Table S1: Estimated association (adjusted coefficient and stand error) between ownership of a pet over five years/1-5 years vs. no pets (exposure) and cognitive test score (outcome) for the total study population from the linear mixed model with a random intercept for each individual and a random slope for each pet ownership group, sensitivity analysis

Cognitive test	Total (n=1,369)	
	Adjusted coefficient[a] (standard error)	P-value
Composite cognitive score		
0 year	Reference	
1-5 years	-0.008 (0.3)	0.97
>5 years	0.03 (0.3)	0.92
Immediate word recall		
0 year	Reference	
1-5 years	0.10 (0.1)	0.40
>5 years	-0.05 (0.1)	0.65
Delayed word recall		
0 year	Reference	
1-5 years	0.02 (0.2)	0.92
>5 years	0.03 (0.1)	0.83
Serial 7's task		
0 year	Reference	
1-5 years	-0.09 (0.1)	0.44
>5 years	0.07 (0.1)	0.46
Backward count		
0 year	Reference	
1-5 years	-0.03 (0.03)	0.27
>5 years	-0.03 (0.02)	0.21

[a]Adjusted for age, gender, education level, marital status, race/ethnicity, family income, survey year, depression, BMI, hypertension, diabetes.

*Accounted for strata and 2010 survey weights (household-level and respondent-level weights)

Table S2: Estimated association (adjusted coefficient and stand error) between ownership of a pet over five years/1-5 years vs. no pets (exposure) and cognitive test score (outcome) for the total study population from the linear mixed model with a random intercept for each individual and a random slope for each pet ownership group, sensitivity analysis

Cognitive test	Total (n=1,369)	
	Adjusted coefficient[a] (standard error)	P-value
Composite cognitive score		
0 year	Reference	
1-5 years	-0.08 (0.3)	0.76
>5 years	0.03 (0.2)	0.87
Immediate word recall		
0 year	Reference	
1-5 years	0.1 (0.1)	0.31
>5 years	0.01 (0.08)	0.87
Delayed word recall		
0 year	Reference	
1-5 years	0.04 (0.1)	0.76
>5 years	0.06 (0.1)	0.55
Serial 7's task		
0 year	Reference	
1-5 years	-0.2 (0.1)	0.04
>5 years	-0.03 (0.08)	0.68
Backward count		
0 year	Reference	
1-5 years	0.003 (0.02)	0.91
>5 years	-0.01 (0.02)	0.57

[*]Sensitivity analysis: those who had pets less than a year were categorized as non-pet owners (n=38). N for new categories: 745, 234, 387.

[*]Adjusted for age, gender, education level, marital status, race/ethnicity, family income, survey year, depression.

[*]Accounted for strata and 2010 survey weights (household-level and respondent-level weights)

Table S3: Estimated association (adjusted coefficient and stand error) between ownership of a pet over five years/1-5 years vs. no pets (exposure) and cognitive test score (outcome) for the total study population from the linear mixed model with a random intercept for each individual and a random slope for each pet ownership group, sensitivity analysis, 2010-2020

Cognitive test	Total (n=969)	
	Adjusted coefficient[a] (standard error)	P-value
Composite cognitive score		
0 year	Reference	
1-5 years	-0.10 (0.2)	0.53
>5 years	0.03 (0.2)	0.89
Immediate word recall		
0 year	Reference	
1-5 years	0.07 (0.1)	0.46
>5 years	0.03 (0.1)	0.72
Delayed word recall		
0 year	Reference	
1-5 years	0.01 (0.1)	0.94
>5 years	0.04 (0.1)	0.66
Serial 7's task		
0 year	Reference	
1-5 years	-0.20 (0.1)	0.02
>5 years	-0.02 (0.1)	0.79
Backward count		
0 year	Reference	
1-5 years	-0.003 (0.02)	0.83
>5 years	-0.002 (0.01)	0.92

[a]Adjusted for age, gender, education level, marital status, race/ethnicity, family income, survey year, depression.

*Accounted for strata and 2010 survey weights (household-level and respondent-level weights)

Table S4: Estimated association (adjusted coefficient and stand error) between ownership of a pet over five years/1-5 years vs. no pets (exposure) and cognitive test score (outcome) for the total study population from the linear mixed model with a random intercept for each individual and a random slope for each pet ownership group, complete table

Cognitive test	Total (n=1,369)		Age<65 (n=725)		Age≥65 (n=644)	
	Adjusted coefficient[a] (standard error)	P-value	Adjusted coefficient[b] (stand error)	P-value	Adjusted coefficient[b] (stand error)	P-value
Composite cognitive score						
0 year	Reference		Reference		Reference	
1-5 years	-0.11 (0.2)	0.64	-0.29 (0.4)	0.50	0.14 (0.3)	0.68
>5 years	0.02 (0.2)	0.94	-0.41 (0.3)	0.16	0.76 (0.3)	0.03
Age						
<65	Reference					
≥65	-2.0 (0.2)	<0.0001	-	-	-	-
Race						
White	Reference		Reference		Reference	
Black	-1.36 (0.3)	<0.0001	-1.81 (0.3)	<0.0001	-0.62 (0.4)	0.13
Hispanic	-0.69 (0.6)	0.26	-1.04 (0.8)	0.20	-0.30 (0.8)	0.72
Other	-0.93 (0.7)	0.16	-0.56 (1.0)	0.58	-1.37 (0.8)	0.09
Gender						
Women	Reference		Reference		Reference	
Men	-0.82 (0.2)	<0.0001	-0.81 (0.3)	<0.0001	-0.75 (0.3)	0.007
Education level						
Above college	Reference		Reference		Reference	
College	-1.08 (0.3)	0.0003	-0.99 (0.6)	0.55	-1.48 (0.5)	0.005
Below college	-2.53 (0.3)	<0.0001	-2.56 (0.8)	0.16	-2.52 (0.5)	<0.0001
Marital status						
Married	Reference		Reference		Reference	
Unmarried	-0.29 (0.2)	0.16	-0.28 (0.3)	0.20	-0.27 (0.3)	0.33
Family income						
<15,900	Reference		Reference		Reference	
≥15,900	0.41(0.2)	0.06	0.11 (0.3)	0.80	0.96 (0.4)	0.008
Depression						
No	Reference		Reference		Reference	
Yes	-0.61 (0.2)	0.02	-0.67 (0.3)	0.03	-0.50 (0.4)	0.24
Survey year	-0.07(0.2)	0.15	0.08 (0.4)	0.60	-0.30 (0.06)	<0.0001

[*]Accounted for strata and 2010 survey weights (household-level and respondent-level weights)
[a]Adjusted for age, gender, education level, marital status, race/ethnicity, family income, survey year, depression.

[b]Adjusted for gender, education level, marital status, race/ethnicity, family income, survey year, depression.