

Supplementary Table S4. Stratified analysis for association between social relationship variables and incident dementia by gender, Geriatric Depression Scale (GDS), subjective cognitive impairment (SCI), and instrumental activities of daily living (IADLs)

	By gender		
	Men	Women	P-value ^b
	HR (95% CI) ^a	HR (95% CI) ^a	
Married (yes)	0.66 (0.54–0.80)	1.01 (0.88–1.15)	<.001
Contact (relatives, yes)	0.84 (0.67–1.05)	0.96 (0.76–1.21)	.445
Contact (friends, yes)	0.88 (0.73–1.06)	0.78 (0.65–0.93)	.336
Group participation (yes)	0.86 (0.73–1.00)	0.91 (0.80–1.05)	.423
Work engagement (yes)	0.87 (0.74–1.03)	0.91 (0.75–1.09)	.788
Support (families, yes)	0.90 (0.74–1.10)	0.87 (0.76–1.00)	.961
Support (relatives, yes)	1.08 (0.94–1.24)	0.99 (0.88–1.12)	.381
Support (friends, yes)	0.96 (0.82–1.12)	1.00 (0.89–1.13)	.636
	By GDS		
	≥5	<5	P-value ^b
	HR (95% CI) ^a	HR (95% CI) ^a	
Married (yes)	0.85 (0.71–1.01)	0.91 (0.78–1.06)	.890
Contact (relatives, yes)	0.86 (0.69–1.09)	0.91 (0.72–1.16)	.635
Contact (friends, yes)	0.88 (0.74–1.06)	0.77 (0.64–0.94)	.487
Group participation (yes)	0.89 (0.76–1.05)	0.89 (0.78–1.02)	.858
Work engagement (yes)	0.78 (0.62–0.98)	0.94 (0.81–1.09)	.437
Support (families, yes)	0.89 (0.75–1.07)	0.88 (0.74–1.04)	.920
Support (relatives, yes)	1.06 (0.91–1.24)	1.02 (0.91–1.16)	.788
Support (friends, yes)	1.05 (0.89–1.24)	0.94 (0.83–1.06)	.204
	By SCI		
	Yes	No	P-value ^b
	HR (95% CI) ^a	HR (95% CI) ^a	
Married (yes)	0.80 (0.64–0.99)	0.92 (0.81–1.05)	.447

Contact (relatives, yes)	0.98 (0.71–1.36)	0.87 (0.72–1.05)	.552
Contact (friends, yes)	0.66(0.51–0.85)	0.89 (0.77–1.04)	.061
Group participation (yes)	0.83 (0.67–1.03)	0.91 (0.80–1.03)	.752
Work engagement (yes)	0.91 (0.70–1.17)	0.87 (0.75–1.00)	.453
Support (families, yes)	0.89 (0.72–1.11)	0.87 (0.76–0.99)	.619
Support (relatives, yes)	1.10 (0.92–1.31)	1.01 (0.91–1.13)	.362
Support (friends, yes)	1.06 (0.87–1.23)	0.96 (0.86–1.08)	.280
By IADLs			
	Dependent	Independent	
	HR (95% CI) ^a	HR (95% CI) ^a	P-value ^b
Married (yes)	0.76 (0.61–0.93)	0.95 (0.83–1.08)	.417
Contact (relatives, yes)	1.08 (0.82–1.42)	0.80 (0.65–0.99)	.138
Contact (friends, yes)	0.74 (0.60–0.91)	0.91 (0.76–1.08)	.097
Group participation (yes)	0.85 (0.70–1.03)	0.90 (0.80–1.03)	.617
Work engagement (yes)	0.70 (0.54–0.91)	0.94 (0.82–1.08)	.163
Support (families, yes)	0.93 (0.76–1.14)	0.86 (0.75–0.98)	.568
Support (relatives, yes)	0.98 (0.83–1.15)	1.07 (0.96–1.20)	.290
Support (friends, yes)	1.09 (0.91–1.31)	0.93 (0.83–1.05)	.115

Notes:

^a A Cox proportional hazards model is employed to estimate hazard risk (HR) for the eight social relationship variables in incident dementia. All social variables are simultaneously entered into the model with covariates (age, gender, education, household income, GDS, SCI, IADLs, stroke, diabetes, daily walking time, and hobbies). 95% CI refers to 95% confidence intervals.

^b P-value refers to the value for the interaction effects of each social relationship variable with gender, GDS, SCI, or IADLs in incident dementia.