

WEB APPENDIX

Assessment of Health History

Participants in the Survey of the Health of Wisconsin (SHOW) self-reported their health history. Specifically, respondents were asked orally whether a doctor or other health professional had ever told them they had congestive heart failure, a heart attack, a stroke, high cholesterol, diabetes, high blood pressure, asthma, chronic bronchitis, allergies, or cancer. Respondents were also given a list and asked to report whether a doctor or other health professional had ever told them they had alcohol abuse, Alzheimer's disease, anemia, anxiety, autism spectrum disorder, celiac disease, chlamydia, Crohn's disease, chronic kidney disease, depression, drug abuse, eczema, epilepsy, gonorrhea, hepatitis, herpes type 1/cold sores, HIV infection/AIDS, human papilloma virus (HPV), irritable bowel syndrome, kidney stones, learning disability, Lyme disease, migraines, mild cognitive impairment, multiple sclerosis, osteoarthritis, osteoporosis, Parkinson's disease, post-traumatic stress disorder, psoriasis, acid reflux, rheumatoid arthritis, shingles or chicken pox, stomach or intestinal ulcer, syphilis, tuberculosis, urinary incontinence or urinary tract infections. The number of health conditions was evaluated by summing the total number of conditions the participant endorsed.

Web Table 1. Full regression models of the association between duration of caregiving and telomere length

	β^a	SE	<i>P</i> value
(Intercept)	-0.13	0.20	
Duration of Care (log-transformed)	-0.02	0.02	0.34
Age, years	-0.01	0.00	0.02
Sex			
Female	-0.08	0.07	0.24
Male		REFERENCE	
Race/Ethnicity			
White (non-Hispanic)	0.00	0.11	0.99
Other		REFERENCE	
Educational Attainment			
<12 years		REFERENCE	
≥ 12 years	0.20	0.08	0.01
No. of Adults in the Household	0.07	0.03	0.05
No. of Health Conditions	0.04	0.02	0.02
No. of Prescription Medications			
0		REFERENCE	
≥ 1	-0.18	0.08	0.03
Caregiver Status			
Current	0.04	0.08	0.59
Former (past 12 months)		REFERENCE	
No. of Care Recipients			
1		REFERENCE	
>1	-0.04	0.08	0.62

SE, standard error.

^aFor continuous covariates, the estimate represents change in log(T/S) per unit increase or per doubling of the covariate, as indicated; for categorical covariates, the estimate represents the difference from the reference group.

Web Table 2. Full regression models of the association between hours per week of caregiving and telomere length

	β^a	SE	P value
(Intercept)	-0.01	0.22	
Duration of Care (log-transformed)	-0.06	0.02	0.00
Age, years	-0.01	0.00	0.02
Sex			
Female	-0.05	0.06	0.48
Male		REFERENCE	
Race/Ethnicity			
White (non-Hispanic)	0.00	0.10	0.99
Other		REFERENCE	
Educational Attainment			
<12 years		REFERENCE	
≥ 12 years	0.23	0.08	0.01
No. of Adults in the Household	0.06	0.03	0.08
No. of Health Conditions	0.05	0.02	0.02
No. of Prescription Medications			
0		REFERENCE	
≥ 1	-0.18	0.09	0.04
Caregiver Status			
Current	-0.04	0.07	0.55
Former (past 12 months)		REFERENCE	
No. of Care Recipients			
1		REFERENCE	
>1	-0.02	0.08	0.80

SE, standard error.

^aFor continuous covariates, the estimate represents change in log(T/S) per unit increase or per doubling of the covariate, as indicated; for categorical covariates, the estimate represents the difference from the reference group.

Web Table 3. Full regression models of the association between relationship with the care recipient and telomere length

	β^a	SE	P value
(Intercept)	-0.11	0.28	
Relationship with Care Recipient			
Spouse		REFERENCE	
Adult-Child	0.07	0.06	0.30
Parent	-0.12	0.10	0.25
Other	0.09	0.10	0.37
Age, years	-0.01	0.00	0.04
Sex			
Female	-0.09	0.07	0.18
Male		REFERENCE	
Marital Status			
Married/Partnered		REFERENCE	
Divorced/Widowed/Separated	0.15	0.07	0.05
Never Married	-0.10	0.16	0.54
Race/Ethnicity			
White (non-Hispanic)	-0.04	0.12	0.75
Other		REFERENCE	
Educational Attainment			
<12 years		REFERENCE	
≥ 12 years	0.20	0.09	0.02
No. of Adults in the Household	0.09	0.03	0.01
No. of Children in the Household	-0.02	0.05	0.71
No. of Health Conditions	0.04	0.02	0.03
No. of Prescription Medications			
0		REFERENCE	
≥ 1	-0.17	0.08	0.03
Caregiver Status			
Current	0.02	0.07	0.75
Former (past 12 months)		REFERENCE	
No. of Care Recipients			
1		REFERENCE	
>1	-0.06	0.08	0.43

SE, standard error.

^aFor continuous covariates, the estimate represents change in log(T/S) per unit increase or per doubling of the covariate, as indicated; for categorical covariates, the estimate represents the difference from the reference group.

Web Table 4. Full regression models of the association between distance from the care recipient and telomere length

	β^a	SE	P value
(Intercept)	-0.07	0.32	
Distance from Care Recipient			
Co-resident		REFERENCE	
≤ 20 minutes	0.06	0.07	0.39
> 20 minutes	-0.02	0.08	0.84
Age, years	-0.01	0.00	0.03
Sex			
Female	-0.09	0.07	0.18
Male		REFERENCE	
Employment Status			
Employed	-0.03	0.07	0.65
Unemployed		REFERENCE	
Marital Status			
Married/Partnered		REFERENCE	
Divorced/Widowed/Separated	0.16	0.09	0.10
Never Married	-0.08	0.16	0.64
Race/Ethnicity			
White (non-Hispanic)	-0.02	0.11	0.85
Other		REFERENCE	
Educational Attainment			
< 12 years		REFERENCE	
≥ 12 years	0.22	0.08	0.01
Income (log-transformed)	0.03	0.05	0.57
No. of Adults in the Household	0.09	0.03	0.01
No. of Children in the Household	-0.03	0.05	0.51
No. of Health Conditions	0.04	0.02	0.05
No. of Prescription Medications			
0		REFERENCE	
≥ 1	-0.18	0.08	0.03
Caregiver Status			
Current	0.01	0.07	0.84
Former (past 12 months)		REFERENCE	
No. of Care Recipients			
1		REFERENCE	
> 1	-0.05	0.08	0.55

SE, standard error.

^aFor continuous covariates, the estimate represents change in log(T/S) per unit increase or per doubling of the covariate, as indicated; for categorical covariates, the estimate represents the difference from the reference group.

Web Table 5. Full regression models of the association between care recipient condition and telomere length

	β^a	SE	<i>P</i> value
(Intercept)	-0.07	0.27	
Care Recipient's Condition			
Dementia	0.07	0.09	0.45
Recovery from Surgery	-0.13	0.21	0.54
Other		REFERENCE	
Age, years	-0.01	0.00	0.03
Sex			
Female	-0.10	0.07	0.13
Male		REFERENCE	
Marital Status			
Married/Partnered		REFERENCE	
Divorced/Widowed/Separated	0.15	0.08	0.07
Never Married	-0.06	0.17	0.73
Race/Ethnicity			
White (non-Hispanic)	0.00	0.12	0.97
Other		REFERENCE	
Educational Attainment			
<12 years		REFERENCE	
≥12 years	0.23	0.08	0.01
No. of Adults in the Household	0.09	0.03	0.01
No. of Children in the Household	-0.03	0.05	0.57
No. of Health Conditions	0.04	0.02	0.02
No. of Prescription Medications			
0		REFERENCE	
≥1	-0.17	0.08	0.03
Caregiver Status			
Current	-0.02	0.06	0.71
Former (past 12 months)		REFERENCE	
No. of Care Recipients			
1		REFERENCE	
>1	-0.03	0.07	0.68

SE, standard error.

^aFor continuous covariates, the estimate represents change in log(T/S) per unit increase or per doubling of the covariate, as indicated; for categorical covariates, the estimate represents the difference from the reference. group.

Web Table 6. Full regression models of the association between care recipient age and telomere length

	β^a	SE	P value
(Intercept)	-0.07	0.22	
Care Recipient's Age, years			
<25	-0.29	0.08	0.00
25-44	-0.12	0.10	0.21
45-64	-0.08	0.09	0.37
65-84	-0.08	0.09	0.38
≥ 85		REFERENCE	
Age, years	-0.01	0.00	0.01
Sex			
Female	-0.09	0.06	0.17
Male		REFERENCE	
Marital Status			
Married/Partnered		REFERENCE	
Divorced/Widowed/Separated	0.19	0.08	0.01
Never Married	-0.06	0.15	0.67
Race/Ethnicity			
White (non-Hispanic)	-0.01	0.11	0.96
Other		REFERENCE	
Educational Attainment			
<12 years		REFERENCE	
≥ 12 years	0.22	0.08	0.01
No. of Adults in the Household	0.11	0.03	0.00
No. of Health Conditions	0.04	0.02	0.04
No. of Prescription Medications			
0		REFERENCE	
≥ 1	-0.15	0.08	0.05
Caregiver Status			
Current	0.01	0.06	0.91
Former (past 12 months)		REFERENCE	
No. of Care Recipients			
1		REFERENCE	
>1	0.00	0.07	0.97

SE, standard error.

^aFor continuous covariates, the estimate represents change in log(T/S) per unit increase or per doubling of the covariate, as indicated; for categorical covariates, the estimate represents the difference from the reference group.

Web Table 7. Full regression models of the association between all caregiving characteristics and telomere length

	β^a	SE	<i>P</i> value
Intercept	0.26	0.25	
Duration of Care (log-transformed)	-0.03	0.02	0.12
Hours per Week (log-transformed)	-0.08	0.03	0.00
Relationship with Care Recipient			
Spouse		REFERENCE	
Adult-Child (caring for a parent)	0.11	0.11	0.29
Parent (caring for a child)	-0.02	0.10	0.83
Other	0.17	0.12	0.13
Distance from Care Recipient			
Co-resident		REFERENCE	
≤20 minutes	-0.16	0.08	0.03
>20 minutes	-0.23	0.11	0.03
Care Recipient's Condition			
Dementia	0.05	0.08	0.54
Recovering from surgery	-0.17	0.20	0.40
Other		REFERENCE	
Care Recipient's Age, years			
<25	-0.23	0.10	0.02
25-44	0.00	0.12	0.99
45-64	-0.04	0.12	0.71
65-84	-0.01	0.08	0.85
≥85		REFERENCE	
Caregiver Status			
Current	-0.04	0.06	0.51
Former (past 12 months)		REFERENCE	
No. of Care Recipients			
1		REFERENCE	
>1	-0.03	0.07	0.66
Care Recipient Sex			
Male		REFERENCE	
Female	-0.05	0.07	0.46
Age, years	-0.01	0.00	0.03

(Table continues)

Sex				
Female	-0.05	0.06	0.40	
Male		REFERENCE		
Race/Ethnicity				
White (non-Hispanic)	0.04	0.11	0.72	
Other		REFERENCE		
Marital Status				
Married/Partnered		REFERENCE		
Divorced/Widowed/Separated	0.13	0.08	0.08	
Never Married	-0.05	0.15	0.76	
Educational Attainment				
<12 years		REFERENCE		
≥12 years	0.19	0.08	0.02	
No. of Adults in the Household	0.07	0.04	0.06	
Employment Status				
Employed	-0.11	0.07	0.14	
Unemployed		REFERENCE		
No. of Health Conditions	0.03	0.02	0.08	
No. of Prescription Medications				
0		REFERENCE		
≥1	-0.16	0.07	0.03	

SE, standard error.

^aFor continuous covariates, the estimate represents change in log(T/S) per unit increase or per doubling of the covariate, as indicated; for categorical covariates, the estimate represents the difference from the reference group.