

eTable 1. Associations between health conditions and exposure status, adjusted for age and education:

Outcome	Neither speak nor read Japanese	Speak	
		Japanese but do not read Japanese	Both speak and read Japanese
Hypertension (defined as BP $\geq$ 140/90 or on an antihypertensive medication)	1.09 (0.54-1.40)	1 (reference)	1.16 (0.90-1.50)
Hypertension (defined as BP $\geq$ 160/95 or on an antihypertensive medication)	1.00 (0.80-1.25)	1 (reference)	0.96 (0.77-1.21)
Diabetes	0.83 (0.61-1.15)	1 (reference)	0.91 (0.66-1.25)
Parkinsonism* (probable or possible)	1.42 (0.72-2.77)	1 (reference)	0.94 (0.46-1.92)
Stroke (any self-report)	0.89 (0.60-1.31)	1 (reference)	0.77 (0.51-1.16)

\* Note that these models are somewhat unstable due to the extremely small number of cases – total of 28 across all 3 groups

eTable 2. Educational attainment in years according to exposure status

Number of years of education	Neither spoke nor read Japanese			Spoke but did not read Japanese (reference)			Both spoke and read Japanese		
	n	Percent		n	Percent		n	Percent	
		n with this number or fewer	with this number or fewer		n with this number or fewer	with this number or fewer		n with this number or fewer	with this number or fewer
2	0	0	0%	1	1	0%	4	4	1%
3	1	1	0%	8	9	0%	6	10	1%
4	2	3	1%	21	30	2%	8	18	2%
5	6	9	2%	14	44	2%	16	34	5%
6	15	24	4%	69	113	6%	37	71	10%
7	17	41	7%	91	204	11%	32	103	14%
8	107	148	26%	344	548	30%	127	230	31%
9	78	226	40%	250	798	43%	75	305	42%
10	32	258	46%	112	910	49%	30	335	46%
11	16	274	49%	56	966	52%	17	352	48%
12	182	456	81%	584	1,550	84%	181	533	73%
13	16	472	84%	52	1,602	87%	27	560	77%
14	25	497	89%	79	1,681	91%	47	607	83%
15	6	503	90%	20	1,701	92%	17	624	85%
16	34	537	96%	90	1,791	97%	61	685	94%
17	13	550	98%	23	1,814	98%	16	701	96%
18	5	555	99%	19	1,833	99%	9	710	97%
19	3	558	99%	8	1,841	100%	10	720	98%
20	1	559	100%	5	1,846	100%	9	729	100%
21	0	559	100%	0	1,846	100%	1	730	100%
22	1	560	100%	0	1,846	100%	0	730	100%
23	0	560	100%	0	1,846	100%	1	731	100%
24	1	561	100%	1	1,847	100%	0	731	100%

eTable 3. Data available regarding language use during the interview stratified by exposure group\*.

	Neither spoke nor <u>read Japanese</u>		Spoke but did not read Japanese <u>(reference)</u>		Both spoke and read <u>Japanese</u>	
	n	%	n	%	n	%
Entirely English -- no problems with language	430	98%	1444	95%	515	89%
English, but some language problems encountered	9	2%	58	4%	31	5%
English, validity uncertain or poor	1	0%	3	0%	5	1%
Mixed, with HHP interpreter	0	0%	2	0%	9	2%
Mixed; interviewer spoke Japanese and English	0	0%	3	0%	4	1%
Mixed: with family member/friend interpreter	0	0%	3	0%	3	1%
Japanese; interviewer spoke Japanese	0	0%	1	0%	1	0%
Japanese; with HHP interpreter (full translation)	0	0%	1	0%	10	2%
Missing	121		332		153	
Total	561		1847		731	

\* HHP refers to Honolulu Heart Program

eTable 4. Comparison of responses to Japanese language questions at Examination 1 (1965) and Examination 5 (1994-1996)

		<u>Honolulu Heart Program Examination 1 (1965, ages 46-65)</u>			
		Neither spoke nor read	Spoke only	Both spoke and read	Total
<u>Honolulu Asia Aging Study Examination 5</u> <u>(1994-1996,</u> <u>ages 75-96)</u>	Neither spoke nor read	143 (47%)	280 (59%)	55 (12%)	478
	Spoke but did not read	159 (52%)	639 (64%)	193 (19%)	991
	Both spoke and read	2 (1%)	20 (7%)	256 (92%)	278
Total		304	939	504	1747

eTable 5. Results of sensitivity analyses limiting the analyses to those with income data and when including income category in the model\*

		Neither spoke nor read Japanese			Spoke but did not read Japanese (reference)			Both spoke and read Japanese		
	n or person- years	Any dementia	AD	Vascular dementia	Any dementia	AD	Vascular dementia	Any dementia	AD	Vascular dementia
Analysis 1										
As reported in Table 3	3,139	0.78	0.48	0.96	1	1	1	1.80	2.07	1.22
Limited to those with reported income	2,715	0.64	0.58	0.95	1	1	1	2.46	3.03	1.91
Adjusted for income	2,715	0.64	0.57	0.95	1	1	1	2.46	3.03	1.91
Analysis 2										
As reported in Table 3	13,838	0.68	0.79	0.47	1	1	1	1.03	0.84	1.22
Limited to those with reported income	12,746	0.65	0.80	0.44	1	1	1	0.99	0.85	1.39
Adjusted for income	12,746	0.65	0.80	0.43	1	1	1	0.99	0.85	1.37
Analysis 3a										
As reported in Table 3	7,178	0.88	0.74	1.66	1	1	1	1.01	0.86	1.47
Limited to those with reported income	6,652	0.88	0.76	1.37	1	1	1	0.89	0.68	1.96
Adjusted for income	6,652	0.89	0.77	1.40	1	1	1	0.89	0.68	1.99

\* AD = Alzheimer disease. This table shows results of analyses as reported in Table 3 (first row), limited to those with data for reported income (second row) and adjusting for income category (third row) for Analyses 1, 2, and 3a. Entries in these cells represent the point estimate of the odds ratio (Analysis 1) and hazard ratios (Analysis 2 and Analysis 3). Corresponding 95% confidence intervals were slightly wider than those reported in Table 3, as expected given the smaller numbers when limiting to individuals with data for income. Comparing the second and third rows, the largest change was for vascular dementia outcomes in Analysis 3a, which changed by 0.03 for those who neither spoke nor read Japanese and by 0.03 for those who both spoke and read Japanese. All other changes were smaller than this negligible change when including income category.

eFigure. Distribution of baseline Cognitive Abilities Screening Instrument (CASI) scores by exposure status

