

Supplementary Materials: Relationships of Community and Individual Level Social Capital with Activities of Daily Living and Death by Gender

Haruhiko Imamura, Tsuyoshi Hamano, Takehiro Michikawa, Fujimi Takeda-Imai, Takahiro Nakamura, Toru Takebayashi and Yuji Nishiwaki

Table S1. (Sensitivity analyses 1). Association of community and individual level social capital with decline in ADL (excluding deaths): results from multilevel logistic regression models.

Social Capital	Model 1*		Model 2†		Model 3‡	
	OR (95% CI)	p-Value	OR (95% CI)	p-Value	OR (95% CI)	p-Value
(Total (n = 952))						
Social participation						
Community level §						
High	1.00		1.00		1.00	
Low	1.41 (0.97–2.05)	0.07	1.34 (0.92–1.96)	0.12	1.35 (0.92–1.97)	0.13
Individual level						
Participate			1.00		1.00	
Not participate			2.08 (1.43–3.03)	<0.001	1.96 (1.34–2.88)	0.001
Generalized trust						
Community level ¶						
High	1.00		1.00		1.00	
Low	0.69 (0.48–0.99)	0.05	0.65 (0.45–0.95)	0.03	0.66 (0.45–0.96)	0.03
Individual level						
Tend to trust			1.00		1.00	
Tend to be careful			1.38 (0.94–2.01)	0.10	1.36 (0.93–1.99)	0.12
(Men (n = 441))						
Social participation						
Community level						
High	1.00		1.00		1.00	
Low	1.72 (0.97–3.05)	0.06	1.64 (0.91–2.97)	0.10	1.60 (0.89–2.89)	0.12
Individual level						
Participate			1.00		1.00	
Not participate			2.42 (1.36–4.32)	0.003	2.32 (1.32–4.09)	0.003
Generalized trust						
Community level						
High	1.00		1.00		1.00	
Low	0.73 (0.42–1.27)	0.27	0.64 (0.36–1.16)	0.15	0.66 (0.37–1.19)	0.17
Individual level						
Tend to trust			1.00		1.00	
Tend to be careful			2.34 (1.28–4.30)	0.006	2.27 (1.23–4.21)	0.009
(Women (n = 511))						
Social participation						
Community level						
High	1.00		1.00		1.00	
Low	1.23 (0.75–2.02)	0.41	1.15 (0.70–1.91)	0.57	1.18 (0.71–1.97)	0.52
Individual level						
Participate			1.00		1.00	
Not participate			1.88 (1.13–3.12)	0.02	1.75 (1.04–2.95)	0.04
Generalized trust						
Community level						
High	1.00		1.00		1.00	
Low	0.66 (0.40–1.08)	0.10	0.64 (0.39–1.05)	0.08	0.63 (0.38–1.04)	0.07
Individual level						
Tend to trust			1.00		1.00	
Tend to be careful			0.95 (0.57–1.56)	0.83	0.96 (0.58–1.59)	0.86

Notes: OR = odds ratio; CI = confidence interval; * Model 1. Community level social capital adjusted for age (continuous), and sex; † Model 2. Community level and individual level social capital adjusted for age (continuous), and sex; ‡ Model 3. Community level and individual level social capital adjusted for age (continuous), sex, marital status, educational attainment, number of people living together, and self-rated health; § Top four areas (high) and lower four areas (low) for social participation at community level; ¶ Top four areas (high) and lower four areas (low) for generalized trust at community level.

Table S2. (Sensitivity analyses 2). Association of community and individual level social capital with composite outcome excluding those who had outcome in the first year of the follow-up period: results from multilevel logistic regression models.

Social Capital	Model 1 *		Model 2 †		Model 3 ‡	
	OR (95% CI)	p-Value	OR (95% CI)	p-Value	OR (95% CI)	p-Value
(Total (n = 902))						
Social participation						
Community level §						
High	1.00		1.00		1.00	
Low	1.18 (0.78–1.78)	0.43	1.13 (0.75–1.71)	0.55	1.13 (0.75–1.72)	0.56
Individual level						
Participate			1.00		1.00	
Not participate			1.55 (1.02–2.35)	0.04	1.55 (1.02–2.35)	0.04
Generalized trust						
Community level ¶						
High	1.00		1.00		1.00	
Low	0.57 (0.38–0.85)	0.006	0.54 (0.36–0.82)	0.004	0.54 (0.36–0.83)	0.004
Individual level						
Tend to trust			1.00		1.00	
Tend to be careful			1.38 (0.91–2.10)	0.13	1.38 (0.91–2.12)	0.13
(Men (n = 423))						
Social participation						
Community level						
High	1.00		1.00		1.00	
Low	1.22 (0.66–2.25)	0.54	1.18 (0.63–2.21)	0.61	1.22 (0.65–2.29)	0.55
Individual level						
Participate			1.00		1.00	
Not participate			1.86 (0.99–3.48)	0.05	1.83 (0.98–3.44)	0.06
Generalized trust						
Community level						
High	1.00		1.00		1.00	
Low	0.50 (0.27–0.94)	0.03	0.44 (0.23–0.84)	0.01	0.42 (0.21–0.81)	0.01
Individual level						
Tend to trust			1.00		1.00	
Tend to be careful			2.82 (1.41–5.63)	0.003	3.00 (1.48–6.08)	0.002
(Women (n = 479))						
Social participation						
Community level						
High	1.00		1.00		1.00	
Low	1.15 (0.66–1.99)	0.62	1.09 (0.62–1.90)	0.77	1.07 (0.61–1.88)	0.82
Individual level						
Participate			1.00		1.00	
Not participate			1.38 (0.79–2.41)	0.26	1.38 (0.78–2.43)	0.27
Generalized trust						
Community level						
High	1.00		1.00		1.00	
Low	0.62 (0.36–1.06)	0.08	0.62 (0.36–1.07)	0.08	0.61 (0.35–1.06)	0.08
Individual level						
Tend to trust			1.00		1.00	
Tend to be careful			0.85 (0.49–1.48)	0.57	0.85 (0.49–1.49)	0.58

Notes: OR = odds ratio; CI = confidence interval; * Model 1. Community level social capital adjusted for age (continuous), and sex; † Model 2. Community level and individual level social capital adjusted for age (continuous), and sex; ‡ Model 3. Community level and individual level social capital adjusted for age (continuous), sex, marital status, educational attainment, number of people living together, and self-rated health; § Top four areas (high) and lower four areas (low) for social participation at community level; ¶ Top four areas (high) and lower four areas (low) for generalized trust at community level.

Table S3. (Sensitivity analyses 3). Association of community and individual level social capital with composite outcome considering a history of major diseases: results from multilevel logistic regression models.

Social Capital	Model 1 *		Model 2 †		Model 3 ‡	
	OR (95% CI)	p-Value	OR (95% CI)	p-Value	OR (95% CI)	p-Value
(Total (n = 439))						
Social participation						
Community level §						
High	1.00		1.00		1.00	
Low	1.04 (0.56–1.92)	0.91	1.03 (0.58–1.85)	0.92	1.05 (0.58–1.89)	0.88
Individual level						
Participate			1.00		1.00	
Not participate			2.12 (1.23–3.66)	0.007	2.11 (1.21–3.69)	0.009
Generalized trust						
Community level ¶						
High	1.00		1.00		1.00	
Low	0.74 (0.40–1.37)	0.34	0.65 (0.36–1.17)	0.15	0.69 (0.38–1.23)	0.21
Individual level						
Tend to trust			1.00		1.00	
Tend to be careful			1.23 (0.72–2.08)	0.45	1.15 (0.67–1.98)	0.62
(Men (n = 198))						
Social participation						
Community level						
High	1.00		1.00		1.00	
Low	1.02 (0.42–2.43)	0.97	0.96 (0.37–2.53)	0.94	1.12 (0.43–2.92)	0.81
Individual level						
Participate			1.00		1.00	
Not participate			2.04 (0.85–4.90)	0.11	1.93 (0.78–4.79)	0.16
Generalized trust						
Community level						
High	1.00		1.00		1.00	
Low	0.56 (0.23–1.36)	0.20	0.44 (0.16–1.20)	0.11	0.46 (0.17–1.20)	0.11
Individual level						
Tend to trust			1.00		1.00	
Tend to be careful			3.29 (1.31–8.22)	0.01	3.67 (1.39–9.67)	0.009
(Women (n = 241))						
Social participation						
Community level						
High	1.00		1.00		1.00	
Low	1.17 (0.58–2.36)	0.66	1.11 (0.54–2.26)	0.78	1.05 (0.51–2.17)	0.90
Individual level						
Participate			1.00		1.00	
Not participate			2.09 (1.04–4.23)	0.04	2.15 (1.03–4.48)	0.04
Generalized trust						
Community level						
High	1.00		1.00		1.00	
Low	0.92 (0.46–1.85)	0.81	0.86 (0.42–1.77)	0.69	0.89 (0.43–1.85)	0.76
Individual level						
Tend to trust			1.00		1.00	
Tend to be careful			0.68 (0.34–1.37)	0.28	0.62 (0.30–1.27)	0.19

Notes: OR = odds ratio; CI = confidence interval; * Model 1. Community level social capital adjusted for age (continuous), and sex; † Model 2. Community level and individual level social capital adjusted for age (continuous), and sex; ‡ Model 3. Community level and individual level social capital adjusted for age (continuous), sex, marital status, educational attainment, number of people living together, self-rated health, and medical history of major diseases (stroke, myocardial infarction/angina, diabetes, Parkinson's disease, or cancer); § Top four areas (high) and lower four areas (low) for social participation at community level; ¶ Top four areas (high) and lower four areas (low) for generalized trust at community level.

