Structured Ambivalence in Grandchild Care: The Quality of Life of European Grandparents – Tables and Figures and Supplemental Material

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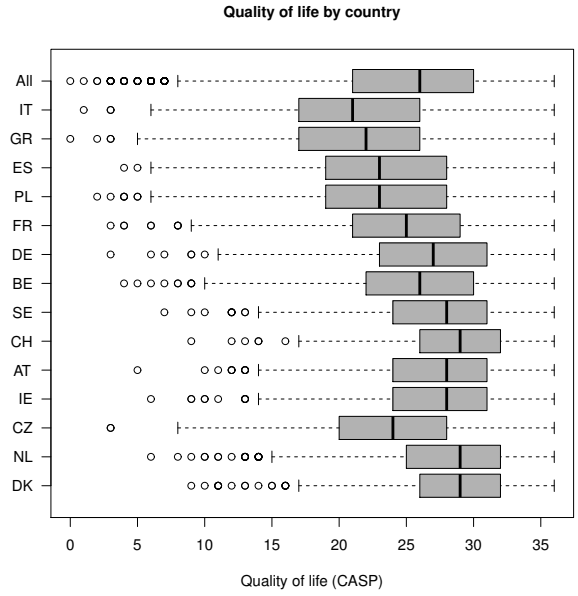
Contents

1 Tables and figures included in the paper

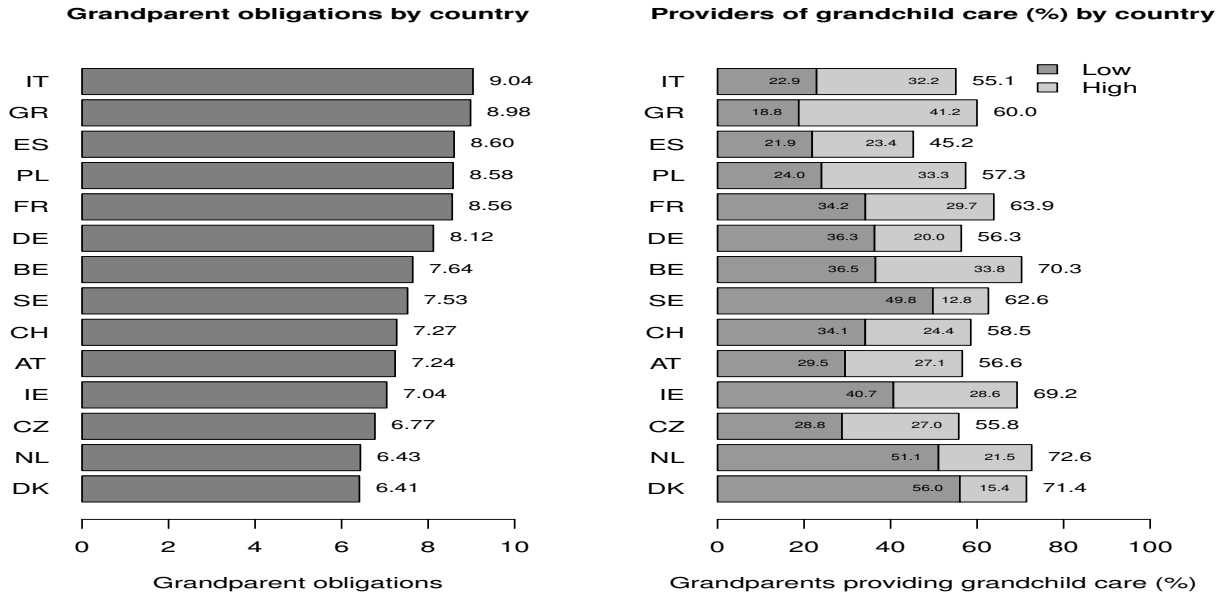
1.1 Descriptive figures

Figure 1: Quality of life in countries under study



Data: SHARE, release 2.5.0; 12740 persons aged 50+ and their partners with at least one living child and grandchild; box-plots of quality of life overall and by country (CASP), own calculations.

Figure 2: Grandparenting norms and persons who provide grandchild care by country (%)



Data: SHARE, release 2.5.0; 12740 persons aged 50+ and their partners with at least one living child and grandchild; average grandparent obligations (left) and average grandchild care (low and high intensity care) provided by respondents by country (right), own calculations.

1.2 Models

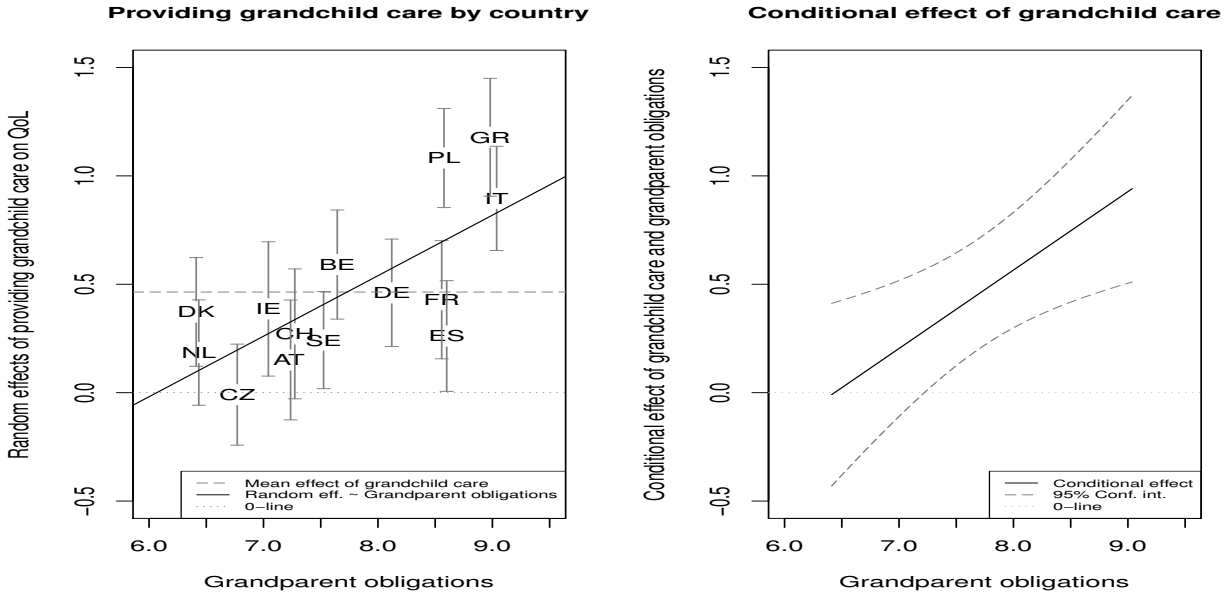
Table 1: Grandchild care and quality of life

	Model 1	Model 2	Model 3	Model 4
Constant	18.25***	18.17***	27.55***	28.20***
	(0.68)	(0.71)	(2.43)	(2.45)
Age in years	−0.05***	−0.05***	−0.05***	−0.05***
	(0.01)	(0.01)	(0.01)	(0.01)
Gender: female/male	−0.26**	−0.25**	−0.25**	−0.25**
	(0.10)	(0.10)	(0.10)	(0.10)
Health: (1=poor; 5=excellent)	1.83***	1.83***	1.83***	1.83***
	(0.04)	(0.04)	(0.04)	(0.04)
Education: medium/low	0.49***	0.47***	0.48***	0.48***
	(0.11)	(0.11)	(0.11)	(0.11)
Education: high/low	0.73***	0.72***	0.72***	0.72***
	(0.13)	(0.13)	(0.13)	(0.13)
Financial situation (1=difficult; 4=easily)	1.67***	1.67***	1.67***	1.66***
	(0.05)	(0.05)	(0.05)	(0.05)
Status: unemplyed/retired	−1.53***	−1.51***	−1.51***	−1.51***
	(0.26)	(0.26)	(0.26)	(0.26)
Status: homemaker/retired	−0.43**	−0.43**	−0.43**	−0.43**
	(0.15)	(0.15)	(0.15)	(0.15)
Status: permanently sick/retired	−1.74***	−1.71***	−1.72***	−1.71***
	(0.23)	(0.23)	(0.23)	(0.23)
Status: employed/retired	−0.44**	−0.43**	−0.43**	−0.43**
	(0.13)	(0.13)	(0.13)	(0.13)
Foreign country of birth	−0.34	−0.34	−0.33	−0.33
	(0.18)	(0.18)	(0.18)	(0.18)
Living with partner/single	0.29*	0.30*	0.30*	0.30*
	(0.12)	(0.12)	(0.12)	(0.12)
Coresiding grandchildren aged <13	−0.44**	−0.48**	−0.47**	−0.48**
	(0.15)	(0.15)	(0.15)	(0.15)
Instrumental support to someone else	−0.08	−0.08	−0.08	−0.08
	(0.09)	(0.09)	(0.09)	(0.09)
High-intensity care	0.16	0.11	0.13	0.11
	(0.11)	(0.12)	(0.12)	(0.12)
Provided grandchild care	0.45***	0.46**	0.46**	−2.33*
	(0.10)	(0.16)	(0.15)	(1.03)
Grandparent obligations			−1.21***	−1.30***
			(0.30)	(0.31)
Grandchild care × grandparent obligations				0.36**
				(0.13)
Random intercept variance	1.877	2.270	0.930	0.939
Grandchild care		0.193	0.176	0.081
Residual	23.211	23.169	23.170	23.170
Deviance	76259.79	76248.62	76240.07	76233.58
N	12740	12740	12740	12740

*Model 1: Hierarchical linear model (HLM) with random intercept; Model 2: HLM with random effect for grandchild care; Model 3: HLM with macro indicator; Model 4: HLM with cross-level interaction. Data: SHARE, release 2.5.0; 12740 grandparents aged 50+ with at least one living grandchild aged 12 years or younger; own calculations. Coefficients from REML estimation. Significance levels: '***' 0.001, '**' 0.01 and '*' 0.05.*

1 Tables and figures included in the paper

Figure 3: Random effects and conditonal effect of grandchild care



Data: SHARE, release 2.5.0; 12,740 persons aged 50+ and their partners with at least one living child and grandchild; random effects of providing grandchild care on quality of life (left) and conditional effect of providing grandchild care and of grandparent obligations (right); own calculations.

2 Additional tables not included in the paper

2.1 Distribution of variables in countries under study

Table 2: Per country distribution of variables

Variables	AT	DE	SE	NL	ES	IT	FR	DK	GR	CH	BE	CZ	PL	IE	All
CASP	27.10	26.54	27.28	27.9	23.22	21.39	24.69	28.8	21.27	28.60	25.86	23.558	23.07	27.15	25.42
(sd)	5.44	5.59	4.74	5.2	6.43	5.92	5.70	4.5	6.22	4.76	5.61	5.546	6.54	5.47	6.09
Age in years	63.36	63.32	63.99	63.9	66.47	65.49	62.64	63.1	65.38	65.33	62.87	60.802	61.90	65.41	63.63
(sd)	7.55	7.70	7.83	7.6	8.21	7.52	8.02	8.0	8.25	8.37	7.83	6.460	8.15	8.09	7.92
Female %	56.09	51.57	52.84	53.3	53.03	54.69	53.64	54.6	55.46	54.77	50.47	55.943	56.09	57.36	54.07
Health: (1=poor; 5=excellent)	3.43	3.06	3.54	3.3	2.79	2.88	3.14	3.6	3.17	3.51	3.45	2.736	2.21	3.30	3.13
(sd)	0.99	1.00	1.06	1.0	1.02	1.07	1.01	1.1	1.03	0.99	0.99	0.935	0.97	1.16	1.10
Education: low %	29.97	15.93	50.82	59.9	88.75	80.85	48.88	19.8	78.46	36.36	48.40	55.496	44.49	44.62	50.54
Education: medium %	51.28	57.20	28.51	22.4	6.06	15.30	35.71	44.4	17.76	56.76	26.23	35.299	48.41	17.80	32.72
Education: high %	18.75	26.87	20.67	17.7	5.19	3.85	15.41	35.8	3.78	6.87	25.38	9.205	7.10	37.58	16.73
Fin. Sit. (1=difficult; 4=easily)	2.97	3.04	3.27	3.2	2.29	2.23	2.77	3.4	2.00	3.27	3.04	2.366	2.02	2.84	2.77
(sd)	0.77	0.89	0.78	0.8	0.87	0.85	0.92	0.8	0.90	0.82	0.92	0.806	0.80	0.94	0.97
Status: unemployed %	3.21	6.61	2.39	1.7	4.08	1.58	3.64	3.2	1.75	1.33	5.38	3.217	4.42	1.98	3.27
Status: homemaker %	12.18	11.38	0.82	27.4	35.11	25.77	10.92	1.0	31.00	11.09	16.23	0.089	5.09	24.40	13.94
Status: permanently sick %	1.12	2.49	2.54	7.7	4.57	1.09	2.94	4.5	0.87	2.44	3.96	2.324	12.52	6.37	4.25
Status: employed %	17.31	27.52	39.78	21.8	12.98	11.85	27.59	39.8	16.59	32.15	21.70	32.082	14.69	23.96	24.80
Status: retired %	66.19	52.00	54.48	41.5	43.26	59.72	54.90	51.5	49.78	52.99	52.74	62.288	63.27	43.30	53.74
Foreign country of birth %	7.53	18.63	7.99	3.5	3.21	1.48	15.13	2.8	1.60	15.30	6.60	4.468	2.84	7.91	6.44
Living with partner %	72.60	87.32	86.94	88.7	87.14	87.27	81.23	82.1	79.04	76.94	82.55	80.340	84.06	72.31	83.22
Coresiding grandchildren aged <13 %	14.26	11.38	0.75	1.6	13.97	16.98	2.80	1.5	22.56	3.99	3.11	16.801	34.72	5.27	10.82
Instrumental support to someone else %	33.81	37.38	47.46	47.2	19.28	28.63	38.66	49.7	24.16	35.25	43.21	39.231	25.46	39.78	37.34
Provided grandchild care %	56.57	56.34	62.61	72.6	45.24	55.08	63.87	71.4	59.97	58.54	70.28	55.764	57.35	69.23	61.46
Provided no grandchild care %	43.43	43.66	37.39	27.4	54.76	44.92	36.13	28.6	40.03	41.46	29.72	44.236	42.65	30.77	38.54
Low-intensity care (1-8 hours per week) %	29.49	36.29	49.78	51.1	21.88	22.90	34.17	56.0	18.78	34.15	36.51	28.776	24.04	40.66	35.77
High-intensity care (>8 hours per week) %	27.08	20.04	12.84	21.5	23.36	32.18	29.69	15.4	41.19	24.39	33.77	26.988	33.31	28.57	25.69
MACRO: Grandparent obligations	7.24	8.12	7.53	6.4	8.60	9.04	8.56	6.4	8.98	7.27	7.64	6.771	8.58	7.04	7.69
N	624	923	1340	1249	809	1013	714	1098	687	451	1060	1119	1198	455	12740

Data: SHARE, release 2.5.0; 12740 grandparents aged 50+ with at least one living grandchild aged 12 years or younger; own calculations.

2.2 Model comparison: ANOVA

Table 3: ANOVA of Model 1 and 2

	Df	AIC	BIC	logLik	Chisq	Chi Df	Pr(>Chisq)
Model.1	19.000	76297.786	76439.383	−38129.893			
Model.2	21.000	76290.620	76447.122	−38124.310	11.166	2.000	0.004

Table 4: ANOVA of Model 3 and 4

	Df	AIC	BIC	logLik	Chisq	Chi Df	Pr(>Chisq)
Model.3	22.000	76284.068	76448.023	−38120.034			
Model.4	23.000	76279.579	76450.987	−38116.790	6.489	1.000	0.011

2.3 Additional tables for gender comparison

Table 9 on the next page provides gender-specific estimations of Model 3 and Model 4. We found no fundamental differences between the models for men and women. Both models without interaction term show positive effects of providing grandchild care. Both effects turn negative when the interaction effect with the grandchild care norm is included (Model 4). Considering the significance of the effect, the effect of grandchild care in Model 3 for males is not significant at the 5 % level, neither is the interaction effect, but both are close. Table 5 reveals that the introduction of the interaction term significantly improves our Model at the 10 % level.

This difference in significance levels could be explained by the number of cases. Table 7 shows that in general, more women then men provide support. Considering the intensity, Table 8 shows that women provide not only more but also more intensive support. Yet since we are not interested in the frequency of support but in its relation to quality of life, we do not provide separate models for men and women. Although the effects tend to be stronger and more significant for women than for men, we have no reason to assume a gender-specific mechanism regarding the relation of grandchild care and QoL. Therefore, we do not provide separate models for grandmothers and grandfather in the manuscript.

Table 5: ANOVA of Male Model 3 and 4

	Df	AIC	BIC	logLik	Chisq	Chi Df	Pr(>Chisq)
Model.3.Male	21.000	34810.691	34950.856	−17384.345			
Model.4.Male	22.000	34809.449	34956.289	−17382.724	3.242	1.000	0.072

Table 6: ANOVA of Female Model 3 and 4

	Df	AIC	BIC	logLik	Chisq	Chi Df	Pr(>Chisq)
Model.3.Female	21.000	41478.059	41621.647	−20718.029			
Model.4.Female	22.000	41472.177	41622.603	−20714.089	7.881	1.000	0.005

Table 7: Support by Gender

	no	yes
Male	2648	3204
Female	2262	4626

2 Additional tables not included in the paper

Table 8: Intensity of Support by Gender

	0 hours	1-8 hours	>8 hours
Male	2648	2023	1181
Female	2262	2534	2092

Table 9: Grandchild care and quality of life

	Model 3 Male	Model 4 Male	Model 3 Female	Model 4 Female
Constant	26.01***	27.41***	30.23***	29.30***
	(2.57)	(2.70)	(2.36)	(2.44)
Age in years	−0.06***	−0.06***	−0.05***	−0.05***
	(0.01)	(0.01)	(0.01)	(0.01)
Health: (1=poor; 5=excellent)	1.70***	1.70***	1.93***	1.93***
	(0.06)	(0.06)	(0.06)	(0.06)
Education: medium/low	0.56***	0.56***	0.45**	0.45**
	(0.16)	(0.16)	(0.14)	(0.14)
Education: high/low	0.92***	0.92***	0.57**	0.57**
	(0.18)	(0.18)	(0.20)	(0.20)
Financial situation (1=difficult; 4=easily)	1.56***	1.56***	1.76***	1.76***
	(0.08)	(0.08)	(0.07)	(0.07)
Status: unemplyed/retired	−1.94***	−1.94***	−1.21***	−1.21***
	(0.37)	(0.37)	(0.36)	(0.36)
Status: homemaker/retired	−1.69	−1.69	−0.36*	−0.35*
	(1.12)	(1.12)	(0.17)	(0.17)
Status: permanently sick/retired	−1.55***	−1.55***	−1.94***	−1.92***
	(0.33)	(0.33)	(0.32)	(0.32)
Status: employed/retired	−0.42*	−0.42*	−0.50**	−0.48*
	(0.19)	(0.19)	(0.19)	(0.19)
Foreign country of birth	−0.49	−0.49	−0.20	−0.21
	(0.26)	(0.26)	(0.24)	(0.24)
Living with partner/single	0.34	0.35	0.20	0.20
	(0.23)	(0.23)	(0.15)	(0.15)
Coresiding grandchildren aged <13	−0.21	−0.21	−0.69***	−0.71***
	(0.22)	(0.22)	(0.20)	(0.20)
Instrumental support to someone else	0.14	0.14	−0.24	−0.24
	(0.13)	(0.13)	(0.13)	(0.13)
High-intensity care	0.20	0.18	0.13	0.09
	(0.18)	(0.18)	(0.15)	(0.15)
Provided grandchild care	0.40	−2.43	0.51**	−3.02*
	(0.21)	(1.56)	(0.18)	(1.18)
Grandparent obligations	−0.91**	−1.09***	−1.65***	−1.53***
	(0.31)	(0.33)	(0.29)	(0.30)
Grandchild care × grandparent obligations		0.37		0.46**
		(0.20)		(0.15)
Random intercept variance	1.034	1.033	0.758	0.797
Grandchild care	0.312	0.213	0.136	0.031
Residual	22.139	22.141	23.892	23.881
Deviance	34768.69	34765.45	41436.06	41428.18
N	5852	5852	6888	6888

*Data: SHARE, release 2.5.0; 12740 grandparents aged 50+ with at least one living grandchild aged 12 years or younger; own calculations. Coefficients from REML estimation. Significance levels: '***' 0.001, '**' 0.01 and '*' 0.05.*