

# Developing new tests of behavioral adaptability

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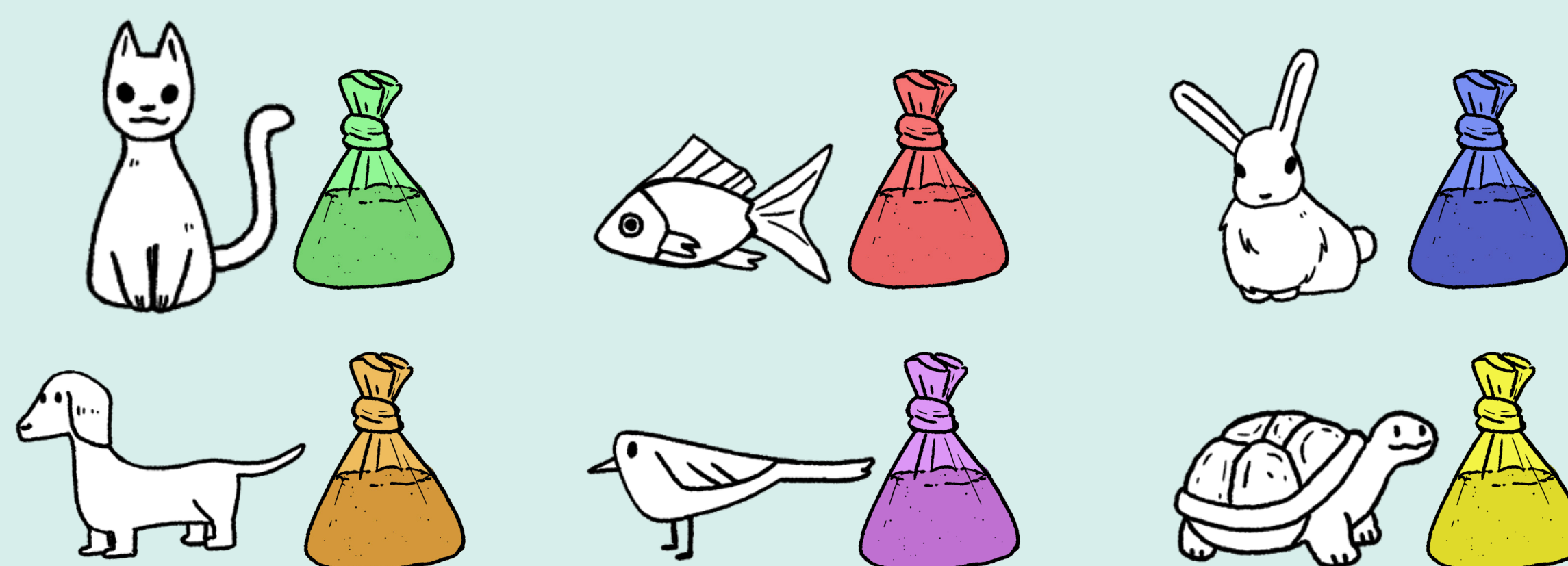


Behavioral adaptability is commonly defined as the ability to flexibly change ones behaviour in response to a change in the environment (Gruner & Pittenger, 2017). It is thereby what enables us to use a new washing machine or change our academic strategy when starting university. Due to this widespread use, it is important to have solid psychological tasks that can test for deficits in behavioural adaptability in for example patients with dementia and schizophrenia. However, the tests currently available are difficult to use and for patients to understand and complete (Owen et al, 1992). **The purpose of this project was therefore to develop two new tests of behavioural adaptability and ensure that healthy participants were capable of mastering them.**



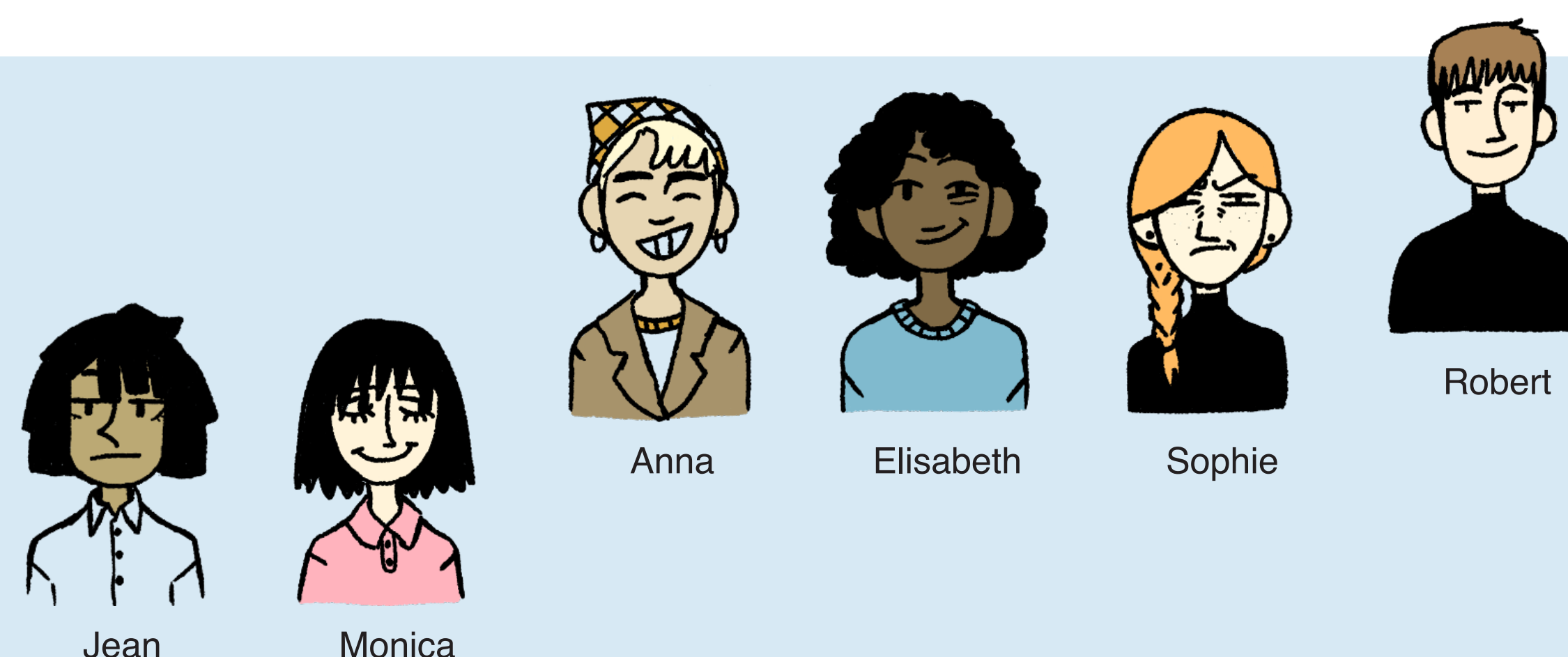
## Test 1 - the animal task

The first of the two new tests was the animal task. Here the participants were first told to pick the correct coloured bag for each of the 6 animals to feed them (learning round). Then suddenly, after the participants had learned the correct animal - bag pairs, the animals all got new bags, and the participants had to learn the new pairs (switch round).



## Test 2 - the party task

The second of the two new tests was the party task. In this task, the participants first had to chose the correct name for each of 6 people they had met at a party (learning round). After this was achieved, the party goes suddenly switched names as a part of a party game and the participants had to learn the new name-person pairs (switch round).



## Results

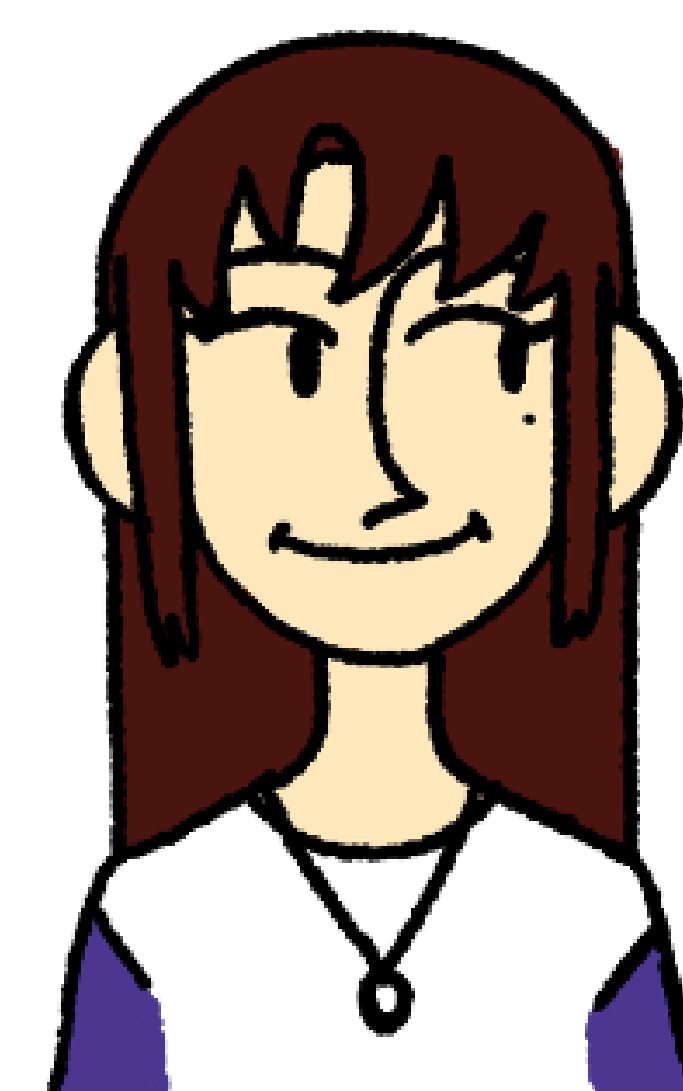
Our results indicated that learning did take place during both tasks, as number of errors significantly decreased as the participants progressed. Furthermore, the clear majority of participants were able to correctly complete the tasks. This shows that the healthy participants were capable of mastering the tests.

## Discussion and conclusion

Our study was successful, as the healthy participants were able to complete the tasks. Furthermore, the tasks were easy to work with and enjoyable for the participants. However, it would be beneficial to test them on a larger group of participants – only 22 people were in the study - and to include measures of cognitive functioning to further validate the tests.

## Acknowledgements

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### Sources:

Gruner, P., & Pittenger, C. (2017). Cognitive inflexibility in Obsessive-Compulsive Disorder. *Neuroscience*, 345, 243–255.  
Owen, A. M., James, M., Leigh, P. N., Summers, B. A., Marsden, C. D., Quinn, N. P., Lange, K. W., & Robbins, T. W. (1992). Fronto-striatal cognitive deficits at different stages of Parkinson's disease. *Brain: A Journal of Neurology*, 115 ( Pt 6), 1727–1751.