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 Shieu1, Jennifer Applebaum2, Galit Dunietz1, and Tiffany Braley1

1University of Michigan Medical Center, 2University 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