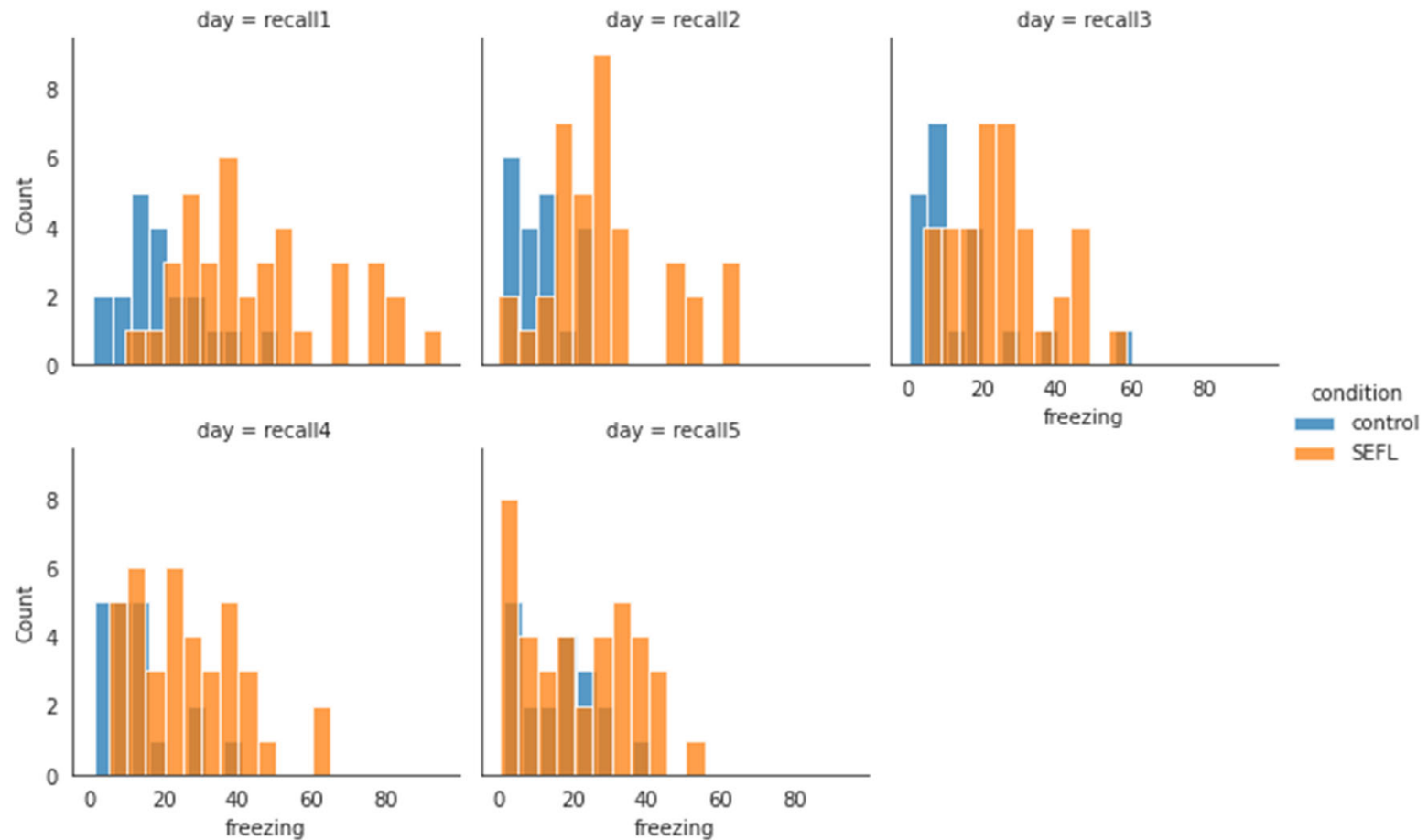


Who has PTSD?



# Contextual fear conditioning

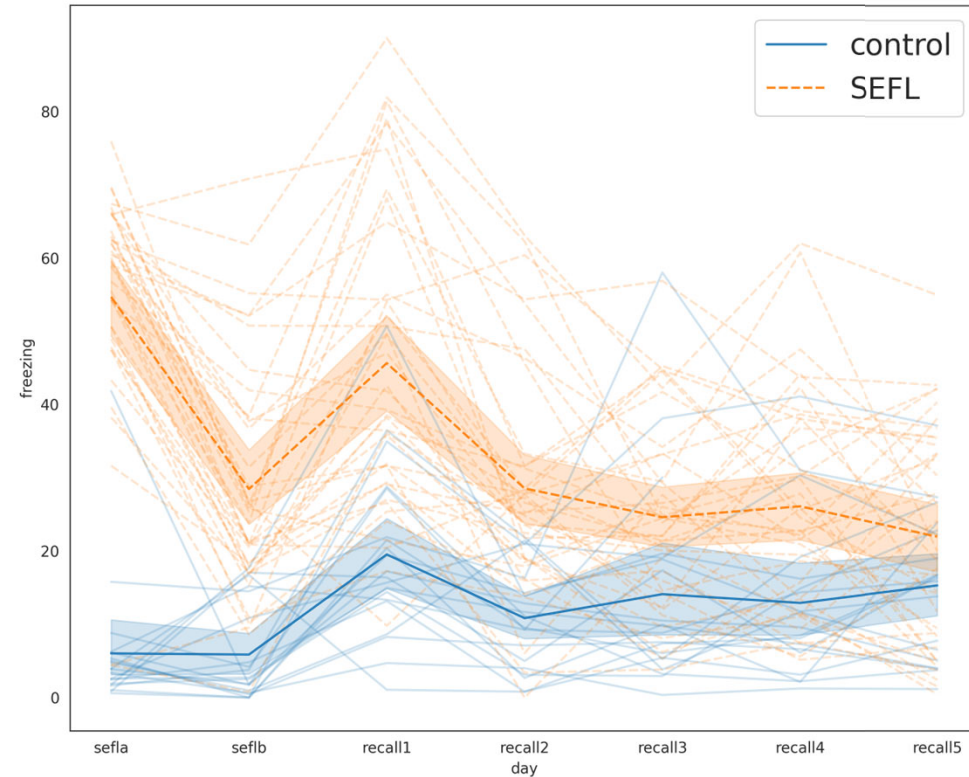
Predicting based on previous experience I.



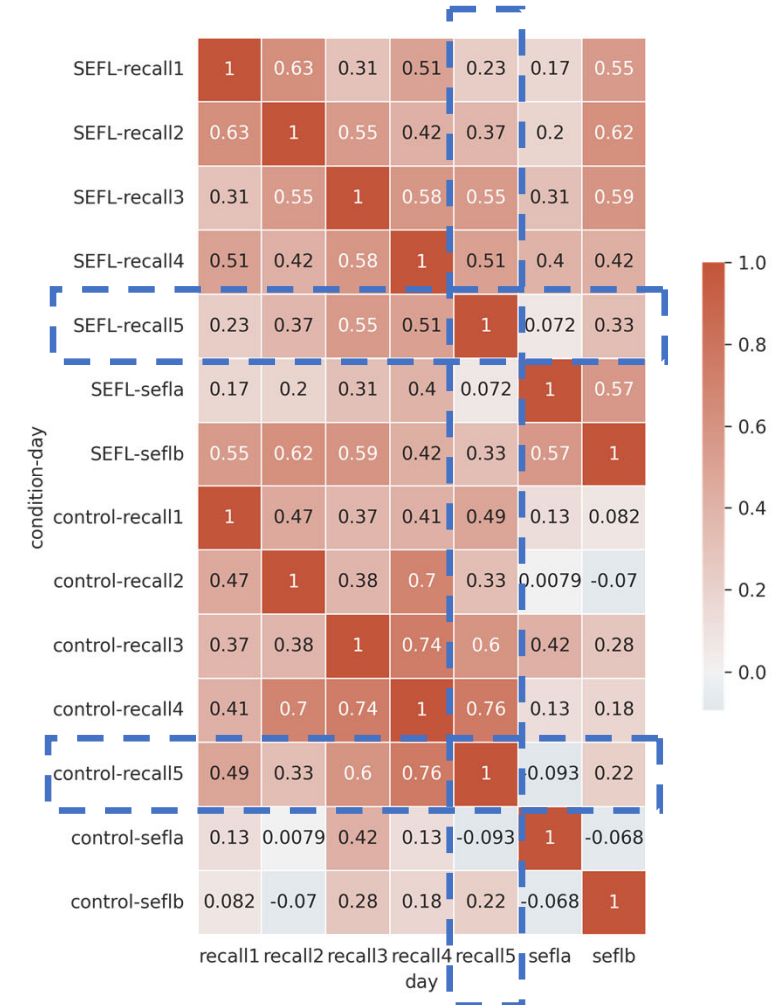
# Contextual fear conditioning

Predicting based on previous experience I.

Mean freezing over time

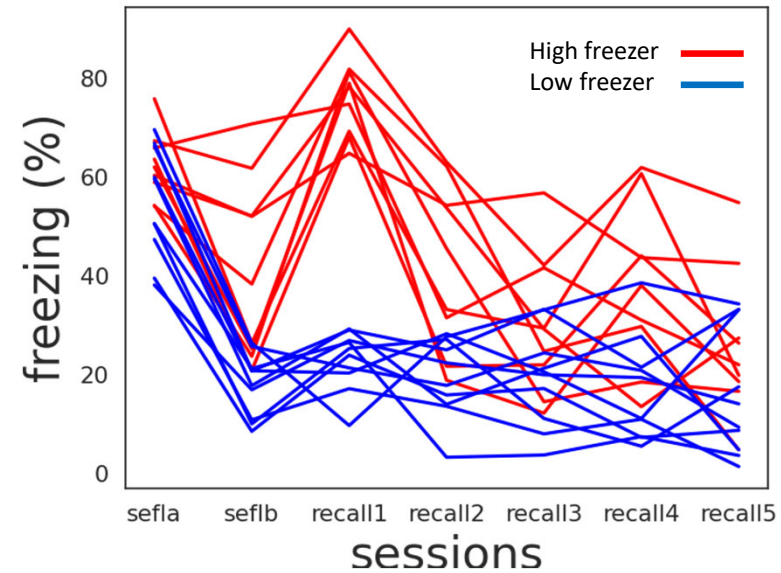
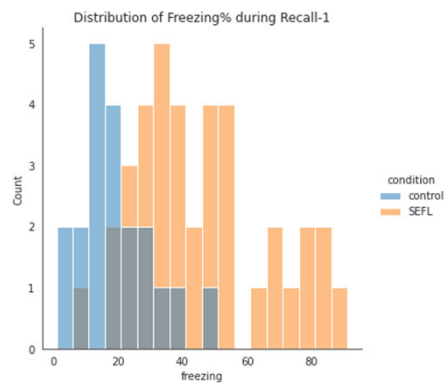
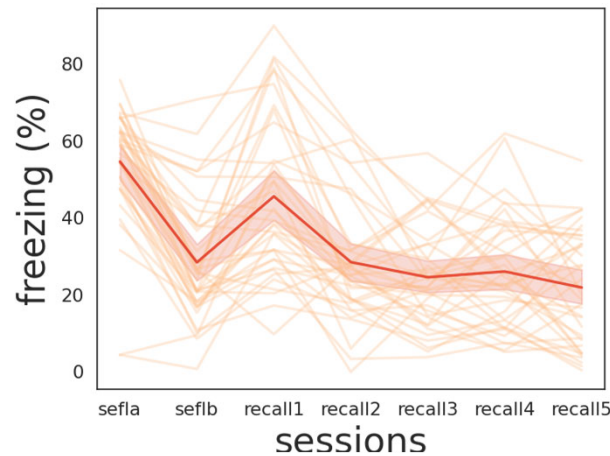


Correlation of freezing across days



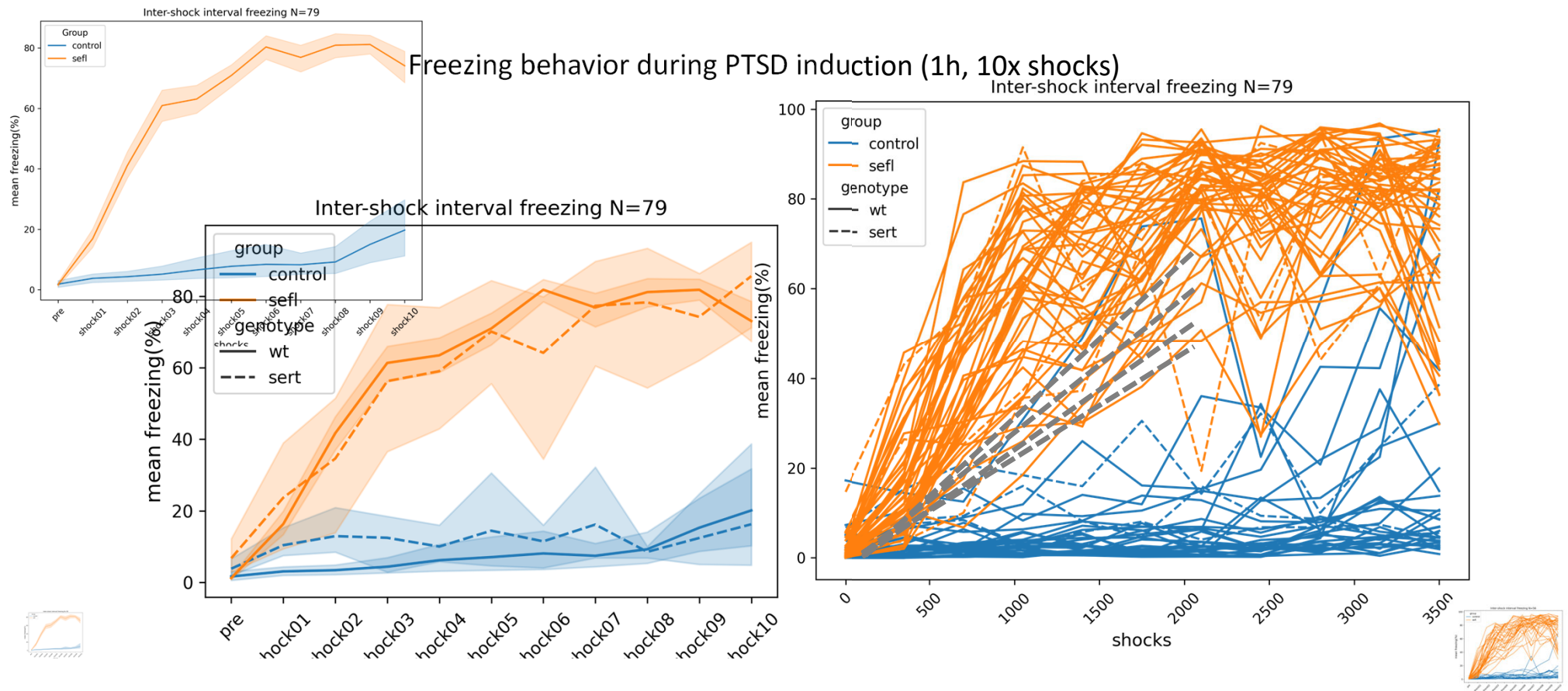
# Contextual fear conditioning

Predicting based on previous experience I.



# Contextual fear conditioning

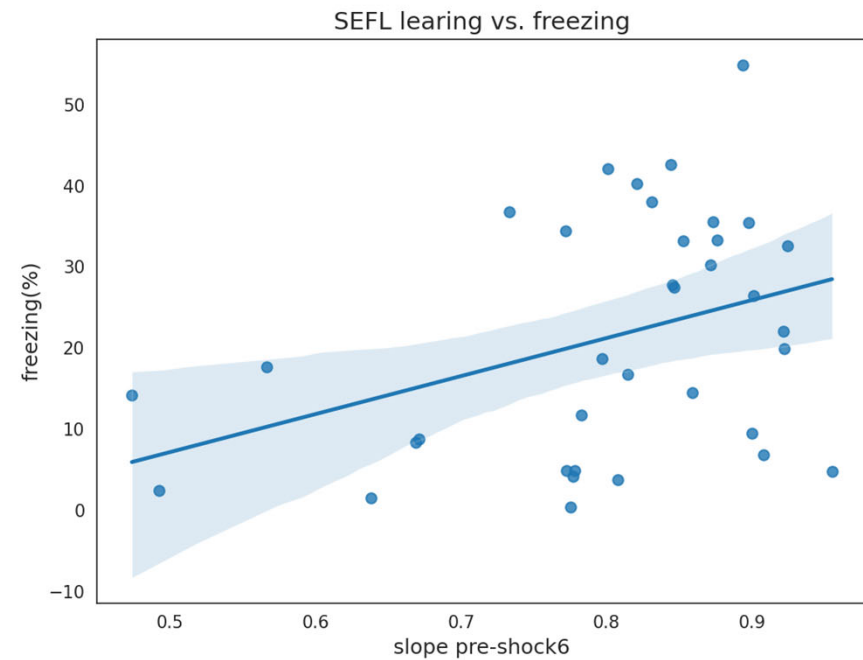
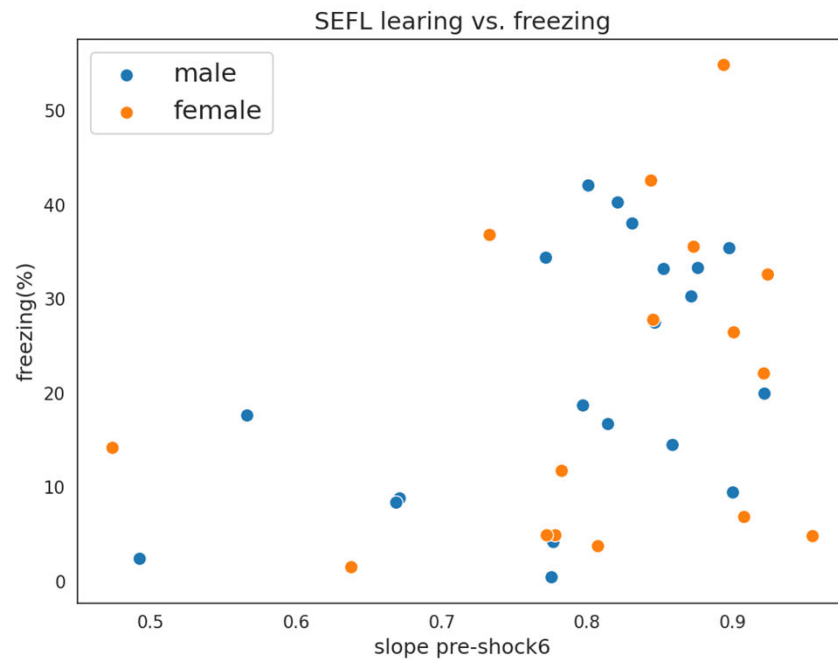
## Predicting freezing based on learning during induction





# Contextual fear conditioning

Predicting freezing based on learning



R-squared: 0.137109  
p: 0.026218

# Contextual fear conditioning

## Effect of psilocybin on freezing

