## Appendix

**Table A1.** Association of loneliness with work disability onset among non-disabled, working older adults when controlling for lagged work limitations variable

(Dependent variable =1 if				
respondent developed work				
disability at wave 6)		Odd	s Ratios	
and the state of				(4)
	(-)	Extra and	Including	(1)
		intra	pathology,	Including
	Basic	individual	impairment,	depression
	model	factors +	and	measured
		Risk	functional	in 2015
		factors	limitations	
Longliness	1 01 0 de de de	1 2 62 de de de	1 222 state	1 1704
Loneliness	1.213***	1.263***	1.222**	1.173*
	(0.051)	(0.083)	(0.084)	(0.082)
Reported work limitation in wave 4	4.473***	3.671***	3.231***	3.199***
	(0.533)	(0.663)	(0.596)	(0.595)
Male		1.051	1.090	1.210
		(0.164)	(0.174)	(0.196)
Age		1.089***	1.080***	1.083***
		(0.017)	(0.017)	(0.017)
Higher-education		0.586**	0.601**	0.612**
		(0.098)	(0.101)	(0.103)
Married		1.330	1.327	1.299
		(0.238)	(0.239)	(0.233)
Income (log)		0.911	0.904	0.907
		(0.077)	(0.078)	(0.079)
Physical inactivity		1.504	1.455	1.403
		(0.590)	(0.571)	(0.550)
Smokes		1.240	1.227	1.235
		(0.214)	(0.213)	(0.215)
Alcohol consumption		1.048	1.049	1.048
		(0.045)	(0.045)	(0.045)
Access difficulties		1.039	1.041	1.035
		(0.036)	(0.036)	(0.036)
2+ chronic diseases			1.853***	1.771***
			(0.293)	(0.282)

Activities of daily living			1.038	1.035
			(0.257)	(0.264)
Depressed (baseline wave - 2013)			1.124	0.809
			(0.217)	(0.165)
Depressed (follow up wave - 2015)				2.757***
				(0.479)
Austria		1.000	1.000	1.000
		(.)	(.)	(.)
Germany		0.584	0.578	0.550
		(0.296)	(0.293)	(0.280)
Sweden		0.461	0.457	0.457
		(0.233)	(0.232)	(0.232)
Spain		0.771	0.764	0.761
		(0.302)	(0.299)	(0.299)
Italy		0.476	0.457	0.417
		(0.218)	(0.210)	(0.192)
France		0.545	0.533	0.475
		(0.214)	(0.210)	(0.189)
Denmark		0.804	0.798	0.827
		(0.300)	(0.299)	(0.311)
Switzerland		0.445*	0.461*	0.448*
		(0.172)	(0.178)	(0.173)
Belgium		0.996	0.936	0.879
		(0.339)	(0.319)	(0.301)
Czech Republic		0.845	0.820	0.837
		(0.303)	(0.295)	(0.302)
Slovenia		0.241	0.235	0.234
		(0.184)	(0.180)	(0.179)
Estonia		1.007	0.978	0.903
		(0.320)	(0.312)	(0.290)
N	5767	5767	5767	5767

*Note:* Logistic regression results with coefficients transformed to odds ratios. Standard error in parentheses. \*p<.05 \*\*p<.01 \*\*\*p<.001. Analysis conducted on the subset of the analytical sample interviewed at waves 4, 5, and 6. N= 5,767. Model controls for lagged work limitation variable.

**Table A2.** Association of loneliness with work disability onset among non-disabled, working older adults when no reported work-limitation in prior two waves

(Dependent variable =1 if					
respondent developed work disability at wave 6)	Odds Ratios				
	(1)	(2)	(3)	(4)	
	Basic model	Extra and intra individual factors + Risk factors	Including pathology, impairment, and functional limitations	Including depression measured in 2015	
Loneliness	1.235***	1.293***	1.202*	1.151	
Donemess	(0.057)	(0.099)	(0.098)	(0.095)	
Male	(0.031)	0.950	0.994	1.084	
TVIAIC		(0.168)	(0.180)	(0.198)	
Age		1.090***	1.081***	1.083***	
Age		(0.019)	(0.019)	(0.020)	
Higher-education		0.606**	0.626*	0.625*	
Ingher education		(0.113)	(0.117)	(0.118)	
Married		1.432	1.429	1.384	
Walled		(0.300)	(0.300)	(0.290)	
Income (log)		0.910	0.898	0.910	
(1.8)		(0.088)	(0.089)	(0.092)	
Physical inactivity		1.509	1.347	1.253	
		(0.669)	(0.603)	(0.566)	
Smokes		1.110	1.104	1.097	
		(0.222)	(0.222)	(0.221)	
Alcohol consumption		1.007	1.003	1.005	
		(0.048)	(0.048)	(0.048)	
Access difficulties		1.069	1.072	1.071	
		(0.041)	(0.041)	(0.041)	
2+ chronic diseases			1.920***	1.824***	
			(0.347)	(0.332)	
Activities of daily living		_	1.369	1.349	
			(0.360)	(0.365)	
Depressed (baseline wave - 2013)			1.369	0.978	
			(0.297)	(0.226)	

Depressed (follow up wave - 2015)				2.709***
- Presses (come up which doesn't				(0.537)
Austria	1.000	1.000	1.000	1.000
	(.)	(.)	(.)	(.)
Germany	0.564	0.554	0.523	0.564
	(0.302)	(0.298)	(0.283)	(0.302)
Sweden	0.398	0.398	0.404	0.398
	(0.202)	(0.204)	(0.208)	(0.202)
Spain	0.760	0.754	0.777	0.760
	(0.304)	(0.302)	(0.313)	(0.304)
Italy	0.363*	0.336*	0.314*	0.363*
	(0.174)	(0.163)	(0.153)	(0.174)
France	0.193**	0.194**	0.176**	0.193**
	(0.102)	(0.102)	(0.093)	(0.102)
Denmark	0.517	0.529	0.557	0.517
	(0.208)	(0.213)	(0.225)	(0.208)
Switzerland	0.294**	0.311**	0.309**	0.294**
	(0.120)	(0.127)	(0.126)	(0.120)
Belgium	0.684	0.640	0.607	0.684
	(0.245)	(0.230)	(0.219)	(0.245)
Czech Republic	0.560	0.558	0.582	0.560
	(0.217)	(0.217)	(0.227)	(0.217)
Slovenia	0.238	0.240	0.236	0.238
	(0.181)	(0.183)	(0.180)	(0.181)
Estonia	0.712	0.706	0.662	0.712
	(0.237)	(0.236)	(0.224)	(0.237)
N	5339	5339	5339	5339

*Note:* Logistic regression results with coefficients transformed to odds ratios. Standard error in parentheses. \*p<.05 \*\*p<.01 \*\*\*p<.001. Analysis conducted on the subset of the analytical sample interviewed at waves 4, 5, and 6. N= 5,339. Model does not include respondents who reported work limitations in waves 4 or 5.

**Table A3.** Mediation results with lagged work limitations variable

THE PROPERTY OF THE PROPERTY O	Coefficient	Bootstrapped Standard Error	P> z	95% CI	
Indirect effect	0.028	0.006	0.000	0.016	0.040
Direct effect	0.076	0.033	0.022	0.011	0.142
Total effect	0.105	0.034	0.002	0.039	0.171
Proportion of total effect mediated	27%				

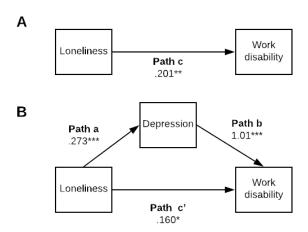
*Note:* Standardized coefficients calculated with the binary mediation command in Stata. Bootstrapped standard errors with 5,000 replications. CI = Confidence Intervals. Analysis conducted on the subset of sample interviewed at waves 4, 5, and 6. N= 5,767. Model controls for lagged work limitation variable.

**Table A4.** Mediation results conducted when no reported work-limitation in prior two waves

	Coefficient	Bootstrapped Standard Error	P> z	959	% CI
Indirect effect	.027	.007	0.000	.013	.041
Direct effect	.065	.040	0.101	013	.144
Total effect	.092	.040	0.022	.014	.171
Proportion of total effect mediated	29%				

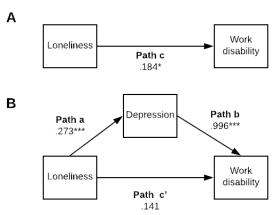
*Note:* Standardized coefficients calculated with the binary mediation command in Stata. Bootstrapped standard errors with 5,000 replications. CI = Confidence Intervals. Analysis conducted on the subset of sample interviewed at waves 4, 5, and 6. N= 5,339. Model does not include respondents who reported work limitations in waves 4 and 5.

**Figure A1.** Model of the association of loneliness, depression, and work disability including lagged work limitations variable



*Note:* Logistic regression coefficients are unstandardized. Results come from separate logistic regression equations and control for the full set of covariates displayed in Table A1 models 3 and 4 and includes the lagged work limitation variable in all models. \*p<.05 \*\*p<.01 \*\*\*p<.001

**Figure A2.** Model of the association of loneliness, depression, and work disability when no reported work-limitation in prior two waves



*Note:* Logistic regression coefficients are unstandardized. Results come from separate logistic regression equations and control for the full set of covariates displayed in Table A2 models 3 and 4 and includes the lagged work limitation variable in all models. \*p<.05 \*\*p<.01 \*\*\*p<.001