Understanding Cat Traits and their Attachment Style

Introduction

Understanding the social interactions between domestic cats and their owner is crucial for enhancing animal welfare practices [1] [2]. Previous studies have investigated various aspects of these human-cat bonds, including feline attachment styles and personalities. One study showed that cats exhibit distinct attachment styles towards their human caregivers [1]. Another study identified five main personality factors in domestic cats: neuroticism, extraversion, dominance, impulsiveness, and agreeableness [2]. Building upon this prior research, our study is intended to explore the correlation between cat personality traits and attachment styles. Our research aims to deepen the understanding of how individual differences in cat personalities influence attachment styles and the human-cat bond in general. This led to the following research question:

Do the personality traits of domestic cats correlate with their attachment styles towards human caregivers, and if so, how?

Method

The experiment consisted of a Cat Personality Test (CPT) followed by a Secure Base Test (SBT). The CPT, developed by IDRlabs, consisted of 35 questions assessing various personality traits [3]. Using principal factor analysis, five personality traits were measured: extraversion, dominance, impulsiveness, kindness (agreeableness) and anxiety (neuroticism). The SBT was used to determine the cat's attachment style in relation to their owner. The test, derived from the strange situation test, involved observing the cat's behaviour when in the presence of their attachment figures versus when alone (see figure 1) [1] [4]. Each cat's attachment style was classified as either secure or insecure attached, based on their behaviour and response patterns in the test.

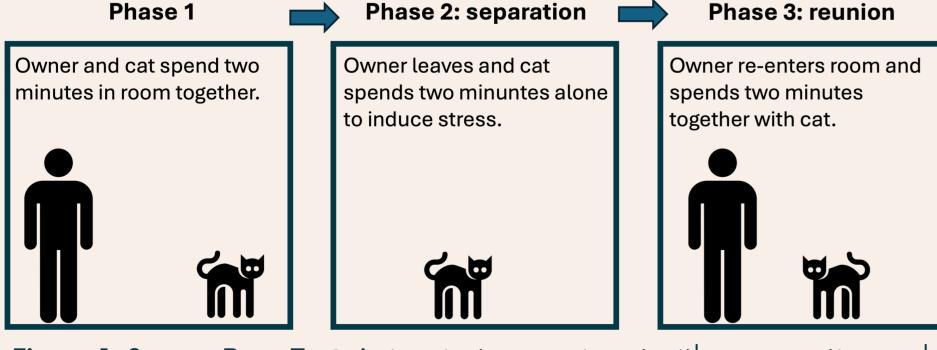


Figure 1: Secure Base Test. A six-minute experiment with a separation and reunion phase between human caregiver and cat.

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Observations & Results

4 CATS were classified as securely attached

3 CATS were classified as insecurely attached

Securely attached cats demonstrate separationdistress in phase 2 which diminishes in phase 3 [1]. Stress signals may include vocalization frequency and observable cues like tail down and nervously waiting at the door. These cats demonstrate a balanced contactseeking approach, engaging in proximity and environmental exploration [4].

Insecure attachment can manifest as ambivalent (excessive proximity-seeking), avoidant (avoidance), or disorganized (both proximity-seeking and avoiding) [1]. Cats displaying stress in both phases indicate insecureambivalent attachment, while the absence of separation distress in phase 2 suggests insecureavoidant or disorganized attachment.

The two attachment style groups are compared with each other on the five personality traits to find out whether, and, if so, which of these traits correlate with the cats' attachment styles towards their caregivers For each trait, figure 2 shows the mean score for both attachment style groups (n = 7).

Personality traits of securely vs insecurely attached cats

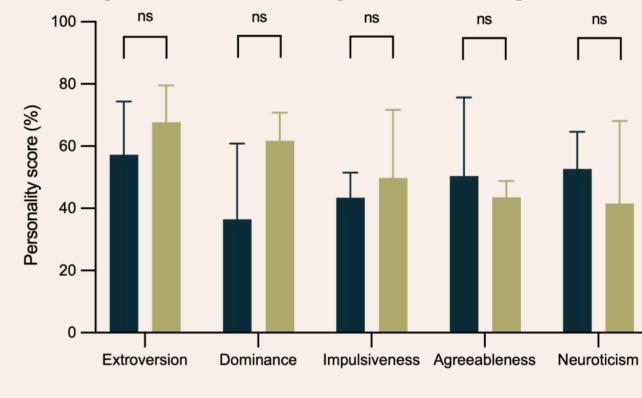


Figure 2: Mean scores for each personality trait within attachment style group.

Analysis

While Figure 2 indicates differences between the two groups, particularly in dominance, we performed independent samples ttests on the scores of the five personality traits across both attachment style groups using GraphPad software. Each calculated t-value fell below the critical t-value threshold, suggesting no significant differences between the two groups across all five personality traits.

Conclusion

In conclusion, this research aimed to explore the relationship between attachment styles and personality traits in domesticated cats. Our analysis showed no significant differences and thus can be concluded that there is no correlation between the personality traits of domestic cats and their attachment styles toward human caregivers. Nevertheless, it is worth noting that the small sample size (n = 7) may influence these findings, suggesting the need for further research with larger sample size to validate our conclusion.

Future work

In addition to using a bigger sample size to repeat our study, future research could also take more aspects of cats into consideration, like age, neuter status, and acquisition source (shelter, purchase, etc.) to have a deeper understanding of human-cat interaction. By incorporating these variables, future studies can enrich our knowledge of animal welfare practices.

References

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