

Evolution of puppy behavior around the adoption period: study on a cohort of 62 Golden Retriever puppies

I.BENDAHMANE ^{1,2}, O.RICHARD¹, L.MONTAGNIER¹, K.KEZIMANA¹, A.MEYNADIER ², H.MILA ¹

¹NeoCare, ENVT, Université de Toulouse, France - ²GenPhySE, Université de Toulouse, INRAE, ENVT, F-31326, Castanet Tolosan, France.

CONTEXT

- Weaning is a challenging for puppies due to separation with their mothers, deprivation of maternal milk, and change in environment.
- This period, with risk of emotional distress ^[1] could affect the behavior and personality of puppies.

AIM

To characterize the evolution of puppies' behavior before and after adoption.

MATERIALS AND METHODS

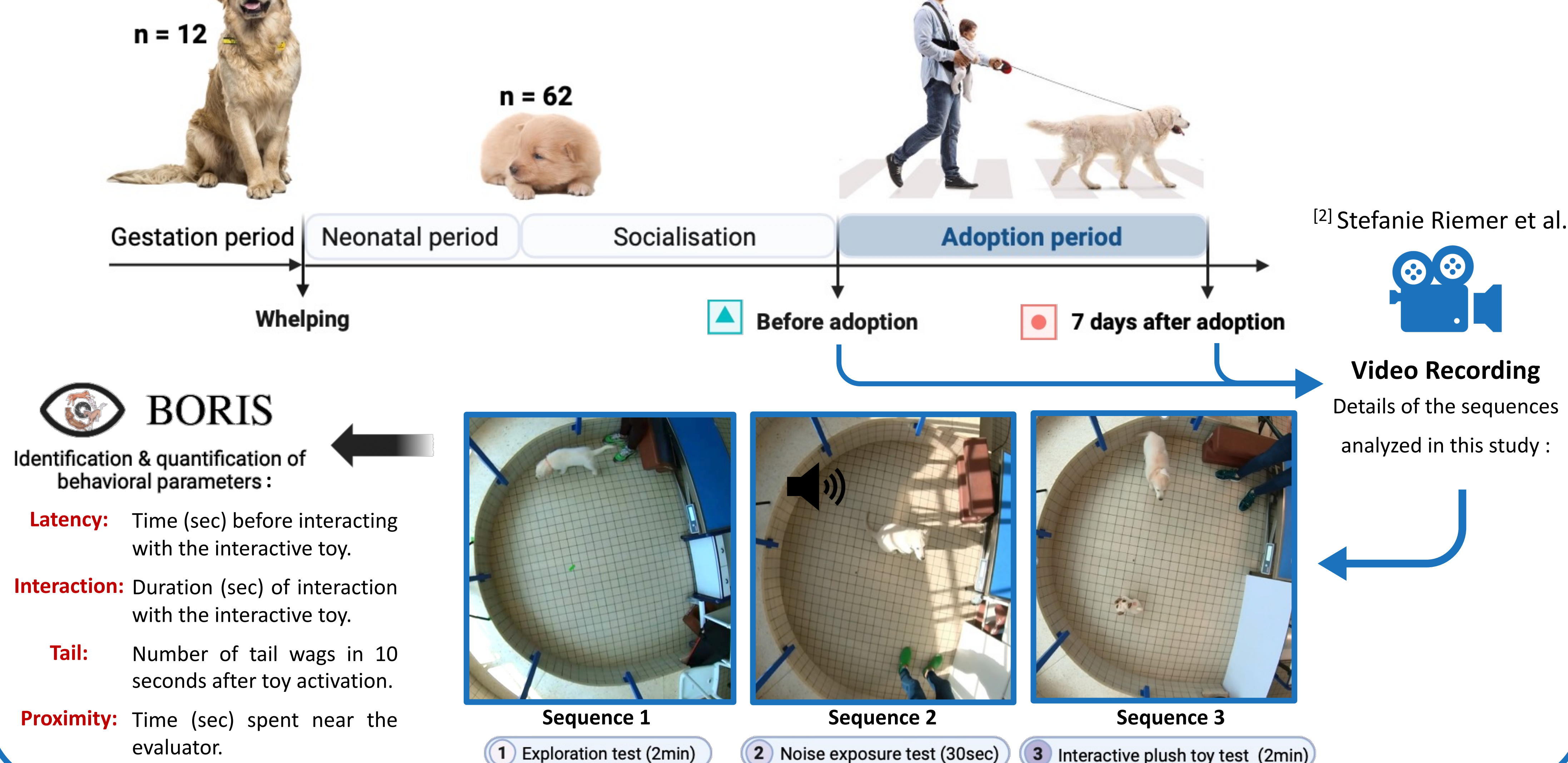
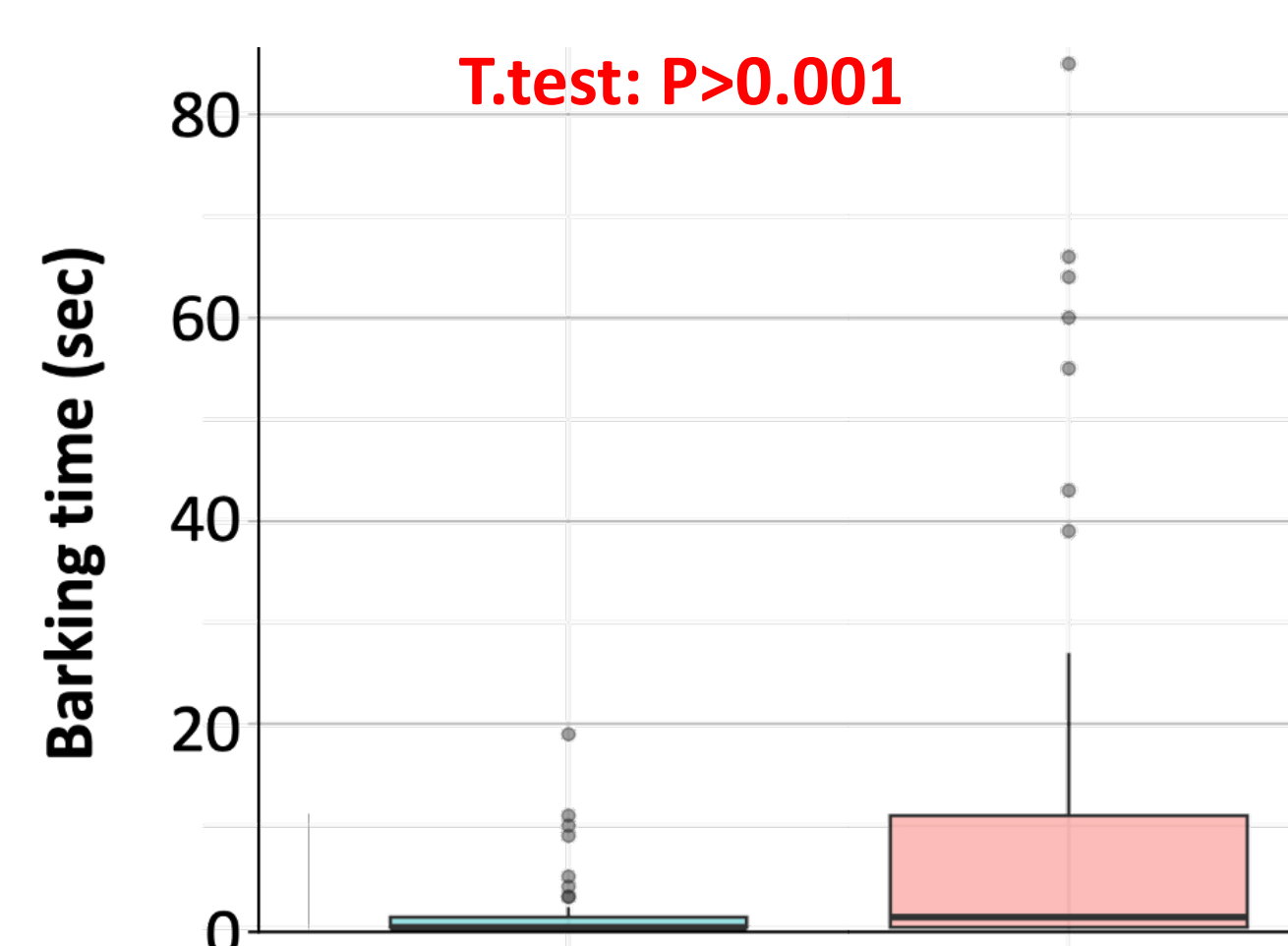


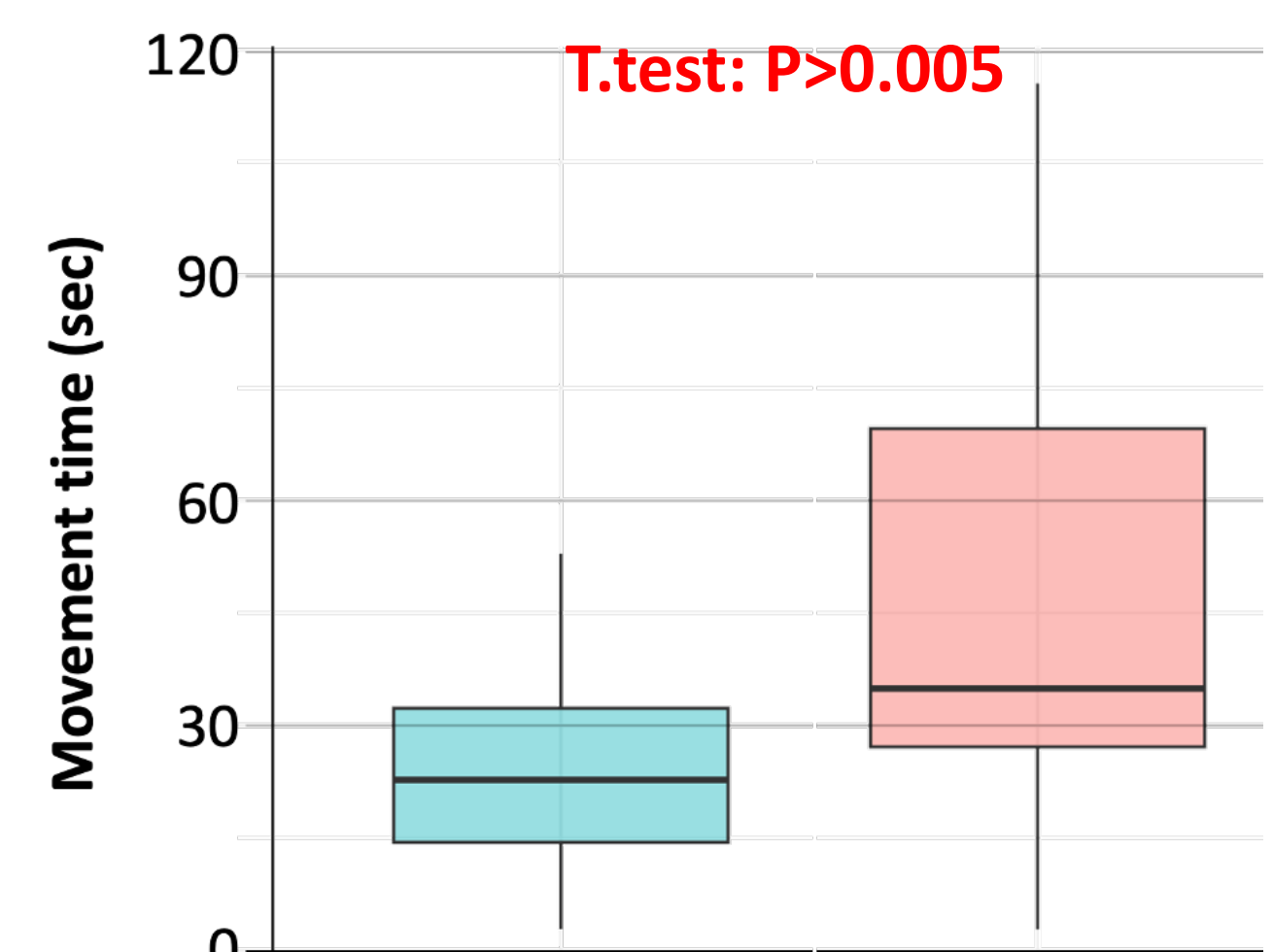
Fig 3: Total barking time during the 3 behavioral sequences.



At 7 days post adoption two behavioral profiles are distinguished: the first, characterized by a high time of barking (Fig3), growling and a time of lying down during the 3rd sequence.

The second is distinguished by a high time of movements (Fig4) and interaction with the interactive push toy.

Fig 4: Movement time during the exploration test (sequence 1)



RESULTS

Behavioral profile has changed dramatically one week after adoption.

Fig 1 : PCA Biplot graph representing puppies behavior according to 16 out of 42 evaluated variables.

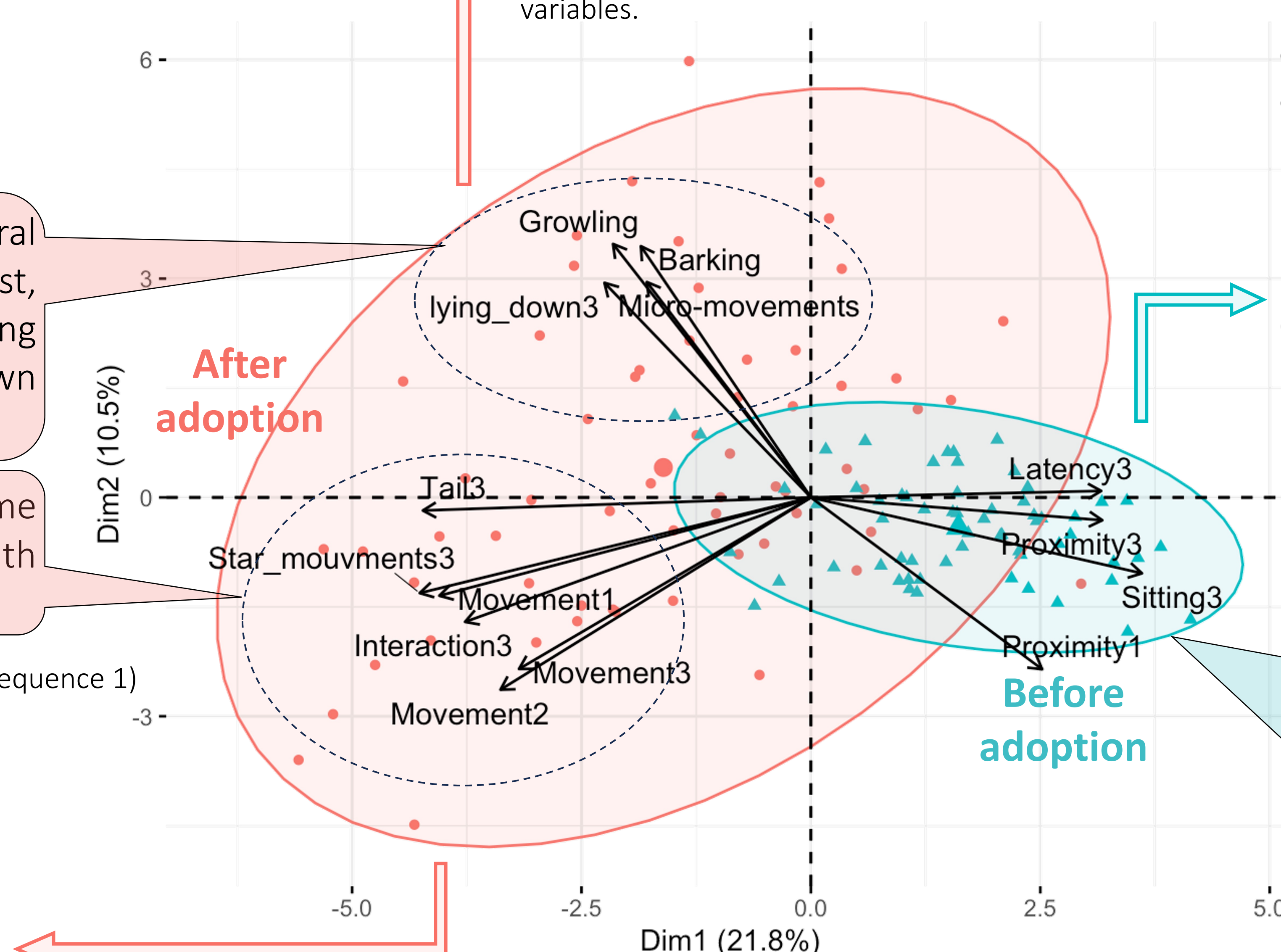
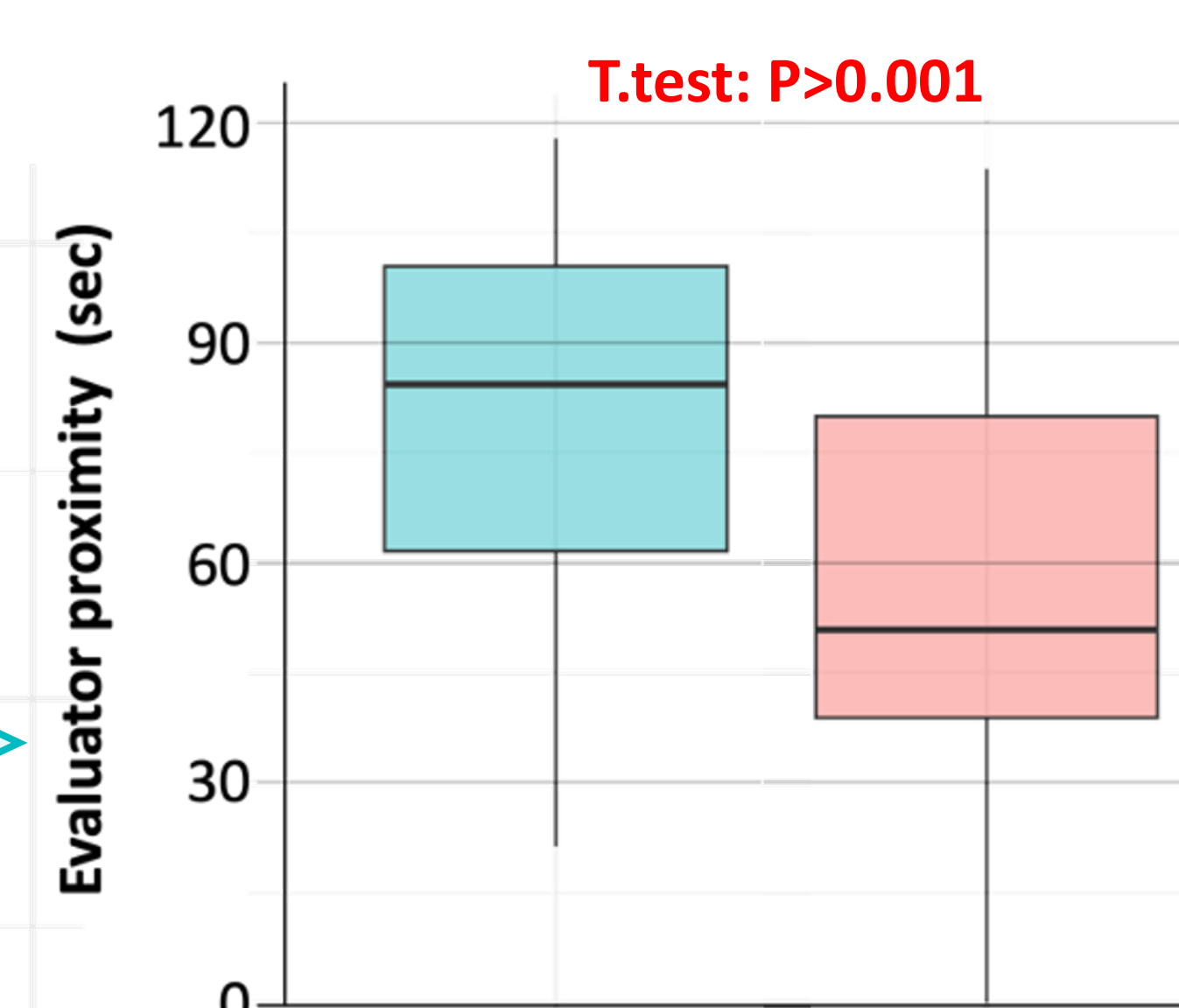


Fig 2: Time spent next to the evaluator during the exploration test (sequence 1)



The puppies' pre-adoption behavior is characterized by increased sitting time during Sequence 3, increased proximity time with the evaluator (Fig2), and increased latency time before interacting with toys.

DISCUSSION

- During the adoption process, puppies undergo notable behavioral changes noticeable as soon as one week after adoption (Fig1).
- Before adoption, puppies seem to be wary towards the new environment. Around 7 days post-weaning, distinct behavioral profiles emerge: some puppies become bold and curious, while others remain inactive with an increase of their vocal expressions.
- Combining behavioral profiles with cortisol concentrations in puppy hair could allow the identify puppies with high stress level.

Corresponding author

Ilyas Bendahmane

3rd year Ph.D student

Ilyas.bendahmane@envt.fr

^[1] The development of emotional distress reactions to separation in puppies. J. of geneticpsychology 1961. O. Elliot et al

^[2] Choice of conflict resolution strategy is linked to sociability in dog puppies. Appl Anim Behav Sci. 2013. Stefanie Riemer et al.