

Project title and project number

*Identification of psychological factors linked to owner-pet bond and puppy blues /
Identifiering av psykologiska faktorer som är associerade med ägare-djurrelationen och
puppy blues*

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Popular science summary

This project examined how psychological characteristics and life circumstances shape the relationship between pet owners and their animals, with a particular focus on early challenges in dog ownership, known as “puppy blues”.

We found that puppy blues symptoms were more common among owners who were emotionally sensitive, experiencing stressful life events, younger, childless, or had limited prior experience with dogs. These findings suggest that the first months of dog ownership can be a demanding life transition for some individuals.

We also explored similarities between owners’ and pets’ personalities and how these may relate to relationship quality. Preliminary results indicate that owners and their pets resemble each other in traits such as emotional reactivity and conscientiousness, and that mismatches in certain traits may be linked to attachment insecurity.

Overall, the findings highlight opportunities to better support new pet owners and promote both human well-being and animal welfare.

Introduction, background, aims, and research questions

Human–pet relationships are increasingly recognized as important for well-being, yet the psychological mechanisms underlying these relationships remain insufficiently understood. Becoming securely attached to a pet may improve the well-being of both parties^{1–3}. Research suggests that people exhibit increased caregiving behaviours (e.g., compassion) towards those who mirror their own attributes⁴. Research in human relationships has shown that similarity in personality traits is associated with higher relationship quality, particularly in voluntary relationships such as friendships^{5,6} and romantic partnerships⁷. However, less is known about whether similar processes apply to human–pet relationships. There is conflicting evidence on owner-pet similarity and relationship satisfaction; studies have found a positive association with satisfaction from both similarity^{8,9} and difference^{10,11}.

In contemporary societies, dogs are frequently treated as quasi-children^{12–15}, reflecting humans’ tendencies toward anthropomorphism, sensitivity to neotenous cues, and caregiving motivations. Yet the transition into dog ownership can also involve substantial emotional strain, and some new owners report a phenomenon known as “puppy blues”, characterized by distress and difficulties adjusting to the demands of caring for a puppy¹⁶. In this project we frame puppy blues as a case of vulnerability–stress processes in a common life transition and investigate whether individual differences, including personality traits and life circumstances, shape susceptibility to emotional adjustment difficulties following the acquisition of a puppy.

This project addressed two primary aims:

1. To examine whether owner–pet personality similarity is associated with insecure attachment styles.
2. To investigate the phenomenon of “puppy blues” and its relationship with caregiver characteristics and later dog behavioural development.

Aim 2 has been completed and has resulted in two scientific manuscripts, one of which has been published and one submitted. Aim 1 is currently in the advanced analysis and manuscript preparation stage.

Materials and methods

Data collection was completed prior to the funding period. In addition to previously collected datasets by our research group, new data were gathered through open university Massive Open Online Courses (MOOCs) and RedCap. During the funded period, the new data were integrated with existing datasets, and extensive data quality checks and preprocessing were conducted to prepare the material for analysis.

Measures included owner personality traits (measured with Short 5¹⁷), demographic and life situation variables (e.g., stressful life events, family structure, prior dog experience), and pet behavioural and personality traits measured with validated questionnaires^{18,19}. Owner-pet attachment was measured with the Pet Attachment Questionnaire²⁰ that measures the two dimensions of pet attachment insecurity; attachment-related anxiety and attachment-related avoidance. Puppy blues was measured with validated puppy blues scale¹⁶.

Statistical analyses focused on associations between owner characteristics, pet traits, and relationship experiences. Validated instruments were used throughout. For Aim 2, associations between psychological vulnerability factors and puppy blues symptoms were analysed using structural equation modelling, allowing simultaneous evaluation of multiple risk factors.

Results

Aim 1: Owner–pet personality matching (ongoing)

The manuscript for Aim 1 is in progress. The introduction has been largely completed, and preliminary analyses have been conducted.

Initial results indicate that:

- Dogs and owners show similarities in conscientiousness (dog: training focus) and neuroticism (dog: insecurity).
- Higher owner neuroticism is associated with lower conscientiousness in dogs.

For cats, preliminary findings suggest that:

- Extraverted owners tend to have more active, playful, and human-social cats.
- Additional smaller correlations were observed between owner and cat personality traits.

In the second phase of this analysis, we are examining whether personality similarity is associated with attachment security within the owner–pet relationship. preliminary findings suggest that dissimilarity in neuroticism and extraversion is linked with higher attachment anxiety in dog owners. Same pattern with neuroticism and attachment anxiety was found in cat owners.

Aim 2: Puppy blues (completed)

The manuscript related to Aim 2 has been completed and submitted for peer review. In addition, a validation paper of the puppy blues questionnaire was finalized during the funding period and has received substantial media attention.

Following the validation study, the research focus was refined to examine potential vulnerability and protective factors underlying puppy blues in a cross-sectional dataset.

Key findings indicate that stronger puppy blues symptoms are associated with:

- Higher owner neuroticism
- Concurrent stressful life events
- Younger age
- Limited prior dog experience
- Absence of children in the household

Discussion, conclusions, and practical relevance

The project successfully met its main objectives, particularly with regard to Aim 2, where a manuscript has been completed and submitted. Aim 1 is progressing and is expected to result in a publishable manuscript. Ongoing work includes developing research collaborations and supervising student involvement to finalize analyses and the manuscript.

The findings highlight that early dog ownership can be psychologically demanding and that individual differences in personality and life context play a significant role in this experience. Identifying vulnerability factors for puppy blues has practical implications for supporting new dog owners, potentially reducing relinquishment risk and improving both human and animal welfare.

The observed personality similarities between owners and pets suggest that matching processes or mutual influence may shape human–animal relationships. If confirmed, these findings could inform better pet-owner matching practices and interventions aimed at strengthening relationship quality.

From an applied perspective, these findings may inform early support initiatives for new pet owners, breeder and adoption counselling practices, and public education on the emotional adjustment involved in pet ownership. Increased awareness of puppy blues may reduce stigma, prevent premature relinquishment, and ultimately improve animal welfare.

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Publications and media presence

- Ståhl, A., Hakanen, E., Mikkola, S., Sulkama, S., Harmas, T., Lahti, J., Lohi, H.* , & Salonen, M.* (2026). *Neuroticism, young age, childlessness, limited experience and stressful life events as vulnerability factors for puppy blues*. Journal of Anxiety Disorders. Manuscript submitted for publication (Manuscript No. ANXDIS-D-26-00373). * co-corresponding
- Ståhl, A., Salonen, M., Hakanen, E., Mikkola, S., Sulkama, S., Lahti, J., & Lohi, H. (2024). Development and validation of the puppy blues scale measuring temporary

affective disturbance resembling baby blues. *npj Mental Health Res* **3**, 27 (2024). <https://doi.org/10.1038/s44184-024-00072-z>

- <https://www.helsinki.fi/en/news/dogs/dogs-puppyhood-can-cause-puppy-blues-reminiscent-baby-blues>
- 9.6. 2024 Yle.fi: “Tutkimus: joka toinen koiranomistaja kokee puppy bluesia – silti se hävettää.” <https://yle.fi/a/74-20080420>
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- 18.7.2024 HuffPost: ”New Study Finds One Way Raising A Puppy Is Actually Like Having A Baby”. https://www.huffpost.com/entry/a-new-study-finds-one-way-raising-a-puppy-is-like-having-a-baby_1_66916347e4b0a1f9fa8597d5
- 3.10.2024 American Kennel Club: “Can Dog Owners Experience the ‘Puppy Blues?’”. <https://www.akc.org/expert-advice/health/puppy-blues/>

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