

Supplementary Table 3. Multiple linear regression of changes in group exercise participation and walking habit (converted into Z-scores) with change in depressive symptoms by analyzing multiply imputed data sets in older adults with or without depression (GDS ≥ 5 or < 5 , respectively)

	Baseline GDS < 5 (n = 2,299-2,309)					Baseline GDS ≥ 5 (n = 1,029-1,039)						
	B	95% CI	β	t	P	B	95% CI	β	t	P		
Crude model												
Change in group exercise participation	-0.174	-0.260	-0.088	-0.057	-3.97	<0.001	-0.263	-0.600	0.073	-0.086	-1.54	0.125
Change in walking habit	-0.146	-0.250	-0.041	-0.050	-2.73	0.006	-0.260	-0.470	-0.049	-0.089	-2.42	0.016
Model 1												
Change in group exercise participation	-0.155	-0.240	-0.071	-0.051	-3.61	<0.001	-0.237	-0.569	0.096	-0.077	-1.40	0.163
Change in walking habit	-0.139	-0.243	-0.035	-0.048	-2.62	0.009	-0.236	-0.445	-0.027	-0.081	-2.22	0.027
Model 2												
Change in group exercise participation	-0.147	-0.229	-0.066	-0.048	-3.54	<0.001	-0.195	-0.532	0.141	-0.064	-1.14	0.255
Change in walking habit	-0.048	-0.147	0.051	-0.016	-0.94	0.345	-0.119	-0.325	0.087	-0.041	-1.13	0.257
Model 3												
Change in group exercise participation	-0.135	-0.218	-0.051	-0.046	-3.37	0.001	-0.226	-0.560	0.107	-0.080	-1.39	0.164
Change in walking habit	-0.037	-0.137	0.063	-0.015	-0.89	0.372	-0.124	-0.328	0.079	-0.051	-1.42	0.155
Change in group exercise participation x house damage	0.046	-0.044	0.135	0.015	1.00	0.318	0.141	-0.174	0.456	0.047	0.88	0.380
Change in walking habit x house damage	0.063	-0.030	0.156	0.022	1.32	0.187	0.179	-0.035	0.394	0.062	1.64	0.101

Z-scores of 1.0 mean 44.5 days/year in the change in frequency of group exercise participation and 30.7 mins/day in the change in daily walking time.

Model 1: crude model + age and sex

Model 2: model 1 + psychological disorder, disease status, educational attainment, impaired activities of daily living, dwelling house damage, death of family members, changes in drinking habits, smoking habits, job status, equivalent income, and instrumental activities of daily living score.

Model 3: model 2 + interaction terms

GDS: Geriatric Depression Scale, CI: confidence interval.