

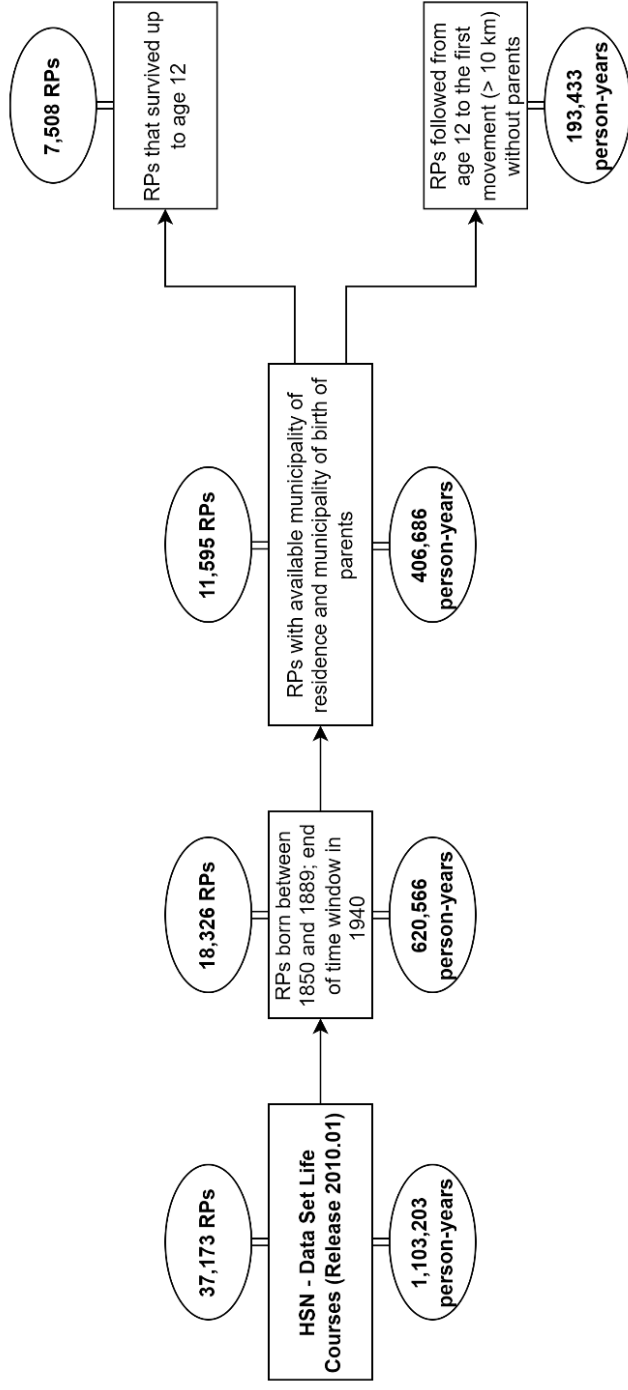
Online Appendix

The Role of Migration History and Household Structure in Internal Migration: Evidence from the Netherlands, 1850-1940*

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* This Online Appendix contains additional information regarding the article:
<https://www.comparativepopulationstudies.de/index.php/CPoS/article/view/758/473>

Fig. A1: Sample selection and sample size at each stage for both the research person (RPs; individuals) and person-year datasets



Note: The numbers in the ovals at the top indicate the number of RPs at each selection stage, while the numbers in the ovals at the bottom indicate the number of person-year observations.
Source: Own calculation based on the HSN Data Set Life Courses Release 2010.01.

Tab. A1: Absolute and relative frequencies, expressed as percentages of person-years and research persons (RPs; individuals), of the variables of interest in our dataset

Variable	Person-years		Individuals (RPs)	
	N	%	N	%
<i>Gender</i>				
Female	96,377	49.82	3,758	50.05
Male	97,056	50.18	3,750	49.95
<i>Geographical region</i>				
North	16,643	8.60	754	10.04
West	120,227	62.15	4,497	59.90
East	25,083	12.97	1,069	14.24
South	31,480	16.28	1,188	15.82
<i>Birth cohort</i>				
1850-1859	12,377	6.40	499	6.65
1860-1869	47,080	24.34	1,808	24.08
1870-1879	58,546	30.27	2,211	29.45
1880-1889	75,430	38.99	2,990	39.82
<i>Parents' migration background</i>				
Neither migrated	126,669	65.49	4,694	62.52
Only mother migrated	23,006	11.89	966	12.87
Only father migrated	21,479	11.10	881	11.73
Both migrated	22,279	11.52	967	12.88
<i>Previous migration experience</i>				
No	171,092	88.45	5,847	77.88
Yes	22,341	11.55	1,661	22.12
<i>Father's occupation</i>				
Elite	2,989	1.54	159	2.12
Lower middle class	22,327	11.54	970	12.92
Self-employed farmers	27,273	14.10	1,002	13.35
Skilled workers	58,509	30.25	2,243	29.87
Unskilled workers	65,294	33.76	2,459	32.75
Unknown	17,041	8.81	675	8.99
<i>Municipality size</i>				
Rural	95,956	49.61	4,256	56.69
Medium	37,217	19.24	1,405	18.71
Large	60,260	31.15	1,847	24.60
<i>Parents in the household</i>				
None	86,402	44.67	611	8.14
Only mother	23,983	12.40	669	8.91
Only father	3,636	1.88	33	0.44
Both	79,412	41.05	6,195	82.51

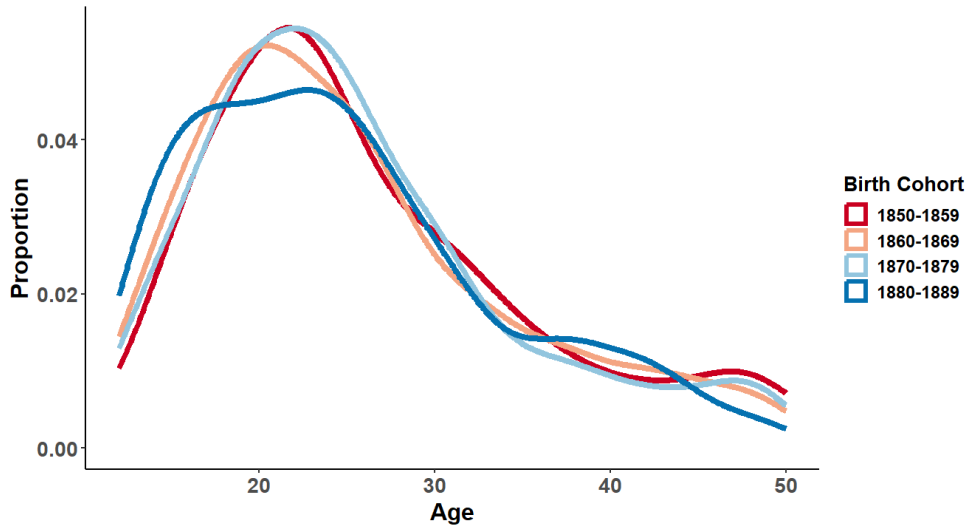
Tab. A1: Continuation

Variable	Person-years		Individuals (RPs)	
	N	%	N	%
<i>Household composition</i>				
Living with spouse	73,964	38.24		
Living with siblings	111,541	57.66	6,861	91.38
Living with children	72,048	37.25		
Living with grandparents	11,513	5.95	923	12.29
Living with non-related individuals	29,967	15.49	1,526	20.32
Living with extended kin	61,180	31.63	2,528	33.67
<i>Number of moves after age 12</i>				
0			5,106	68.00
1			919	12.24
2			582	7.75
3			297	3.96
4			203	2.70
5			126	1.68
6+			275	3.67

Note: Data from HSN Data Set Life Courses Release 2010.01. n (individuals) = 7,508; n (person-year observations) = 193,433. The numbers and percentages for the variables "Geographical region," "Municipality size," "Household parental availability," and "Household members" in the column "Individuals" are recorded at age 12.

Source: Own calculation based on the HSN Data Set Life Courses Release 2010.01.

Fig. A2: Smoothed age distribution of first move within the Netherlands (>10 km) without parents by age



Note: Each color refers to a different birth cohort of 10 years.

Source: Own calculation based on the HSN Data Set Life Courses Release 2010.01.

Tab. A2: Coefficients of the logistic regression model of moving for the first time within the Netherlands (> 10 km) without parents after age 12, by individual's father's occupation

Variable	Elite + lower middle class	Skilled workers	Self employed farmers	Unskilled workers	Unknown
<i>Gender (ref.: male)</i>					
Female	0.056 (0.100)	-0.053 (0.078)	0.173 (0.141)	0.195* (0.081)	0.139 (0.156)
Age	0.160*** (0.033)	0.157*** (0.026)	0.155*** (0.041)	0.188*** (0.027)	0.230*** (0.052)
Age ²	-0.003*** (0.001)	-0.003*** (0.0005)	-0.003*** (0.001)	-0.003*** (0.0005)	-0.004*** (0.001)
Duration of residence	-0.008 (0.007)	-0.009* (0.005)	-0.016* (0.007)	-0.010* (0.004)	-0.005 (0.009)
<i>Geographical region (ref.: East)</i>					
North	0.532* (0.231)	0.098 (0.168)	0.519* (0.259)	0.399* (0.156)	-0.306 (0.312)
South	0.240 (0.249)	-0.493** (0.159)	-0.372 (0.219)	-0.199 (0.161)	-0.310 (0.271)
West	0.244 (0.200)	0.063 (0.133)	0.219 (0.189)	0.102 (0.127)	0.033 (0.228)
<i>Birth cohort (ref.: 1850-1859)</i>					
1860-1869	-0.471** (0.182)	-0.520*** (0.156)	0.035 (0.334)	0.194 (0.189)	-0.139 (0.333)
1870-1879	-0.251 (0.166)	-0.405** (0.152)	0.120 (0.331)	0.032 (0.186)	-0.179 (0.328)
1880-1889	-0.212 (0.166)	-0.251 (0.143)	0.252 (0.329)	0.325 (0.180)	0.176 (0.322)
<i>Parents' migration background (ref.: neither migrated)</i>					
Both parents migrated	0.262 (0.134)	0.202 (0.119)	0.462* (0.231)	0.276* (0.133)	0.352 (0.230)
Only father migrated	0.284 (0.151)	0.160 (0.116)	0.373 (0.244)	0.150 (0.128)	0.017 (0.231)
Only mother migrated	0.301* (0.142)	0.264* (0.112)	0.090 (0.213)	0.330** (0.121)	0.432* (0.214)
<i>Previous migration experience (ref.: no)</i>					
Previous migration experience	0.369** (0.137)	0.666*** (0.114)	0.884*** (0.222)	0.628*** (0.113)	0.797*** (0.198)
<i>Municipality size (ref.: rural)</i>					
Medium	0.029 (0.131)	-0.103 (0.097)	-0.366 (0.246)	-0.093 (0.101)	0.232 (0.196)
Large	-0.343** (0.128)	-0.778*** (0.105)	-0.566 (0.357)	-0.698*** (0.127)	-0.516* (0.211)

Tab. A2: Continuation

Variable	Elite + lower middle class	Skilled workers	Self employed farmers	Unskilled workers	Unknown
<i>Household parental availability (ref.: none)</i>					
Only father	-0.662 (0.629)	-1.994** (0.695)	-0.816 (0.660)	-1.074* (0.512)	-0.860 (1.040)
Only mother	-0.853*** (0.198)	-0.750*** (0.161)	-1.117*** (0.286)	-0.565*** (0.170)	-0.730* (0.332)
Both	-0.590*** (0.176)	-0.520*** (0.144)	-0.703** (0.233)	-0.301 (0.157)	-0.397 (0.307)
<i>Household composition</i>					
Living with spouse	-0.688** (0.240)	-0.994*** (0.225)	-0.992** (0.317)	-0.535** (0.193)	-0.400 (0.328)
Living with siblings	0.182 (0.168)	0.044 (0.143)	-0.055 (0.232)	0.062 (0.151)	0.338 (0.315)
Living with grandparents	-0.103 (0.192)	0.194 (0.138)	0.223 (0.288)	-0.001 (0.156)	-0.107 (0.254)
Living with children	-0.072 (0.220)	0.175 (0.215)	-0.105 (0.324)	-0.373* (0.190)	-0.373 (0.328)
Living with non-related individuals	0.368** (0.113)	0.058 (0.104)	0.023 (0.168)	0.159 (0.111)	0.007 (0.209)
Living with extended kin	-0.142 (0.110)	0.038 (0.085)	-0.089 (0.148)	-0.083 (0.090)	-0.150 (0.171)
<i>Intercept</i>	-5.421*** (0.516)	-4.974*** (0.395)	-5.985*** (0.708)	-6.639*** (0.419)	-6.617*** (0.768)
<i>Observations</i>	25,282	58,448	27,236	65,223	17,031
<i>Number of individuals</i>	1,077	2,181	977	2,403	654
<i>Log-likelihood</i>	-2,143.311	-3,633.841	-1,266.637	-3,646.317	-977.473
<i>AIC</i>	4,338.622	7,319.681	2,585.274	7,344.635	2,006.945

Note: For each coefficient, standard errors clustered by individual ID are shown in parentheses.

Source: Own calculation based on the HSN Data Set Life Courses Release 2010.01.

Tab. A3: Coefficients of the logistic regression model of moving for the first time within the Netherlands (>10 km) without parents after age 12, by birth cohort

Variable	1850-1869	1870-1879	1880-1889
<i>Gender (ref.: male)</i>			
Female	0.055 (0.082)	0.126 (0.084)	0.047 (0.067)
Age	0.153*** (0.027)	0.207*** (0.029)	0.161*** (0.021)
Age ²	-0.003*** (0.0005)	-0.004*** (0.001)	-0.003*** (0.0004)
Duration of residence	-0.003 (0.005)	-0.011* (0.005)	-0.013*** (0.004)
<i>Geographical region (ref.: East)</i>			
North	0.574** (0.178)	0.150 (0.175)	0.209 (0.132)
South	-0.279 (0.187)	-0.355* (0.163)	-0.189 (0.127)
West	0.264 (0.149)	0.151 (0.138)	0.074 (0.102)
<i>Parents' migration background (ref.: neither migrated)</i>			
Both parents migrated	0.291* (0.130)	0.268* (0.127)	0.212* (0.101)
Only father migrated	0.099 (0.130)	0.230 (0.128)	0.216* (0.103)
Only mother migrated	0.231* (0.113)	0.345** (0.132)	0.313** (0.095)
<i>Previous migration experience (ref.: no)</i>			
Previous migration experience	0.572*** (0.121)	0.806*** (0.115)	0.514*** (0.095)
<i>Father's occupation (ref.: skilled workers)</i>			
Elite	0.276 (0.246)	0.569** (0.220)	-0.019 (0.269)
Lower middle class	0.208 (0.124)	0.166 (0.128)	0.188 (0.102)
Self-employed farmers	-0.431** (0.142)	-0.411** (0.152)	-0.474*** (0.127)
Unskilled workers	-0.210* (0.107)	-0.306** (0.113)	-0.190* (0.084)
Unknown	-0.028 (0.154)	-0.099 (0.160)	-0.234 (0.135)
<i>Municipality size (ref.: rural)</i>			
Medium	0.060 (0.110)	-0.113 (0.108)	-0.096 (0.084)
Large	-0.537*** (0.113)	-0.604*** (0.119)	-0.639*** (0.093)

Tab. A3: Continuation

Variable	1850-1869	1870-1879	1880-1889
<i>Parents in the household (ref.: none)</i>			
Only father	-2.533* (1.010)	-0.936* (0.456)	-0.884* (0.426)
Only mother	-0.536*** (0.156)	-0.853*** (0.167)	-0.833*** (0.149)
Both	-0.465** (0.150)	-0.517*** (0.141)	-0.466*** (0.130)
<i>Household composition</i>			
Living with spouse	-0.869*** (0.193)	-0.534** (0.197)	-0.697*** (0.179)
Living with siblings	-0.148 (0.142)	0.226 (0.145)	-0.214 (0.127)
Living with grandparents	-0.119 (0.180)	-0.043 (0.158)	0.203 (0.114)
Living with children	-0.192 (0.183)	-0.402* (0.193)	0.046 (0.173)
Living with non-related individuals	0.029 (0.097)	0.096 (0.105)	0.235* (0.092)
Living with extended kin	0.010 (0.090)	0.052 (0.089)	-0.179* (0.075)
<i>Intercept</i>	-5.669*** (0.401)	-6.481*** (0.409)	-5.513*** (0.315)
<i>Observations</i>	59,348	58,501	75,371
<i>Number of individuals</i>	2,250	2,151	2,891
<i>Log-likelihood</i>	-3,469.392	-3,241.141	-4,978.004
<i>AIC</i>	6,994.784	6,538.283	10,012.010

Note: For each coefficient, standard errors clustered by individual ID are shown in parentheses.

Source: Own calculation based on the HSN Data Set Life Courses Release 2010.01.

Tab. A4: Coefficients of the logistic regression model of moving for the first time within the Netherlands without parents after age 12, by distance of the intermunicipal move

Variable	Any intermunicipal move	Intermunicipal moves >10 km	Intermunicipal moves >40 km
<i>Gender (ref.: male)</i>			
Female	0.174*** (0.033)	0.075 (0.044)	-0.080 (0.058)
Age	0.072*** (0.011)	0.169*** (0.014)	0.190*** (0.019)
Age ²	-0.002*** (0.0002)	-0.003*** (0.0003)	-0.003*** (0.0003)
Duration of residence	0.028*** (0.006)	-0.009*** (0.003)	-0.017*** (0.003)
<i>Geographical region (ref.: East)</i>			
North	0.309*** (0.061)	0.287** (0.090)	0.204 (0.114)
South	-0.077 (0.062)	-0.269** (0.088)	-0.361** (0.116)
West	0.261*** (0.055)	0.126 (0.072)	-0.091 (0.092)
<i>Birth cohort (ref.: 1850-1859)</i>			
1860-1869	-0.012 (0.065)	-0.229* (0.091)	-0.240* (0.118)
1870-1879	-0.030 (0.064)	-0.206* (0.088)	-0.214 (0.113)
1880-1889	0.091 (0.063)	-0.045 (0.086)	-0.127 (0.109)
<i>Parents' migration background (ref.: neither migrated)</i>			
Both parents migrated	0.107* (0.043)	0.246*** (0.068)	0.073 (0.125)
Only father migrated	0.119* (0.055)	0.190** (0.068)	0.103 (0.122)
Only mother migrated	0.212*** (0.049)	0.296*** (0.063)	0.374*** (0.106)
<i>Previous migration experience (ref.: no)</i>			
Previous migration experience	1.590*** (0.053)	0.604*** (0.063)	0.844*** (0.098)
<i>Father's occupation (ref.: skilled workers)</i>			
Elite	0.421*** (0.114)	0.282* (0.138)	0.571*** (0.147)
Lower middle class	0.214*** (0.056)	0.190** (0.067)	0.358*** (0.083)
Self-employed farmers	-0.239*** (0.057)	-0.454*** (0.080)	-0.640*** (0.120)

Tab. A4: Continuation

Variable	Any intermunicipal move	Intermunicipal moves >10 km	Intermunicipal moves >40 km
Unskilled workers	-0.041 (0.043)	-0.230*** (0.057)	-0.301*** (0.077)
Unknown	0.046 (0.063)	-0.141 (0.086)	-0.133 (0.112)
<i>Municipality size (ref.: rural)</i>			
Medium	-0.243*** (0.041)	-0.047 (0.057)	0.341*** (0.073)
Large	-1.061*** (0.052)	-0.607*** (0.061)	-0.180* (0.084)
<i>Parents in the household (ref.: none)</i>			
Only father	-0.180 (0.163)	-1.206*** (0.293)	-1.276** (0.410)
Only mother	-0.358*** (0.070)	-0.761*** (0.090)	-0.727*** (0.120)
Both	-0.210** (0.066)	-0.490*** (0.081)	-0.421*** (0.105)
<i>Household composition</i>			
Living with spouse	-0.666*** (0.087)	-0.706*** (0.109)	-0.620*** (0.135)
Living with siblings	-0.083 (0.065)	0.104 (0.079)	0.120 (0.102)
Living with grandparents	0.042 (0.056)	0.064 (0.082)	-0.103 (0.123)
Living with children	-0.049 (0.082)	-0.146 (0.106)	-0.246 (0.132)
Living with non-related individuals	0.081 (0.042)	0.126* (0.056)	0.105 (0.073)
Living with extended kin	-0.018 (0.034)	-0.060 (0.048)	-0.033 (0.065)
<i>Intercept</i>	-4.747*** (0.155)	-5.628*** (0.227)	-6.478*** (0.287)
<i>Observations</i>	215,370	193,220	219,841
<i>Log-likelihood</i>	-22,168.560	-11,718.240	-7,402.174
<i>AIC</i>	44,399.130	23,498.600	14,866.350

Note: For each coefficient, standard errors clustered by individual ID are shown in parentheses.
Source: Own calculation based on the HSN Data Set Life Courses Release 2010.01.

Tab. A5: Coefficients of the logistic regression model of moving for the first time within the Netherlands without parents, by age thresholds used as the starting point for observing migration events without parents

Variable	12	14	16	18
<i>Gender (ref.: male)</i>				
Female	0.075 (0.044)	0.087 (0.045)	0.090 (0.047)	0.096 (0.049)
Age	0.169*** (0.014)	0.132*** (0.017)	0.092*** (0.020)	0.049* (0.025)
Age ²	-0.003*** (0.0003)	-0.002*** (0.0003)	-0.002*** (0.0003)	-0.001** (0.0004)
Duration of residence	-0.009*** (0.003)	-0.009*** (0.003)	-0.009*** (0.003)	-0.009*** (0.003)
<i>Geographical region (ref.: East)</i>				
North	0.287** (0.090)	0.292** (0.092)	0.286** (0.096)	0.344*** (0.103)
South	-0.269** (0.088)	-0.242** (0.090)	-0.219* (0.094)	-0.147 (0.099)
West	0.126 (0.072)	0.154* (0.074)	0.166* (0.077)	0.211* (0.082)
<i>Birth cohort (ref.: 1850-1859)</i>				
1860-1869	-0.229* (0.091)	-0.258** (0.092)	-0.284** (0.095)	-0.278** (0.100)
1870-1879	-0.206* (0.088)	-0.230* (0.090)	-0.259** (0.092)	-0.217* (0.097)
1880-1889	-0.045 (0.086)	-0.091 (0.087)	-0.153 (0.090)	-0.152 (0.095)
<i>Parents' migration background (ref.: neither migrated)</i>				
Both parents migrated	0.246*** (0.068)	0.253*** (0.069)	0.256*** (0.071)	0.248*** (0.075)
Only father migrated	0.190** (0.068)	0.211** (0.069)	0.178* (0.072)	0.160* (0.075)
Only mother migrated	0.296*** (0.063)	0.292*** (0.065)	0.281*** (0.067)	0.264*** (0.071)
<i>Previous migration experience (ref.: no)</i>				
Previous migration experience	0.604*** (0.063)	0.608*** (0.064)	0.630*** (0.065)	0.636*** (0.068)
<i>Father's occupation (ref.: skilled workers)</i>				
Elite	0.282* (0.138)	0.279* (0.142)	0.237 (0.147)	0.306* (0.153)
Lower middle class	0.190** (0.067)	0.195** (0.068)	0.196** (0.071)	0.195** (0.074)
Self-employed farmers	-0.454*** (0.080)	-0.442*** (0.082)	-0.449*** (0.085)	-0.431*** (0.089)
Unskilled workers	-0.230*** (0.057)	-0.213*** (0.058)	-0.209*** (0.060)	-0.194** (0.063)

Tab. A5: Continuation

Variable	12	14	16	18
Unknown	-0.141 (0.086)	-0.127 (0.087)	-0.141 (0.091)	-0.148 (0.096)
<i>Municipality size (ref.: rural)</i>				
Medium	-0.047 (0.057)	-0.046 (0.058)	-0.044 (0.060)	-0.021 (0.063)
Large	-0.607*** (0.061)	-0.600*** (0.063)	-0.584*** (0.064)	-0.575*** (0.068)
<i>Household parental availability (ref.: none)</i>				
Only father	-1.206*** (0.293)	-1.182*** (0.295)	-1.239*** (0.308)	-1.392*** (0.338)
Only mother	-0.761*** (0.090)	0.760*** (0.091)	-0.763*** (0.094)	-0.745*** (-0.097)
Both	-0.490*** (0.081)	-0.479*** (0.081)	-0.435*** (0.083)	-0.390*** (0.086)
<i>Household composition</i>				
Living with spouse	-0.706*** (0.109)	-0.684*** (0.111)	-0.647*** (0.113)	-0.575*** (0.115)
Living with siblings	0.104 (0.079)	0.116 (0.080)	0.095 (0.082)	0.100 (0.084)
Living with grandparents	0.064 (0.082)	0.097 (0.084)	0.094 (0.089)	0.083 (0.097)
Living with children	-0.146 (0.106)	-0.131 (0.108)	-0.141 (0.110)	-0.162 (0.112)
Living with non-related individuals	0.126* (0.056)	0.132* (0.057)	0.108 (0.060)	0.126* (0.063)
Living with extended kin	-0.060 (0.048)	-0.073 (0.050)	-0.093 (0.052)	-0.084 (0.054)
<i>Intercept</i>	-5.628*** (0.227)	-5.126*** (0.260)	-4.496*** (0.310)	-3.967*** (0.388)
<i>Observations</i>	193,220	178,706	164,429	150,506
<i>Log-likelihood</i>	-11,718.240	-11,133.110	-10,346.650	-9,333.781
<i>AIC</i>	23,498.600	22,328.220	20,755.290	18,729.560

Note: For each coefficient, standard errors clustered by individual ID are shown in parentheses.

Source: Own calculation based on the HSN Data Set Life Courses Release 2010.01.

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