



## AAN 74<sup>th</sup> ANNUAL MEETING ABSTRACT

Media Contacts:

Renee Tessman, [rtessman@aan.com](mailto:rtessman@aan.com), (612) 928-6137

Michelle Uher, [muher@aan.com](mailto:muher@aan.com), (612) 928-6120

### EMBARGOED FOR RELEASE UNTIL 4 P.M. ET, WEDNESDAY, FEBRUARY 23, 2022

**Abstract Title:** Companion Animals and Cognitive Health; A Population-Based Study

**Press Release Title:** Do Pets Have a Positive Effect on Your Brain Health? *Study Shows Long-Term Pet Ownership Linked to Slower Decline in Cognition Over Time*

**Authors:** Monica Shieu<sup>1</sup>, Jennifer Applebaum<sup>2</sup>, Galit Dunietz<sup>1</sup>, and Tiffany Braley<sup>1</sup>

<sup>1</sup>University of Michigan Medical Center, <sup>2</sup>University of Florida

**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.

**Study Support:** NIH/NHLBI T32 HL 110952 and NIH/NIA R01AG074342