

# Personality and Enrichment Engagement

## Does Primate Personality Affect Enrichment Engagement And Behaviour in L'Hoest's Monkeys? How Can We Use This To Tailor Enrichment To Individual Animals?

Charlotte O'Neill<sup>1</sup>, and Vincent Nijman<sup>2</sup>

<sup>1</sup>Oxford Brookes University MSc 2022/2023 <sup>2</sup>Oxford Brookes University



Patricia  
Lowest Ranking Female  
5/12/1999



Gimini  
Dominant Male  
12/11/2006



Masindi  
Highest Ranking Female  
26/6/2011



Kanye  
Lowest Ranking Male  
11/6/2016



Kano  
Mid-Ranking Male  
13/3/2018



Bikonzi  
Mid-Ranking Female  
25/9/2019



Tumba  
Mid-Ranking Female  
20/4/2020

### Introduction

- Zoos have become more focussed on conservation efforts, research and education, not just a place to showcase animals. (3)
- Captivity can cause physical and behavioural issues for many species, which enrichment has been used to address. (3)
- Enrichment is additional objects that encourage animals to engage in natural behaviours. (1,2)
- Primates share the same Big Five personality types as humans (Openness, Conscientiousness, Extroversion, Agreeableness, Neuroticism), as well as 'Dominance'. (4,5)

### Methods

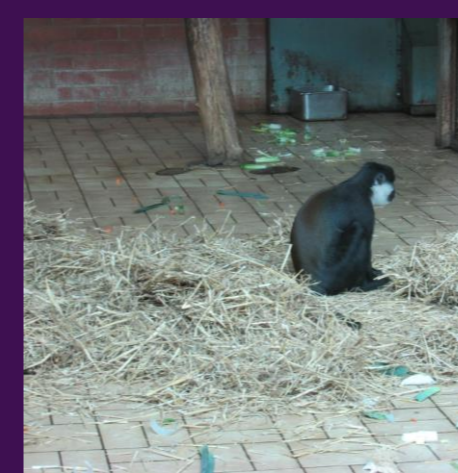
- Data collection between May-July 2022, including a six-day observation to get to know the individuals.
- Seven individuals: four (F) three (M). Aged between one to 22 years old.
- Hominid Personality Questionnaires (HPQ) were completed by seven members of primate care staff. This data was used to determine whether the individual was introverted or extroverted. 18 personality traits were included.

Trait No.	Trait	Definition	Scale												
			1	2	3	4	5	6	7	8	9	10			
1	Shy	Reluctant to engage with environment, enrichment or socially.					X								
2	Cautious	Apprehensive to investigate changes within the enclosure.													X

- 420 hours of instantaneous observations. For each individual, there were 60 hours: 35 non-enrichment and 25 enrichment.

- Enrichment types:

#### Hay Bales



#### Scent Oils



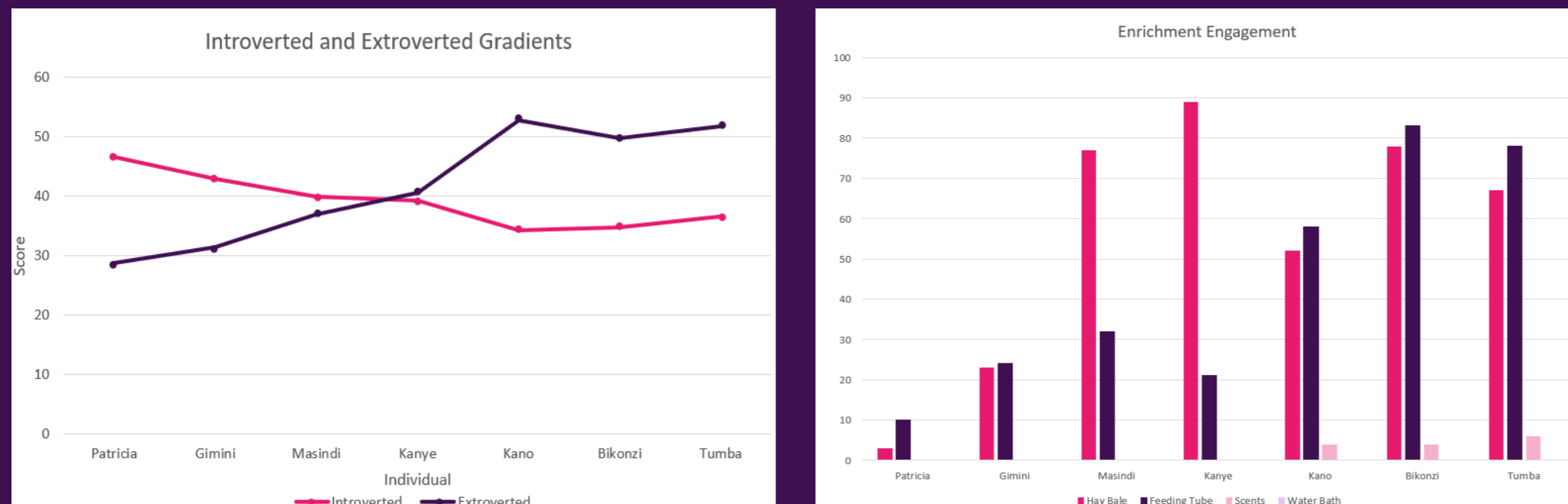
#### Feeding Tubes



#### Water Baths



### Analysis and Results



#### Hominid Personality Questionnaire Results:

- Average scores of HPQ determined how introverted and extroverted each individual L'Hoest's monkey is.
- Patricia most introverted and Kano most extroverted.
- Kanye scored the same on both introversion and extroversion scores, so is an ambivert.
- The three most extroverted were the three youngest.



#### Enrichment Engagement Results:

- Hay bale enrichment was interacted with most (388 minutes) followed by feeding enrichment (300 minutes).
- Scent oils and water baths not interacted with.
- The L'Hoest's were curious about the water baths but did not physically interact with the water.

#### Personality and Enrichment Engagement Results:

- The two most introverted preferred the feeding tube enrichment.
- The most extroverted engaged with enrichment significantly more than introverted individuals.

### Tailoring Enrichment

- **Introverts and Ambiverts**  
**Patricia, Gimini, Masindi and Kanye:** Would likely benefit from solo or outside enrichment, though this would be difficult to execute. Often waited until others had finished before engaging with enrichment. Masindi often missed out on feeding enrichment as a result. Patricia and Kanye were 'out of sight' a lot and preferred to be alone.
- **Extroverts**  
**Kano, Bikonzi and Tumba:** All highly extroverted. Seemed to enjoy the social aspect of enrichment. Would engage with enrichment regardless of object/location or other individuals present.

### References

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