

Online Supplementary Material

Adjusting to the Survey: How Interviewer Experience Relates to Interview Duration

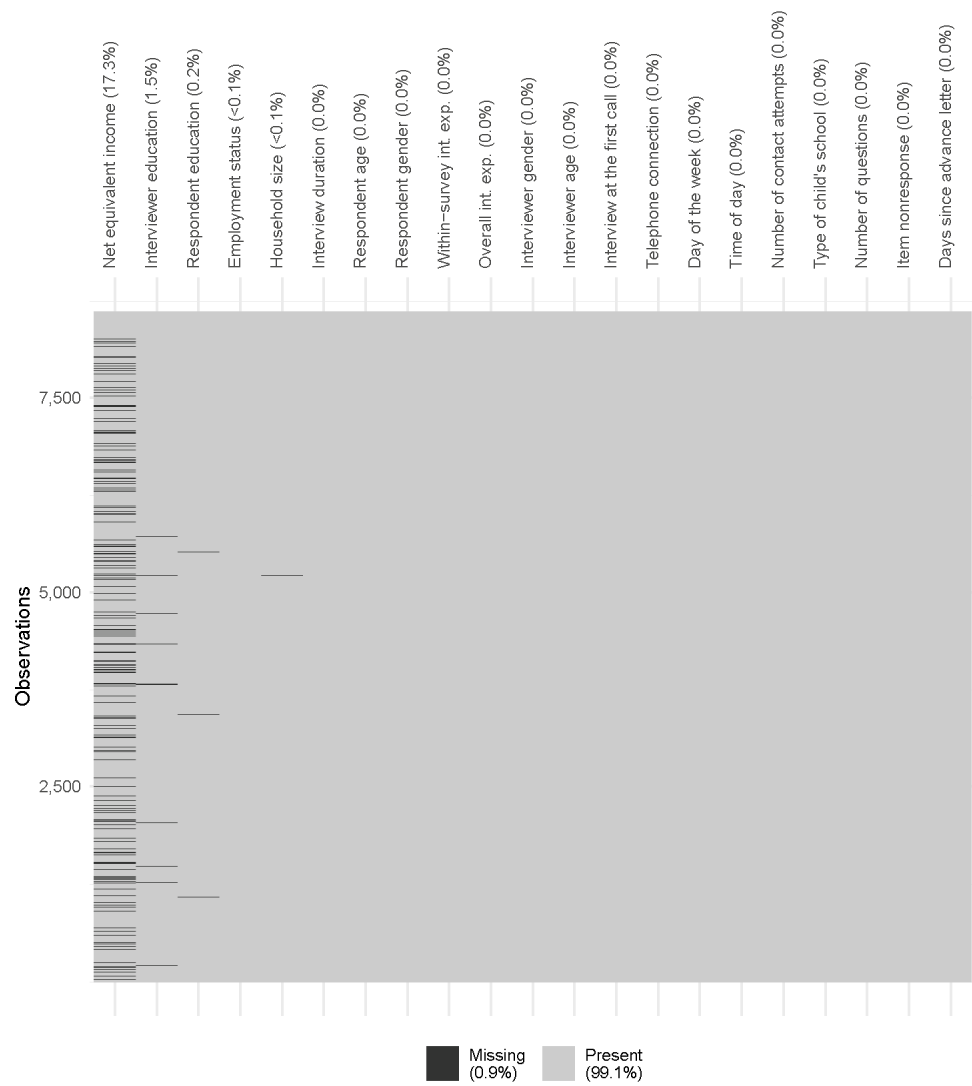


Figure S.1 Missing data visualization

Table S.1 Hierarchical linear random intercept models: estimated coefficients, standard errors, and variance components (including controls). Interview duration without trimming

	Model 0 Null	Model 1 + Experience	Model 2 + Interviewer	Model 3 + Respondent	Model 4 + Interview	Model 5 + Interaction
<i>Main explanatory variables</i>						
Within-survey interviewer experience (log)		-0.030*** (0.002)	-0.030*** (0.002)	-0.031*** (0.002)	-0.043*** (0.002)	-0.046*** (0.004)
Overall interviewer experience [ref. < 2 years]						
2–3 years		-0.029 (0.028)	-0.046 (0.027)	-0.045 (0.027)	-0.030 (0.023)	-0.005 (0.028)
4–5 years		-0.023 (0.028)	-0.054 (0.027)	-0.052 (0.027)	-0.033 (0.023)	-0.048 (0.027)
> 5 years		-0.028 (0.033)	-0.080** (0.034)	-0.078** (0.033)	-0.066** (0.028)	-0.120*** (0.033)
<i>Interviewer-level controls</i>						
Gender [female]			-0.009 (0.019)	-0.014 (0.019)	-0.015 (0.016)	-0.017 (0.016)
Age [ref. < 30 years old]						
30–49			0.082*** (0.024)	0.081*** (0.024)	0.064*** (0.020)	0.066*** (0.020)
50–65			0.121*** (0.027)	0.121*** (0.027)	0.106*** (0.023)	0.105*** (0.023)
> 65			0.155*** (0.047)	0.150*** (0.046)	0.144*** (0.039)	0.146*** (0.039)
Education [ref. intermediate]						
Lower education			-0.019 (0.032)	-0.012 (0.031)	0.010 (0.027)	0.006 (0.027)
Higher education			-0.020 (0.027)	-0.013 (0.026)	-0.010 (0.022)	-0.012 (0.022)
<i>Respondent-level controls</i>						
Gender [female]				-0.046*** (0.006)	-0.017** (0.005)	-0.017** (0.005)
Age (centered)				0.001** (0.000)	0.002*** (0.000)	0.002*** (0.000)
Education [ref. intermediate]						
Lower education				0.144*** (0.008)	0.121*** (0.007)	0.121*** (0.007)
Higher education				0.011* (0.005)	0.129** (0.004)	0.129** (0.004)
Employment status [employed]				0.006 (0.006)	0.001 (0.005)	0.000 (0.005)
Net equivalent income [ref. average]						
Risk of poverty				0.020*** (0.005)	0.055*** (0.005)	0.055*** (0.005)
High income				0.017 (0.011)	-0.006 (0.010)	-0.006 (0.010)
Household size [ref. 4 persons]						
1–3 persons				-0.030*** (0.005)	-0.010* (0.005)	-0.010* (0.005)
> 4 persons				0.021*** (0.005)	-0.009 (0.005)	-0.009 (0.005)

Table S.1 (continued)

	Model 0 Null	Model 1 + Experience	Model 2 + Interviewer	Model 3 + Respondent	Model 4 + Interview	Model 5 + Interaction
Type of child's school ["Gymnasium"]				-0.051*** (0.005)	-0.022*** (0.004)	-0.022*** (0.004)
<i>Interview-level controls</i>						
Number of contact attempts (centered)					0.009*** (0.000)	0.009*** (0.000)
Interview at the first call [not first call]					0.066*** (0.005)	0.065*** (0.005)
Days since advance letter (centered)					-0.000*** (0.000)	-0.000*** (0.000)
Telephone connection [ref. landline]						
Mobile phone					0.044*** (0.009)	0.043*** (0.009)
Undefined					0.023*** (0.004)	0.023*** (0.004)
Time of day [ref. morning]						
Afternoon					-0.027*** (0.005)	-0.027*** (0.005)
Evening					-0.007 (0.006)	-0.007 (0.006)
Day of the week [weekday]					-0.001 (0.005)	-0.002 (0.005)
Item nonresponse (%)					0.029*** (0.002)	0.029*** (0.002)
Number of questions (centered)					0.027*** (0.000)	0.027*** (0.000)
Within-survey * overall interviewer experience						
Within-survey * 2–3 years						-0.0125* (0.006)
Within-survey * 4–5 years						0.006 (0.005)
Within-survey * > 5 years						0.019** (0.0064)
Intercept	3.468*** (0.011)	3.567*** (0.021)	3.541*** (0.032)	3.573*** (0.033)	3.468*** (0.029)	3.478*** (0.031)
Residual variance (interviewer)	0.021	0.018	0.016	0.015	0.011	0.011
Residual variance (respondent)	0.049	0.049	0.049	0.045	0.033	0.033
ICC	0.300	0.269	0.244	0.252	0.247	0.248
Marginal R ²	-	0.019	0.050	0.104	0.321	0.323
Conditional R	0.300	0.283	0.282	0.330	0.489	0.490
LogLikelihood	514.32	580.64	592.83	906.46	2,210.00	2,221.41
Pr (>Chisq)		0.000***	0.000***	0.000***	0.000***	0.000***
Sample size (respondents/interviewers)	8,622/180					

Notes: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table S.2 Hierarchical linear random intercept models: estimated coefficients, standard errors, and variance components (including controls). Duration in minutes (without log transformation)

	Model 0 Null	Model 1 + Experience	Model 2 + Interviewer	Model 3 + Respondent	Model 4 + Interview	Model 5 + Interaction
<i>Main explanatory variables</i>						
Within-survey interviewer experience (log)		-0.829*** (0.084)	-0.847*** (0.084)	-0.889*** (0.081)	-1.326*** (0.087)	-1.486*** (0.142)
Overall interviewer experience [ref. < 2 years]						
2–3 years		-0.979 (0.920)	-1.495 (0.884)	-1.443 (0.869)	-0.980 (0.736)	-0.386 (0.906)
4–5 years		-0.629 (0.902)	-1.546 (0.89)*	-1.5065 (0.874)	-0.884 (0.740)	-1.609 (0.898)
> 5 years		-1.053 (1.081)	-2.635** (1.094)	-2.568** (1.076)	-2.218** (0.910)	-4.131*** (1.085)
<i>Interviewer-level controls</i>						
Gender [female]			-0.232 (0.649)	-0.405 (0.638)	-0.464 (0.540)	-0.511 (0.540)
Age [ref. < 30 years old]						
30–49			2.485** (0.799)	2.461** (0.785)	1.989** (0.665)	2.077*** (0.666)
50–65			3.707*** (0.885)	3.712*** (0.870)	3.318*** (0.736)	3.279*** (0.737)
> 65			4.671** (1.514)	4.533** (1.488)	4.421*** (1.259)	4.483*** (1.261)
Education [ref. intermediate]						
Lower education			-0.450 (1.034)	-0.255 (1.015)	0.447 (0.861)	0.306 (0.862)
Higher education			-0.289 (0.875)	-0.104 (0.859)	-0.032 (0.728)	-0.092 (0.730)
<i>Respondent-level controls</i>						
Gender [female]				-1.593*** (0.209)	-0.657*** (0.185)	-0.655** (0.184)
Age (centered)				0.042** (0.015)	0.080*** (0.013)	0.080*** (0.013)
Education [ref. intermediate]						
Lower education				5.010*** (0.283)	4.237*** (0.250)	4.246*** (0.250)
Higher education				0.324 (0.177)	0.376* (0.154)	0.376* (0.154)
Employment status [employed]				0.163 (0.218)	-0.014 (0.192)	-0.024 (0.191)
Net equivalent income [ref. average]						
Risk of poverty				0.615*** (0.190)	1.701*** (0.170)	1.695*** (0.170)
High income				0.527 (0.385)	-0.185 (0.336)	-0.191 (0.336)
Household size [ref. 4 persons]						
1–3 persons				-0.913*** (0.180)	0.256 (0.165)	0.264 (0.165)
> 4 persons				0.677*** (0.191)	0.297 (0.167)	0.309 (0.167)
Type of child's school ["Gymnasium"]				-1.516*** (0.167)	-0.065*** (0.147)	-0.650*** (0.147)

Table S.2 (continued)

	Model 0 Null	Model 1 + Experience	Model 2 + Interviewer	Model 3 + Respondent	Model 4 + Interview	Model 5 + Interaction
<i>Interview-level controls</i>						
Number of contact attempts (centered)					0.302*** (0.010)	0.304*** (0.010)
Interview at the first call [not first call]					1.918*** (0.191)	1.901*** (0.191)
Days since advance letter (centered)					-0.015** (0.003)	-0.015*** (0.003)
Telephone connection [ref. landline]						
Mobile phone					1.252*** (0.311)	1.227*** (0.311)
Undefined					0.715*** (0.151)	0.720*** (0.151)
Time of day [ref. morning]						
Afternoon					-0.792*** (0.191)	-0.772*** (0.191)
Evening					-0.204 (0.226)	-0.181 (0.226)
Day of the week [weekday]					-0.001 (0.005)	-0.002 (0.005)
Item nonresponse (%)					1.000*** (0.066)	0.998*** (0.066)
Number of questions (centered)					0.082*** (0.002)	0.081*** (0.002)
Within-survey * overall interviewer experience						
Within-survey * 2–3 years						-0.254 (0.202)
Within-survey * 4–5 years						0.273 (0.183)
Within-survey * > 5 years						0.686*** (0.211)
Intercept	33.136*** (0.363)	35.938*** (0.693)	34.916*** (1.043)	36.016*** (1.071)	32.979*** (0.955)	33.493*** (1.014)
Residual variance (interviewer)	20.972	18.077	16.072	15.603	11.084	11.110
Residual variance (respondent)	52.208	51.788	51.804	48.097	36.512	36.438
ICC	0.287	0.259	0.237	0.245	0.233	0.234
Marginal R ²	-	0.015	0.042	0.098	0.305	0.305
Conditional R	0.287	0.270	0.269	0.319	0.467	0.468
LogLikelihood	-29521	-29473	-29462	-29140	-27942	-27932
Pr (>Chisq)		0.000***	0.000**	0.000***	0.000***	0.000***
Sample size (respondents/interviewers)	8,622/180					

Notes: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table S.3 Hierarchical linear random intercept models: estimated coefficients, standard errors, and variance components (including controls). Non imputed data

	Model 0 Null	Model 1 + Experience	Model 2 + Interviewer	Model 3 + Respondent	Model 4 + Interview	Model 5 + Interaction
<i>Main explanatory variables</i>						
Within-survey interviewer experience (log)		-0.031*** (0.002)	-0.031*** (0.002)	-0.033*** (0.002)	-0.044*** (0.002)	-0.049*** (0.004)
Overall interviewer experience [ref. < 2 years]						
2–3 years		-0.037 (0.028)	-0.051 (0.026)	-0.050 (0.026)	-0.038 (0.022)	-0.018 (0.028)
4–5 years		-0.019 (0.027)	-0.053 (0.026)*	-0.051 (0.026)	-0.033 (0.022)	-0.057* (0.028)
> 5 years		-0.040 (0.032)	-0.086** (0.032)	-0.084** (0.032)	-0.074** (0.027)	-0.128*** (0.033)
<i>Interviewer-level controls</i>						
Gender [female]			-0.005 (0.019)	-0.009 (0.019)	-0.009 (0.016)	-0.010 (0.016)
Age [ref. < 30 years old]						
30–49			0.078*** (0.024)	0.077*** (0.023)	0.060** (0.020)	0.062** (0.020)
50–65			0.121*** (0.026)	0.120*** (0.026)	0.106*** (0.022)	0.105*** (0.022)
> 65			0.139** (0.047)	0.129** (0.046)	0.288*** (0.039)	0.131*** (0.039)
Education [ref. intermediate]						
Lower education			-0.0174 (0.031)	-0.010 (0.031)	0.009 (0.026)	0.006 (0.026)
Higher education			-0.022 (0.027)	-0.017 (0.026)	-0.012 (0.022)	-0.014 (0.022)
<i>Respondent-level controls</i>						
Gender [female]				-0.050*** (0.006)	-0.017** (0.005)	-0.017** (0.005)
Age (centered)				0.005** (0.000)	0.002*** (0.000)	0.002*** (0.000)
Education [ref. intermediate]						
Lower education				0.136*** (0.009)	0.113*** (0.008)	0.113*** (0.008)
Higher education				0.008 (0.005)	0.008 (0.005)	0.008 (0.005)
Employment status [employed]				0.001 (0.007)	-0.001 (0.006)	-0.001 (0.006)
Net equivalent income [ref. average]						
Risk of poverty				0.018** (0.006)	0.048*** (0.005)	0.048*** (0.005)
High income				0.028* (0.011)	-0.001 (0.010)	-0.001 (0.010)
Household size [ref. 4 persons]						
1–3 persons				-0.027*** (0.005)	-0.013* (0.005)	-0.013* (0.005)
> 4 persons				0.022*** (0.006)	-0.010* (0.005)	-0.010* (0.005)
Type of child's school ["Gymnasium"]				-0.049*** (0.005)	-0.022*** (0.004)	-0.022*** (0.004)

Table S.3 (continued)

	Model 0 Null	Model 1 + Experience	Model 2 + Interviewer	Model 3 + Respondent	Model 4 + Interview	Model 5 + Interaction
<i>Interview-level controls</i>						
Number of contact attempts (centered)					0.008*** (0.000)	0.008*** (0.000)
Interview at the first call [not first call]					0.061*** (0.006)	0.060*** (0.006)
Days since advance letter (centered)					-0.000*** (0.000)	-0.000*** (0.000)
Telephone connection [ref. landline]						
Mobile phone					0.049*** (0.010)	0.048*** (0.010)
Undefined					0.016*** (0.004)	0.016*** (0.004)
Time of day [ref. morning]						
Afternoon					-0.022*** (0.006)	-0.021*** (0.006)
Evening					-0.003 (0.007)	-0.003 (0.007)
Day of the week [weekday]					-0.004 (0.006)	-0.000 (0.006)
Item nonresponse (%)					0.036*** (0.002)	0.035*** (0.002)
Number of questions (centered)					0.002*** (0.000)	0.002*** (0.000)
Within-survey*overall interviewer experience						
Within-survey * 2–3 years						-0.008 (0.006)
Within-survey * 4–5 years						0.008 (0.006)
Within-survey * > 5 years						0.019** (0.006)
Intercept	3.457*** (0.011)	3.562*** (0.021)	3.536*** (0.031)	3.576*** (0.032)	3.475*** (0.029)	3.490*** (0.031)
Residual variance (interviewer)	0.019	0.016	0.014	0.013	0.010	0.010
Residual variance (respondent)	0.046	0.045	0.045	0.042	0.032	0.032
ICC	0.293	0.261	0.235	0.242	0.239	0.239
Marginal R ²	-	0.023	0.054	0.110	0.321	0.322
Conditional R	0.293	0.278	0.277	0.325	0.483	0.484
LogLikelihood	627.94	690.48	702.55	962.31	1,981.37	1,989.60
Pr (>Chisq)		0.000***	0.000***	0.000***	0.000***	0.000***
Sample size (respondents/interviewers)	7,008/174					

Notes: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table S.4 Sociodemographic characteristics of early, middle, and late respondents of the first tranche

	Early <i>n</i> (%)	Middle <i>n</i> (%)	Late <i>n</i> (%)	Overall <i>p</i>	Early vs Middle <i>p</i>	Early vs Late <i>p</i>	Middle vs Late <i>p</i>
N	2,383	3,217	459				
Gender				0.015	0.980	0.010	0.010
Male	420 (17.6%)	569 (17.7%)	106 (23.1%)				
Female	1,963 (82.4%)	2,648 (82.3%)	353 (76.9%)				
Age (mean)	45.7 SD 5.09	45.7 SD 5.11	44.8 SD 5.60	0.001	0.887	0.001	0.002
Education				0.021	0.135	0.026	0.094
Lower	195 (8.18%)	303 (9.42%)	58 (12.6%)				
Intermediate	1,391 (58.4%)	1,805 (56.1%)	258 (56.2%)				
Higher	797 (33.4%)	1109 (34.5%)	143 (31.2%)				
Employment status				0.008	0.070	0.017	0.070
Unemployed	395 (16.6%)	470 (14.6%)	52 (11.3%)				
Employed	1,988 (83.4%)	2,747 (85.4%)	407 (88.7%)				
Net equivalent income				0.644	0.697	0.697	0.697
Risk of poverty	694 (29.1%)	981 (30.5%)	148 (32.2%)				
Average income	1,569 (65.8%)	2,079 (64.6%)	291 (63.4%)				
High income	120 (5.04%)	157 (4.88%)	20 (4.36%)				
Household size				< 0.001	0.059	< 0.001	< 0.001
1–3 persons	666 (27.9%)	992 (30.8%)	204 (44.4%)				
4 persons	1,076 (45.2%)	1,409 (43.8%)	154 (33.6%)				
> 4 persons	641 (26.9%)	816 (25.4%)	101 (22.0%)				
Type of child's school				0.001	0.022	0.002	0.022
Other school	1,395 (58.5%)	1,984 (61.7%)	309 (67.3%)				
"Gymnasium"	988 (41.5%)	1,233 (38.3%)	150 (32.7%)				

Table S.5 Hierarchical linear random intercept models: estimated coefficients, standard errors, and variance components (including controls). First tranche

	Model 0 Null	Model 1 + Experience	Model 2 + Interviewer	Model 3 + Respondent	Model 4 + Interview	Model 5 + Interaction
<i>Main explanatory variables</i>						
Within-survey interviewer experience (log)		-0.030*** (0.002)	-0.031*** (0.002)	-0.032*** (0.003)	-0.035*** (0.003)	-0.041*** (0.005)
Overall interviewer experience [ref. < 2 years]						
2–3 years		-0.037 (0.028)	-0.051 (0.027)	-0.052 (0.027)	-0.037 (0.023)	-0.028 (0.029)
4–5 years		-0.026 (0.028)	-0.055 (0.027)*	-0.056* (0.027)	-0.037 (0.023)	-0.061* (0.029)
> 5 years		-0.037 (0.033)	-0.083* (0.033)	-0.085** (0.033)	-0.074** (0.028)	-0.133*** (0.034)
<i>Interviewer-level controls</i>						
Gender [female]			-0.003 (0.020)	-0.007 (0.020)	-0.005 (0.017)	-0.007 (0.017)
Age [ref. < 30 years old]						
30–49			0.078** (0.024)	0.078*** (0.024)	0.059** (0.021)	0.061** (0.021)
50–65			0.120*** (0.027)	0.119*** (0.027)	0.102*** (0.023)	0.101*** (0.023)
> 65			0.141** (0.049)	0.134** (0.048)	0.128** (0.041)	0.131** (0.041)
Education [ref. intermediate]						
Lower education			-0.018 (0.032)	-0.013 (0.032)	0.006 (0.027)	0.002 (0.027)
Higher education			-0.018 (0.027)	-0.015 (0.027)	-0.011 (0.023)	-0.013 (0.023)
<i>Respondent-level controls</i>						
Gender [female]				-0.049*** (0.007)	-0.015** (0.006)	-0.015** (0.006)
Age (centered)				0.000 (0.000)	0.002*** (0.000)	0.002*** (0.000)
Education [ref. intermediate]						
Lower education				0.130*** (0.010)	0.108*** (0.008)	0.109*** (0.008)
Higher education				0.008 (0.006)	0.008 (0.005)	0.008 (0.005)
Employment status [employed]				-0.005 (0.007)	-0.001 (0.006)	-0.002 (0.006)
Net equivalent income [ref. average]						
Risk of poverty				0.019** (0.006)	0.048*** (0.005)	0.048*** (0.005)
High income				0.033* (0.012)	0.003 (0.011)	-0.006 (0.011)
Household size [ref. 4 persons]						
1–3 persons				-0.028*** (0.006)	-0.013* (0.005)	-0.013* (0.005)
> 4 persons				0.020** (0.006)	0.006 (0.005)	0.006 (0.005)
Type of child's school ["Gymnasium"]				-0.047*** (0.006)	-0.019*** (0.005)	-0.019*** (0.005)

Table S.5 (continued)

	Model 0 Null	Model 1 + Experience	Model 2 + Interviewer	Model 3 + Respondent	Model 4 + Interview	Model 5 + Interaction
<i>Interview-level controls</i>						
Number of contact attempts (centered)					0.009*** (0.000)	0.009*** (0.000)
Interview at the first call [not first call]					0.064*** (0.006)	0.063*** (0.006)
Days since advance letter (centered)					-0.001*** (0.000)	-0.001*** (0.000)
Telephone connection [ref. landline]						
Mobile phone					0.057*** (0.011)	0.056*** (0.011)
Undefined					0.017*** (0.005)	0.017*** (0.005)
Time of day [ref. morning]						
Afternoon					-0.025*** (0.006)	-0.024*** (0.006)
Evening					-0.004 (0.008)	-0.003 (0.008)
Day of the week [weekday]					-0.000 (0.006)	-0.000 (0.006)
Item nonresponse (%)					0.034*** (0.003)	0.034*** (0.003)
Number of questions (centered)					0.027*** (0.000)	0.027*** (0.000)
Within-survey * overall interviewer experience						
Within-survey * 2–3 years						-0.043 (0.006)
Within-survey * 4–5 years						0.009 (0.006)
Within-survey * > 5 years						0.021** (0.007)
Intercept	3.466*** (0.011)	3.564*** (0.021)	3.539*** (0.031)	3.575*** (0.032)	3.467*** (0.029)	3.477*** (0.030)
Residual variance (interviewer)	0.020	0.016	0.014	0.014	0.011	0.011
Residual variance (respondent)	0.046	0.045	0.045	0.042	0.031	0.031
ICC	0.298	0.265	0.242	0.251	0.252	0.253
Marginal R ²	-	0.023	0.054	0.105	0.320	0.321
Conditional R	0.298	0.282	0.282	0.330	0.492	0.493
LogLikelihood	510.02	565.71	576.94	784.97	1,705.47	1,712.60
Pr (>Chisq)		0.000***	0.000***	0.000***	0.000***	0.000***
Sample size (respondents/interviewers)	8,622/180					

Notes: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.