## **Your Brain With Pets**

## Can pet ownership help mitigate cognitive decline?

Two out of three American homes include a pet. Those of us who own pets certainly love and care for them and 95% of American pet owners consider pets to be family members. But are there other benefits to pet ownership, especially as we age? Can owning a pet help to slow cognitive decline? If so, what are the mechanisms?

## **Abstract**

- Objective: To examine associations between pet ownership and long-term cognitive outcomes among US adults.
- Background: Despite increasing evidence in support of potential health benefits of pet ownership, relationships between pet ownership and long-term cognitive health have been insufficiently examined.
- Design/Methods: We utilized data from the Health and Retirement Study (HRS), a nationally representative cohort of US adults age 50+. Pet ownership and its duration were assessed in the 2012 wave. Cognitive assessments from 2010 to 2016 were used to create a composite score derived from immediate and delayed 10-noun free recall test, serial seven subtraction test, and a backwards count test (score range: 0-27). Participants with impaired cognitive function, as determined by HRS algorithms at baseline (2010), were excluded. We fitted mixed effects models with a random intercept to estimate the longitudinal associations between pet ownership and cognitive function.
- Results: Of the 1,369 HRS participants with normal cognition at baseline, 53% owned pets. At baseline, pet owners had lower prevalence of hypertension (44.0% vs 49.2%) but higher prevalence of depression (23.8% vs 14.0%) compared with non-pet owners. Higher socioeconomic status was also apparent among pet owners compared to non-pet owners. Over six years, cognitive score decreased by 0.21 points among non-pet owners, in comparison to pet owners (beta=0.21, p=0.08). The magnitude of this association was stronger among those who owned pets for more than five years (beta=1.2, p=0.03). The cognitive benefits associated with longer pet ownership were more prominent for Black adults, college-educated adults, and men.
- Conclusions: Long-term pet ownership could mitigate cognitive decline in older adults. Findings of this study
  provide a fundamental step to increase our understanding of how sustained relationships with companion
  animals could contribute to cognitive health.

Pet ownership has increased 20% since 1988 and there was an obvious spike over the past couple of years as people sought out "pandemic puppies". Fifty-three percent of American households have dogs and 35% own cats. So, there are a lot of animals in households. Besides companionship, can these pets help to slow cognitive decline? This study was a peer-reviewed abstract presented at the recent American Academy of Neurology meeting. It is a large study of Medicare beneficiaries with normal cognition at baseline. In this study, 53% owned pets, which mirrors our society. Previous research has examined the impact of pets on overall health, mood, and quality of life, but this study had a different goal, to consider the effects of pet ownership on cognitive health. Pet owners, especially long-term pet owners had a slower rate of cognitive decline suggesting that long-term pet ownership may protect against cognitive decline. While not proving cause-and-effect or mechanism of action, the results are certainly interesting. We can speculate on the reasons for this. For dog ownership, the need to walk the dog may provide an opportunity for <u>physical activity</u>, which we know is beneficial for maintaining cognition. Pets are beneficial for the mental health and overall health of the elderly which may contribute to protection from cognitive decline. We should support programs to help people maintain their pets as they age. An unwanted separation from a pet could be devastating. As the son of a veterinarian, I saw first-hand how important pets were to people. I remember elderly who wouldn't have left the house if they didn't have to walk their dog every day. The dog was a lifeline to the outside world. Now we have another study supporting this important humananimal bond.

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