

Pre-disaster social support is protective for onset of post-disaster depression: Prospective study from the Great East Japan Earthquake & Tsunami

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Appendix 1. Multivariate Poisson regression (A)RR and 95% CIs from MI analysis for support factors of depressive symptoms (n=3,340)

Social support	Crude Model A1			Adjusted Model A2		
	RR	95%CI		ARR	95%CI	
Giving and receiving instrumental & emotional social support						
No emotional and no instrumetal social support	1.00			1.00		
one social support	0.91	0.63	1.30	0.92	0.64	1.33
two social supports	0.83	0.63	1.09	0.82	0.62	1.09
three social supports	0.72 *	0.56	0.94	0.74 *	0.57	0.97
four social supports	0.48 **	0.38	0.61	0.53 **	0.42	0.68

MI: Multiple Imputation, RR: Rate Ratio, ARR: Adjusted Rate Ratio, CI: Confidence Interval

Model A2 adjusted for age, sex, living status (alone or not alone), equivalized income, all types of disaster damage [housing damage, loss of close relative(s), and loss of close friend(s)]

Four social supports: Giving and receiving instrumental & emotional support

Continuous variables: age and all types of disaster damage

Including indiividual whose GDS score was five or greater at baseline

*P-value for <0.05; **P-value for <0.01

Appendix 2. Distribution of GDS score at baseline survey among those who were included and excluded from the analysis

		Included sample	People who did not meet inclusion criteria	People who dropped out after baseline survey
GDS score at 2010	Mean ($\pm$ SD)	1.6 (1.3)	7.4 (3.0)	5.6 (4.0)

Appendix 3. Poisson regression (A)RR and 95% CIs for support factors of depressive symptoms by each supporter (n=2,293)

	ARR	95%CI		ARR	95%CI		ARR	95%CI		ARR	95%CI
Before the disaster											
Giving emotional social support to			Receiving emotional social support from			Giving instrumental social support to			Receiving instrumental social support from		
Spouse	0.90	0.72 1.12		0.78 *	0.63 0.97		0.79 *	0.62 0.99		0.82	0.64 1.04
Children living together	1.00	0.78 1.27		1.05	0.83 1.32		0.92	0.73 1.17		1.13	0.92 1.39
Children living apart / relatives	1.03	0.84 1.27		1.01	0.82 1.24		0.88	0.70 1.10		1.00	0.81 1.23
Neighbors	1.23	0.99 1.52		1.19	0.93 1.51		0.85	0.54 1.34		0.75	0.41 1.37
Friends	0.80 *	0.65 0.99		0.85	0.69 1.05		0.77	0.51 1.17		1.01	0.67 1.53
After the disaster											
Giving emotional social support to			Receiving emotional social support from			Giving instrumental social support to			Receiving instrumental social support from		
Spouse	0.73 **	0.58 0.91		0.62 **	0.50 0.77		0.67 **	0.54 0.83		0.62 **	0.49 0.78
Children living together	0.86	0.67 1.11		0.85	0.68 1.07		0.59 **	0.45 0.78		0.99	0.81 1.21
Children living apart / relatives	0.85	0.71 1.03		1.10	0.91 1.33		0.69 **	0.56 0.86		1.00	0.83 1.21
Neighbors	0.94	0.74 1.19		0.99	0.77 1.28		0.74	0.44 1.26		0.55	0.28 1.06
Friends	0.75 **	0.61 0.93		0.82	0.66 1.01		0.82	0.52 1.30		0.60	0.35 1.05

ARR: Adjusted Rate Ratio, CI: Confidence Interval; N/A: Not Applicable

Adjusted for age, sex, living status (alone or not alone), equivalized income, all types of disaster damage [housing damage, loss of close relative(s), and loss of close friend(s)]

*P-value for <0.05; **P-value for <0.01