

## Appendix

Table 1. Measurement invariance test for negative exchanges across care status

	$\Delta\chi^2$	$\Delta df$	<i>P</i> value
Weak factorial invariance (Metric invariance)	11.412	12	0.490
Strong factorial invariance (Scalar invariance)	47.207	16	<0.0001
Strong partial factorial invariance (Partial scalar invariance)	9.630	8	0.292

Note. We adjusted the  $\chi^2$  using the Satorra-Bentler scaling correction because  $\chi^2$  difference tests were conducted using the MLR estimator in Mplus.

Table 2. Results from the invariance test of structural paths in the APIM across care status

	$\Delta\chi^2$	$\Delta df$	<i>P</i> value
Wives' perceived negative interactions with husbands → Wives' depressive symptoms	4.574	2	0.102
Husbands' perceived negative interactions with husbands → Husbands' depressive symptoms	8.288	2	0.016
Wives' perceived negative interactions with husbands → Husbands' depressive symptoms	3.768	2	0.152
Husbands' perceived negative interactions with husbands → Wives' depressive symptoms	0.060	2	0.970

Table 3. Measurement invariance test for negative exchanges between caregivers and care-recipients

	$\Delta\chi^2$	$\Delta df$	<i>P</i> value
Weak factorial invariance (Metric invariance)	7.304	8	0.504
Strong factorial invariance (Scalar invariance)	59.460	6	<0.0001
Strong partial factorial invariance (Partial scalar invariance)	5.384	3	0.146

Note. We adjusted the  $\chi^2$  using the Satorra-Bentler scaling correction because  $\chi^2$  difference tests were conducted using the MLR estimator in Mplus.

Table 4. Results from the Wald test of path constraints in the APIM between men and women

	Wald test statistics	df	<i>P</i> value
Caregivers' perceived negative interactions with care recipients → Caregivers' depressive symptoms	11.900	1	0.001
Care recipients' perceived negative interactions with caregivers → Care recipients' depressive symptoms	1.234	1	0.266
Caregivers' perceived negative interactions with care recipients → Care recipients' depressive symptoms	1.699	1	0.192
Care recipients' perceived negative interactions with caregivers → Caregivers' depressive symptoms	0.035	1	0.851