Validation of an fMRI-based Olfactory Cue Reactivity Task

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Aims

- By combining an image and odour based cue reactivity task (CRT), we aim to show the effectivity of olfactory cues compared with the tried and tested image-only cue reactivity task.
- Ultimately enhance the measurement precision of the task.

Methods

Participants
N = 11 (6 female)
Age: Mean = 25, S.D. = 4.8
Min 20, Max 35

Questionnaires
Stanford Sleepiness Scale
Psychomotor Vigilance Test
Alcohol Urge Questionnaire
Sniffin' Sticks Olfaction Test

fMRI Tasks
Image CRT
Image + Olfaction CRT
Monetary Incentive Delay Task

Stimuli Groups
Alcoholic / Non-Alcoholic

Image + Olfaction CRT

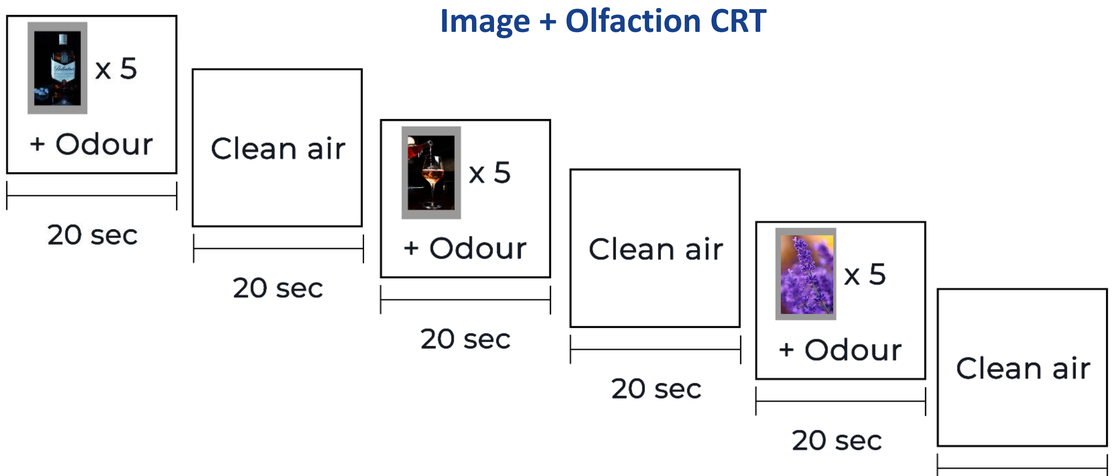
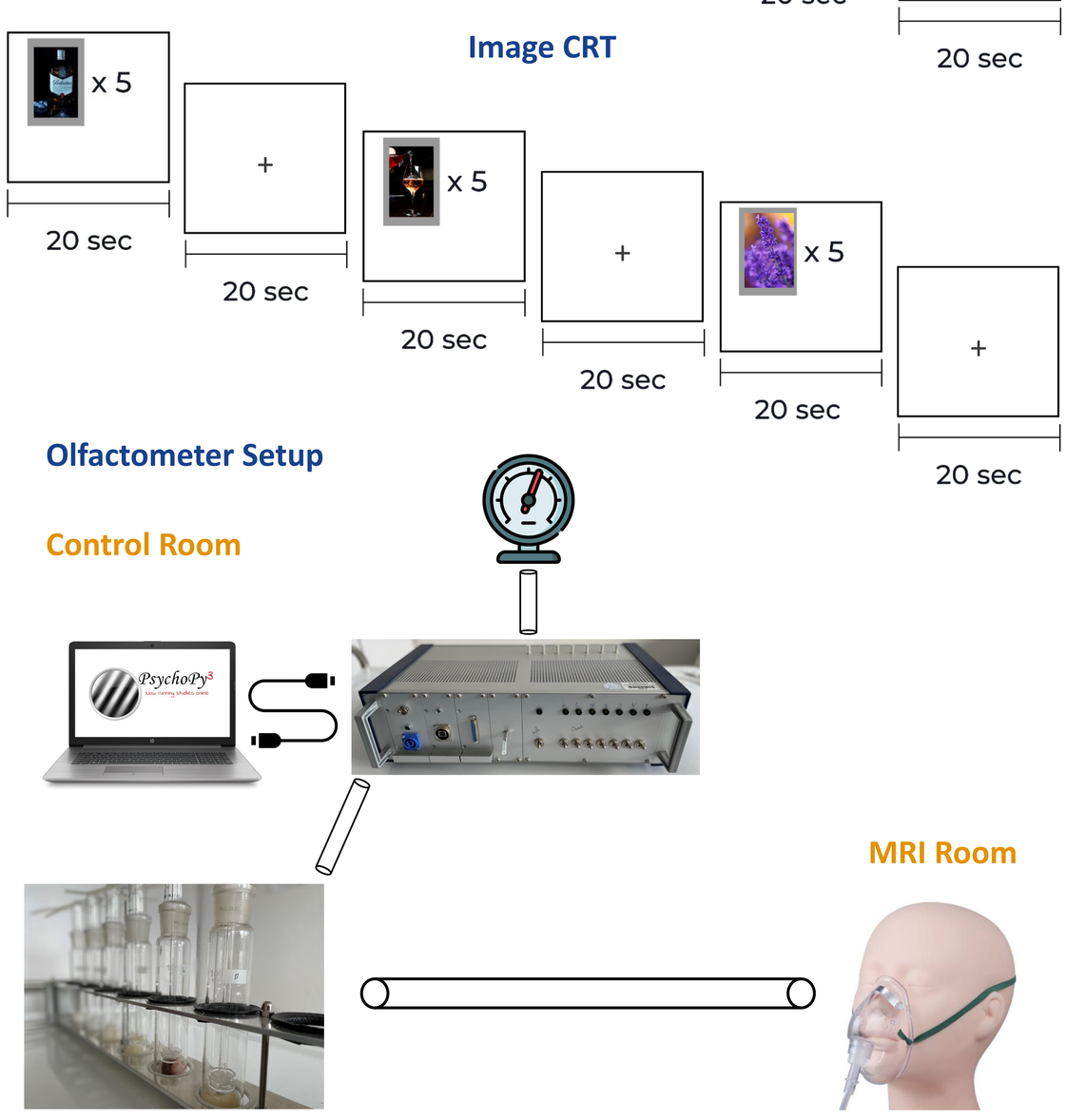


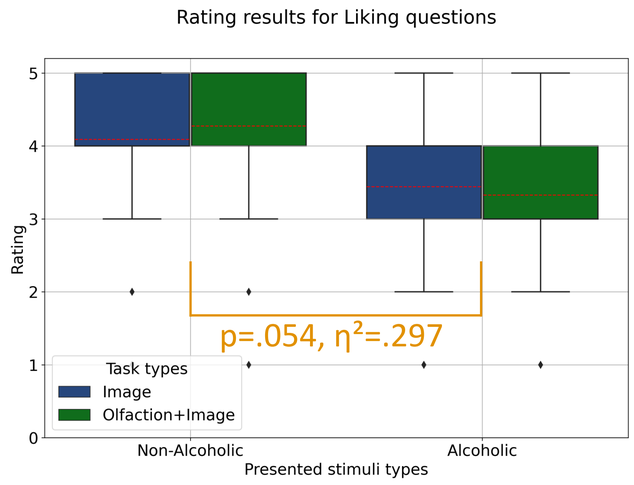
Image CRT

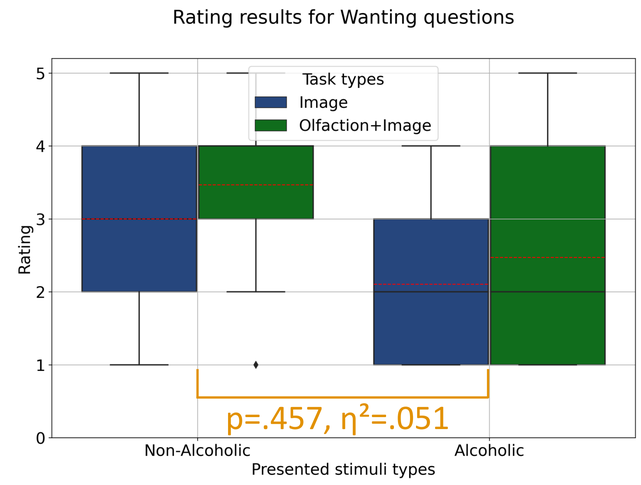


Olfactometer Setup

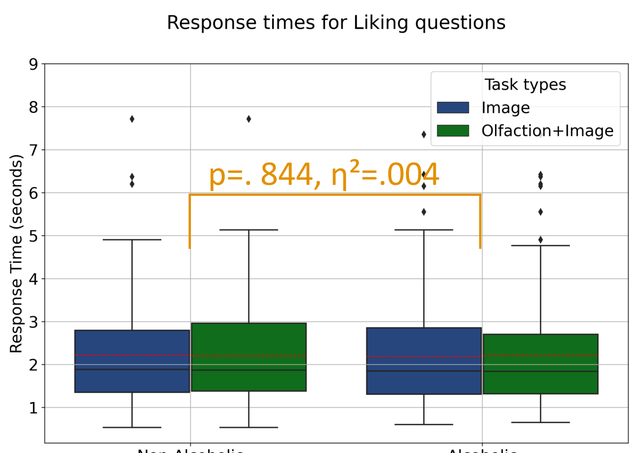
Preliminary Behavioural Results

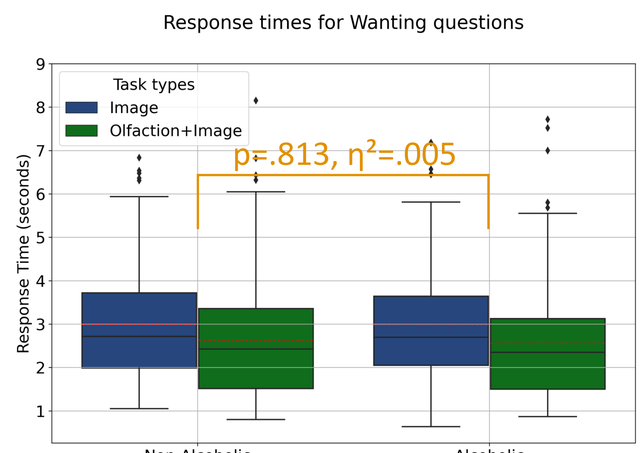
Liking/Wanting Ratings



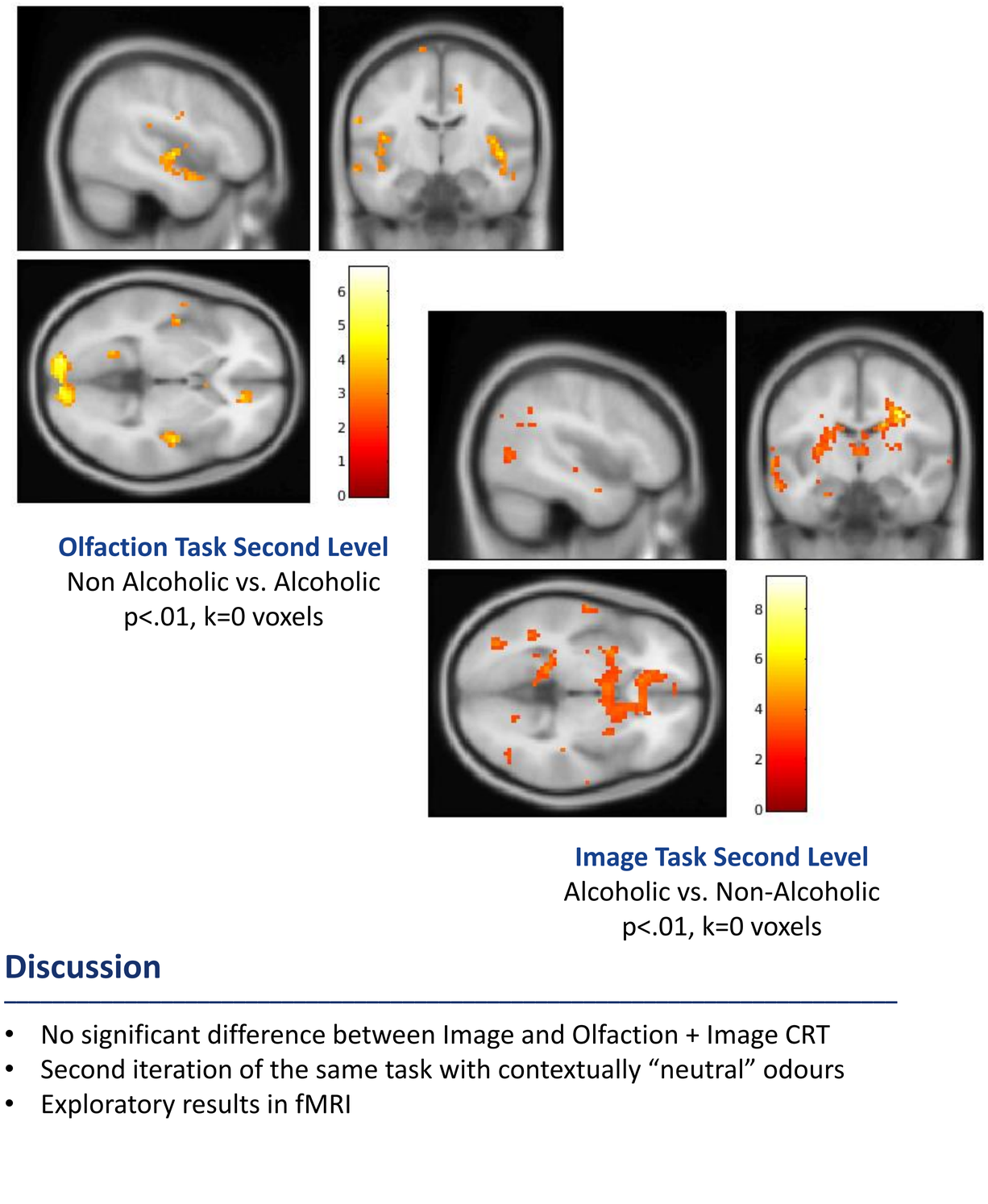


Liking/Wanting Response Times





Preliminary fMRI Results



Discussion

- No significant difference between Image and Olfaction + Image CRT
- Second iteration of the same task with contextually "neutral" odours
- Exploratory results in fMRI