

Paper submitted to the Annual Meeting of the Population Association of America, Austin TX, April 10-13, 2019.

Author: Glenn Sandström, PhD Associate Professor

Centre for Demographic and Aging Research, Umeå University
and Research Affiliate, Stockholm University Demography Unit (SUDA), Stockholm University
and Department of Historical, Philosophical and Religious Studies, Umeå University
SE - 901 87 UMEÅ
SWEDEN

Phone: +46-90-786 59 75

E-mail: glenn.sandstrom@umu.se

E-mail: glenn.sandstrom@sociology.su.se

Author: Lena Karlsson, PhD Associate Professor

Centre for Demographic and Aging Research, Umeå University
and Research Affiliate, Stockholm University Demography Unit (SUDA), Stockholm University
and Department of Sociology, Umeå University
SE - 901 87 UMEÅ
SWEDEN

Phone: +46-90-786 59 75

E-mail: glenn.sandstrom@umu.se

E-mail: glenn.sandstrom@sociology.su.se

The Educational Gradient of Living Alone:

A Comparison Among the Working-Age Population in Europe

Background: In recent decades, the proportion of individuals living alone (in a one-person household) has increased in Western countries. Previous research has mainly been concerned with the increase among the elderly and younger segments of the population, and there is a lack of research regarding the characteristics of individuals living alone among the working-age population.

Objective: The aim of this study is to examine the educational gradient of living alone in the working-age population (aged 25–64 years) in a comparative perspective.

Methods: Using data on 12 European countries from the Generations and Gender Surveys, the estimated probabilities of living alone for women and men with different levels of education were calculated with logistic regression models while controlling for differences in the age distribution across different populations.

Results: We found that the educational gradient of living alone reveals a converging pattern in a Northern/Western European cluster of countries, where the gender differences in living alone are highest among the least educated. In an Eastern European cluster, we find a U-shaped pattern, where the gender differences in living alone are lowest for the medium educational level. In the south (Italy), we found a significant positive educational gradient of living alone for both genders with the lowest levels among individuals with only primary education and the highest levels among men and women with university degrees.

Contributions: This study highlights differences in living alone in the working age population in Europe.

Keywords: living alone; working-age; educational gradient; age; gender; Europe

Introduction

This paper focuses on the association between education and living alone in the working age (25–64 years) population in Europe. Previous research has mainly been concerned with the living arrangements among the elderly population (Gaymu et al., 2006; Gierveld, Dykstra, & Schenk, 2012) or in young adulthood (Mandic, 2008; Schwanitz & Mulder, 2015), and less attention has been given to the characteristics of the individuals living alone in the working-age population, especially from a comparative perspective.

In recent decades, the proportion of individuals living alone has increased in Western countries (Jamieson & Simpson, 2013). The highest rates of living alone in the working-age population are found in a cluster of Northern European countries where the Nordic countries and Germany stand out as having the highest rates (Fokkema & Liefbroer, 2008). However, in some European countries, like the Nordic countries that have already reached high levels of living alone, the increase is perceived to be less intense or even will be followed by a recession, whereas in countries where the trend is recently started there is predicted to be a major increase in single-person households (Jamieson & Simpson, 2013). Regarding gender, previous research has shown that men are more likely to be living alone up to their fifties and sixties, but after that the gender pattern is reversed with more women living alone than men (Iacovou & Skew, 2011; Jamieson, Wasoff, & Simpson, 2009). That women at older ages to a greater extent live alone compared to men has been seen in almost all European countries (Fokkema & Liefbroer, 2008; Iacovou & Skew, 2011) and can be explained by differences in spousal age gaps and in life expectancy (Demey, Berrington, Evandrou, & Falkingham, 2013; Fokkema & Liefbroer, 2008; Iacovou & Skew, 2011). How the proportions of those living alone are distributed across educational groups in Europe is not fully known, especially from a gender perspective. At present there are only scattered findings from, e.g., Great Britain that show that women living alone in early mid-life (aged 35-44 years) tend to be more highly educated than their male counterparts (Demey et al., 2013). Given the gaps in knowledge concerning how the socio-economic background of men and women in different European societies influences the probability of living alone, the aim of this study was to analyse the educational gradient of living alone in the working-age population in Europe.

Data and method

The source material for this study is data from wave 1 and wave 2 of the Generations and Gender Survey (GGS) collected in 12 European countries between 2002 and 2013. In our analysis, we have selected the 12 countries with available data – Sweden, the Netherlands, France, Belgium, Germany, Poland, Hungary, Romania, Bulgaria, Estonia, Austria, and Italy. Even though the GGS included more countries, a couple of countries were excluded from the analysis based on 1) small sample size (e.g. fewer than 3,000 individuals) and/or 2) having an incompatible household scheme (Russia). For our purpose, there are some shortcomings in the GGP data. First, besides Sweden, the GGP lacks data from more countries representing the Nordic region, and only Italy represents the South/Mediterranean area. Although additional Nordic and Southern European countries would have been preferable, it is a strength that the data represent a wide selection of countries in West, Central, and Eastern Europe.

Table 1: Country comparison data for wave 1-2

Wave	Country	N-cases	Min-age	Max-age	Start-year	End-year
1	Bulgaria	9,173	25	64	2004	2004
2	Bulgaria	6,900	25	64	2007	2007
1	Germany	7,058	25	64	2005	2005
2	Germany	2,317	25	64	2008	2009
1	France	7,236	25	64	2005	2005
2	France	4,880	25	64	2008	2008
1	Hungary	10,034	25	64	2004	2005
2	Hungary	8,160	25	64	2008	2009
1	Italy	8,757	25	64	2003	2003
2	Italy	5,514	25	64	2007	2007
1	Netherlands	6,423	25	64	2002	2004
2	Netherlands	4,790	25	64	2006	2007
1	Romania	8,541	25	64	2005	2005
2	.	.	.	.	.	.
1	Austria	4,030	25	45	2008	2009
2	Austria	3,612	25	49	2012	2013
1	Estonia	5,618	25	64	2004	2005
2	.	.	.	.	.	.
1	Belgium	5,322	25	64	2008	2010
2	.	.	.	.	.	.
1	Poland	14,113	25	64	2010	2011
2	.	.	.	.	.	.
1	Sweden	6,565	25	64	2012	2013
2	.	.	.	.	.	.

Source: Gender & generations Survey wave 1 and 2 <http://www.ggp-i.org/data>

The sample size at the start- and end-year are presented in Table 1. The GGP data include samples that should represent the target population. All estimates of relative frequencies were weighted using the country-specific analytical weights provided in the GGS data to account for recruitment biases of certain groups (Simard & Franklin, 2005). In the case of the logistic regression analysis, we chose to not include weights in the analysis because the GGS data do not provide probability weights, which would be the appropriate method to apply in logistic regression. Also, the influence of weighting on parameter estimates in logistic regression is expected to be much less important than in prevalence calculations (Fokkema, Kveder, Hiekel, Emery, & Liefbroer, 2016). This is confirmed by our analysis showing that the inclusion of analytical weights in the regression through the *ivweight* tool in Stata have essentially no impact on the estimated proportions given by the logistic regression analysis (StataCorp, 2017).

The variables

Living arrangements

In this paper we differentiate living arrangements as ‘living alone’, ‘living as a lone parent/single parent’, ‘living with parents’, ‘living as a couple’, ‘living as a couple with children’ (hereafter called ‘nuclear’), and ‘other’. ‘Other’ living arrangements included individuals living with grandparents or great-grandparents or living with siblings. A similar categorisation was used by Fokkema and Liefbroer (Fokkema & Liefbroer, 2008). Because the living arrangement status is vital in all analyses, the estimates of the weighted proportions of living arrangements in the GGP data for each of the 12 countries were compared to the corresponding proportions from the 2011 Census Eurostat data (Eurostat, the statistical office of the European Union, 2011). The comparisons revealed overall similar proportions of living arrangements and their distribution across gender and age between the GGP data and the Census data for each of the included countries.

Working age was categorised in 10-year age categories as 25–34, 35–44, 45–54, and 55–64 years. Unfortunately, the Austrian sample did not include respondents aged 55 years and older. Therefore, some caution needs to be taken when comparing Austria with the other countries.

For education, we used the International Standard Classification of Education form as an indicator for the respondent's highest level of education, which was categorised as "Low" (ISCED 0–2), "Middle" (ISCED 3–4), or "High" (ISCED 5–6).

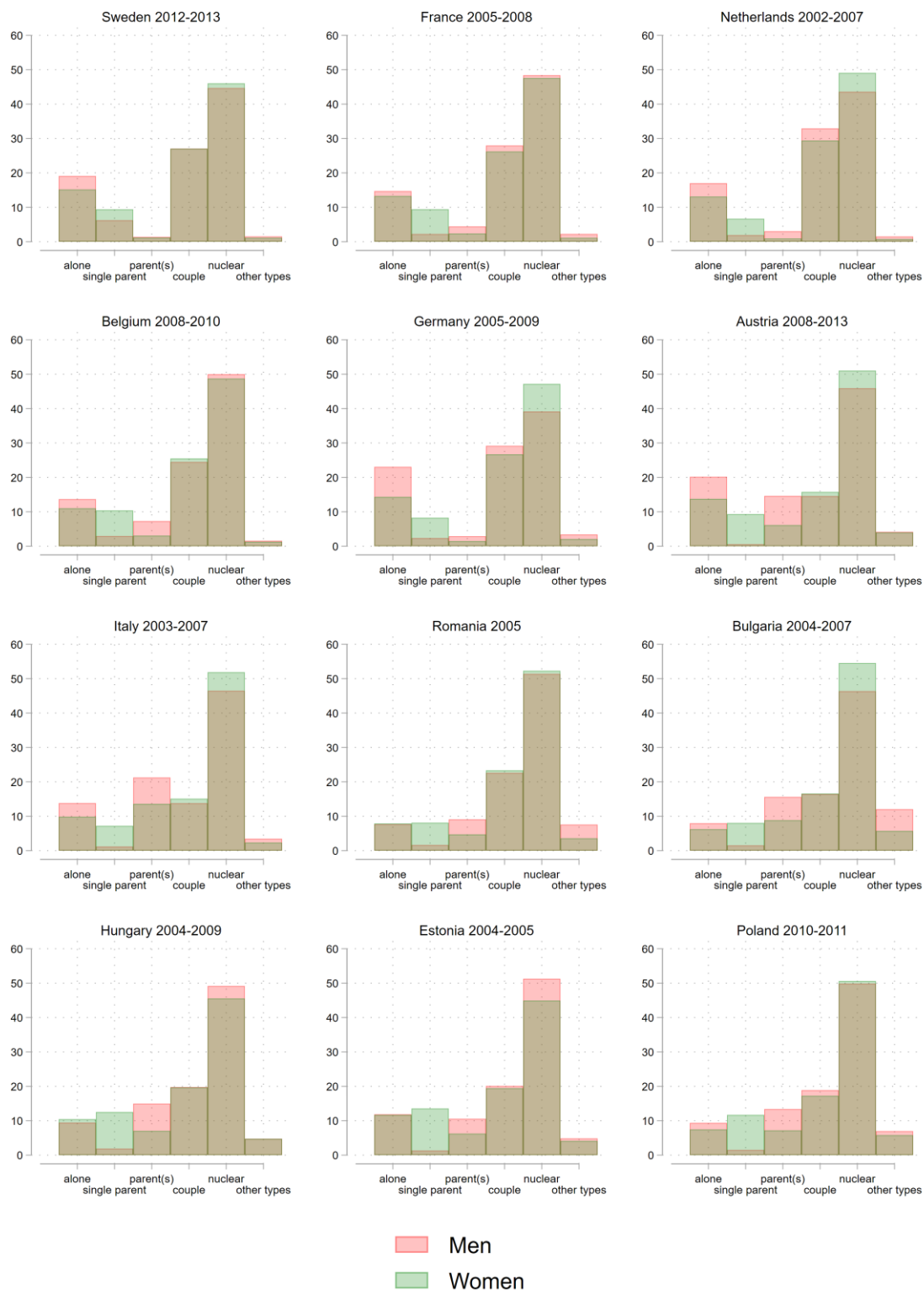
Method

In the descriptive analyses of the GGS data (the proportions of the working-age population in different living arrangements), waves 1 and 2 were merged and handled as a single period. To estimate the effect of education on the probability of living alone, we estimated odds ratios with 95% confidence intervals in full interaction logistic regression models with the outcome of living alone coded as a straightforward dichotomous variable. Apart from education, the models include controls for age, sex, and survey wave and their interaction with the sex of the respondent. The results from the regression are presented as contrasts for different levels of education (Figure 4 in the results section).

Results

Living arrangements in Europe

Figure 1: Proportion of working-age (25-64) population in different living arrangements in different European countries 2002-2013



Source: Gender & generations Survey wave 1 and 2 <http://www.ggp-i.org/data/>

After living in a nuclear family or as a couple with no children, living alone is the third most common living arrangement in Northern and Western European countries (Figure 1). The exception is Austria, where living alone is the second most common living arrangement, which almost certainly is the result of the exclusion of individuals aged 55 years and older. This age group contains a large number of couples where the children have moved out of the parental home, which makes the living arrangement as a couple under-represented in the Austrian case. Besides Austria, the highest proportions of those living alone are found in Sweden and Germany. In both Eastern and Southern Europe, levels of single living are considerably lower than in the Northern European countries, and in most cases living in the parental home is a more common living arrangement than living alone in an independent household. Here, Italy stands out in terms of a larger share of the population living in the parental home than as a couple with no cohabiting children, making it the second most common living arrangement in the country. In Eastern Europe, the proportion of the working-age population living alone is even more uncommon, reaching around or even below 10 per cent of the population aged 25-64 years in Romania, Bulgaria, Hungary, and Poland. In all of the countries except Hungary, Romania, and Estonia, living alone is more frequent among men, and the difference between the genders is most pronounced in Germany.

Living arrangements in Europe by age group and gender

Figure 2: Proportion of working-age (25-64) living alone by 10 year age-groups in twelve European countries 2002-2013



Source: Gender & generations Survey wave 1 and 2 <http://www.ggp-i.org/data/>

In the Northern European countries, the proportion of men and women living alone according to 10-year age groups (Figure 2) reveals a typical U-shaped pattern where living alone is most common for the youngest age group (aged 25–34) and among individuals in later mid-life (aged 55–64). This pattern is clearly exhibited in Sweden, the Netherlands, France, and Germany and to a somewhat lesser extent in Bulgaria and Estonia, and it shows that single living is a non-static position. In Italy, Poland, and Hungary, the proportion of those living alone is rather high for the youngest age group and increases by age, where the highest percentage of living alone is found among the later mid-life population (aged 55–64). This is likely the result of a rather delayed age at which one leaves the home among youth in these countries, as indicated by Figure 1, which also shows the highest levels of co-residence with parents in these countries. Generally, the age differences in living alone are highest in Northern Europe (Sweden) and North-Western Europe (France, the Netherlands, and Germany), followed by the Eastern European countries (Romania, Estonia, and Hungary), and are smallest for Italy, Poland, Bulgaria, and Belgium.

As expected, men up to their fifties to a greater extent live alone, but after that the gender pattern is reversed. The gender difference is most pronounced in Germany, where living alone is more than twice as common among men up to their mid-fifties compared to women of the same ages. The only exception is Italy, where there is essentially no gender difference in living alone in later mid-life. Among the population aged 55 and older, the differences between the genders are highest in Hungary and Estonia, where women to a significantly greater extent live alone.

Education and living alone in Europe

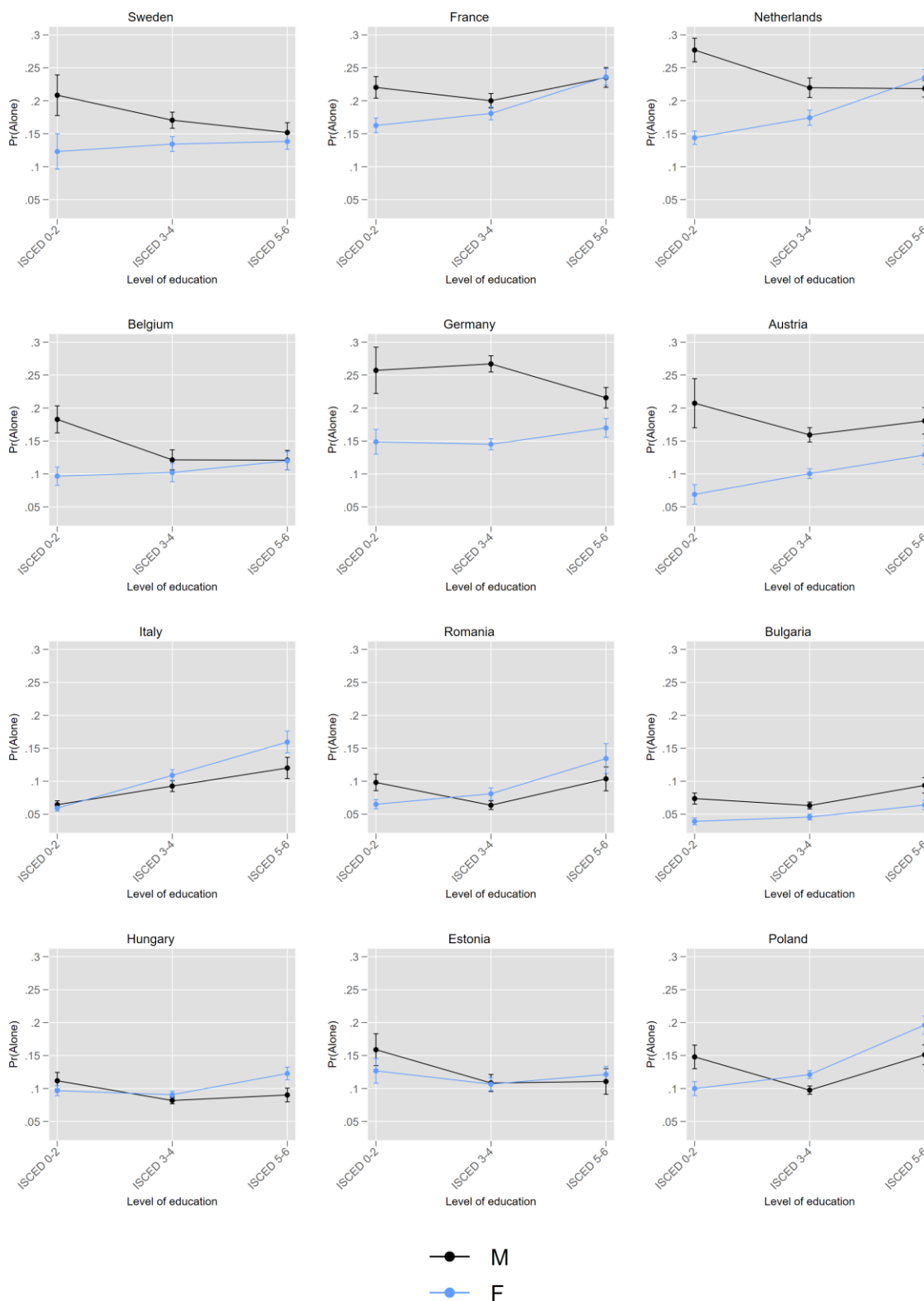
Figure 3: Proportion of working-age (25-64) men and women living alone by level of education in twelve different European countries 2002-2013



Source: Gender & generations Survey wave 1 and 2 <http://www.ggp-i.org/data/> From Figure 3, it is possible to identify three major patterns in how education is associated with living alone across

the countries included in the analysis. First, there is a negative gradient of living alone found in Sweden, Belgium, and the Netherlands, where the highest proportion of those living alone is among individuals with the lowest educational level. Second, there is a U-shaped pattern found among the Eastern European cluster (Romania, Bulgaria, Poland, Hungary, and Estonia) where the lowest proportion of those living alone is among individuals in the Middle educational category. Especially Poland and Romania exhibit this U-shaped pattern. Third, a positive gradient of living alone is found in Italy, where the proportion of those living alone is almost twice as large among the High educational category, compared to the corresponding proportion among the lowest educated. Figure 3 also shows that of the 12 countries, France, Germany, and Austria do not fit neatly into any of the three major patterns. Similar to Sweden, Belgium, and the Netherlands, the lowest proportion of those living alone in Germany is found among the High educational level, while there is a somewhat higher proportion of living alone among individuals in the Middle educational level, compared to the proportion among the Low educational level. In France, like Italy, the greatest proportion of those living alone is among the High educational level, but contrary to Italy there is no difference in living alone between the Low educational level and the Middle level. The educational differences in living alone for Austria also show a U-shaped pattern similar to that found among the Eastern European cluster.

Figure 4: Estimated probabilities of living alone for men and women by level of education in different European countries 2002-2013



Source: Gender & generations Survey wave 1, and 2 <http://www.ggp-i.org/data/>

Note: Marginal effects from logistic regression model A3 in appendix. Model includes controls for age, sex, survey-year and interactions of age*sex, and education*sex.

In Figure 4, we control for differences in the age distribution and between survey years and present the estimated probabilities of living alone for men and women with different levels of education. Three groups of countries can be distinguished. The first group includes Sweden, France, Austria, Belgium, Germany, and the Netherlands and to a certain degree Estonia, and these are characterised by a converging gender pattern according to level of education. In these countries, the greatest gender differences are found among individuals in the Low education category, where males shows a significantly greater probability of living alone compared to women. This is especially noticeable in the Netherlands, Austria, and Germany where the probability of living alone is almost twice as high among low-educated men compared to low-educated women. Typically in these North and North-Western countries, the gradient of education is the opposite between men and women in terms of being negative for men and for women being either positive (France, the Netherlands, Germany, and Austria) or showing no real difference across educational levels (Sweden, Belgium, and Estonia). The end result of these gender differences is a convergence across the levels of education resulting in similar probabilities of living alone among men and women with the highest level of education.

The second group of countries is an Eastern European cluster that includes Romania, Bulgaria, Hungary, and Poland, where gender differences are much less pronounced. In this Eastern European cluster, men show a U-shaped relationship between living alone and education, where men in the Middle education category show the lowest levels of living alone. In all of the Eastern European countries, women exhibit a clear and positive gradient of education. The positive gradient for women results in a tendency for a crossover in terms of lowly educated women being slightly less likely to live alone than men and highly educated women being slightly more likely to live alone than men. However, it is only in Poland that this tendency is sufficiently strong to result in any substantial differences between men and women, and the general pattern is that of much smaller gender differences compared to differences in North-Western Europe.

The third group consists of only Italy, where there is a strong positive educational gradient of living alone for both genders where both highly educated men and women are substantially more likely to live alone than the lowest educated.

Conclusions

The results presented in this paper are both consistent and inconsistent with previous findings. As expected, living alone is much more common in Northern and Western Europe and less common in Eastern and Southern Europe (Esping-Andersen, 2016; Fokkema & Liefbroer, 2008; Iacovou & Skew, 2011; Kaufmann, 1994; Sobotka & Toulemon, 2008; Stella, 2017). In the Northern and Western European countries, living alone is a living arrangement that is highly concentrated among younger and older ages. In Italy, almost no differences in living alone are found according to age, whereas in the countries in Eastern Europe living alone is highly concentrated among those of older age, where countries like Hungary, Romania, and Estonia reach levels of about 20–25 per cent among women in the 55–64 age group, coming close to the levels found for women in North Western Europe. Bulgaria and Poland on the other hand, show age patterns in living alone that are more similar to each other, which is in parity with what is seen in Italy.

Regarding the educational gradient of living alone, this study reveals a rather mixed pattern. A negative gradient of living alone is seen for men in Sweden, Belgium, the Netherlands, and Estonia, whereas Italy is the only country with a clearly positive gradient of living alone for men. The Eastern European countries have a U-shaped pattern where the highest proportion of those living alone is among men in the Middle education category. Among women, the pattern shows less variation with either no association between education and living alone (Sweden, Belgium, Germany, and Estonia) or varying degrees of a positive association in all the other countries,

with Poland and Italy standing out as the countries with the strongest increases across educational levels for women. Comparing the differences between men and women, our results show a converging pattern in a Nordic-Western cluster of countries, where gender differences are highest among the least educated and are generally non-significant for the highest educational level.

In an Eastern European cluster of countries, differences between men and women with the same level of education tend to be much smaller than in the Nordic-Western cluster of countries. Italy was the only country where the probability of living alone increased uniformly across the levels of education for both men and women resulting in by far the highest probabilities of living alone among men and women with the highest level of education.

References

- Demey, D., Berrington, A., Evandrou, M., & Falkingham, J. (2013). Pathways into living alone in mid-life: Diversity and policy implications. *Advances in Life Course Research, 18*(3), 161-174. doi:10.1016/j.alcr.2013.02.001
- Esping-Andersen, G. (2016). *Families in the 21st century*. Stockholm: Stockholm : SNS förlag.
- Fokkema, T., Kveder, A., Hiekel, N., Emery, T., & Liefbroer, A. C. (2016). Generations and Gender Programme Wave 1 data collection: An overview and assessment of sampling and fieldwork methods, weighting procedures, and cross-sectional representativeness. *Demographic Research, 34*, 498-524. doi:10.4054/DemRes.2016.34.18
- Fokkema, T., & Liefbroer, A. C. (2008). Trends in living arrangements in Europe: Convergence or divergence? *Demographic Research, 19*, 1351-1417. doi:DOI 10.4054/DemRes.2008.19.36
- Gaymu, J., Delbes, C., Springer, S., Binet, A., Desesquelles, A., Kalogirou, S., & Ziegler, U. (2006). Determinants of the living arrangements of older people in Europe. *European Journal of Population- Revue Europeenne De Demographie, 22*(3), 241-262. doi:10.1007/s10680-006-9004-7
- Gierveld, J. D., Dykstra, P. A., & Schenk, N. (2012). Living arrangements, intergenerational support types and older adult loneliness in Eastern and Western Europe. *Demographic Research, 27*, 167-199. doi:ARTN 7
- DOI 10.4054/DemRes.2012.27.7
- Iacovou, M., & Skew, A. J. (2011). Household composition across the new Europe: Where do the new Member States fit in? *Demographic Research, 25*, 465-489. doi:ARTN 14
- DOI 10.4054/DemRes.2011.25.14
- Jamieson, L., & Simpson, R. (2013). *Living alone : globalization, identity and belonging*.
- Jamieson, L., Wasoff, F., & Simpson, R. (2009). Solo-Living, Demographic and Family Change: The Need to know more about men. *Sociological Research Online, 14*(2-3).
- Kaufmann, J. C. (1994). ONE-PERSON HOUSEHOLD IN EUROPE. *Population, 49*(4-5), 935-958. doi:10.2307/1533664
- Mandic, S. (2008). Home-leaving and its structural determinants in Western and Eastern Europe: An exploratory study. *Housing Studies, 23*(4), 615-636. doi:10.1080/02673030802112754
- Schwanitz, K., & Mulder, C. H. (2015). Living Arrangements of Young Adults in Europe. *Comparative Population Studies, 40*(4), 367-398. doi:10.12765/CPoS-2015-14en
- Simard, M., & Franklin, S. (2005). Sample Design Guidelines *Generations and Gender Programme: Survey Instruments* (pp. 5-14). New York/Geneva: United Nations.
- Sobotka, T., & Toulemon, L. (2008). Overview Chapter 4: Changing family and partnership behaviour. *Demographic Research, 19*, 85-138. doi:10.4054/DemRes.2008.19.6
- StataCorp, L. P. (2017). *Stata user's guide: Release 15*. College Station, Texas: Stata Press.
- Stella, L. (2017). Living arrangements in Europe: whether and why paternal retirement matters. *Review of Economics of the Household, 15*(2), 497-525. doi:10.1007/s11150-016-9327-z

Appendix:

Table A1: Country comparison of living arrangements for men and women aged 25-64, relative frequencies in percent (weighted)

Living arrangement	Country by Sex Respondent																							
	Bul.		Ger.		Fra.		Hun.		Ita.		Net.		Rom.*		Aus.*		Est.		Bel.		Pol.		Swe.	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
<i>alone</i>	8.0	6.2	23.1	14.3	14.7	13.3	9.4	10.5	13.8	9.9	17.0	13.1	7.7	7.9	20.2	13.8	11.9	11.7	13.7	11.0	9.4	7.5	19.1	15.2
<i>single parent</i>	1.5	8.1	2.3	8.3	2.2	9.4	1.9	12.5	1.2	7.2	1.9	6.7	1.6	8.1	0.6	9.3	1.3	13.6	2.9	10.4	1.5	11.7	6.2	9.4
<i>parent(s)</i>	15.6	8.8	2.9	1.5	4.4	2.4	15.0	7.0	21.3	13.6	3.0	0.9	9.1	4.7	14.6	6.1	10.5	6.2	7.3	3.1	13.4	7.2	1.4	1.2
<i>couple</i>	16.5	16.6	29.2	26.7	28.0	26.2	19.8	19.7	13.8	15.1	32.9	29.4	22.6	23.4	14.6	15.8	20.1	19.4	24.5	25.5	18.9	17.2	27.1	27.0
<i>nuclear</i>	46.4	54.5	39.2	47.2	48.4	47.6	49.2	45.5	46.5	51.9	43.6	49.1	51.4	52.3	45.9	51.0	51.3	44.9	50.0	48.7	49.9	50.6	44.6	46.0
<i>other types</i>	12.1	5.7	3.4	2.1	2.2	1.1	4.8	4.7	3.5	2.4	1.5	0.8	7.6	3.6	4.2	4.0	4.9	4.1	1.6	1.3	7.0	5.8	1.5	1.1
<i>Total</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: Gender & generations Survey wave 1 and 2 <http://www.ggp-i.org/data/> *Estimates for Romania are unweighted and Austria only has individuals aged 25-49

Table A2: Country comparison of living arrangements for men and women, relative frequencies in percent (un-weighted frequencies)

Living arrangement	Country by Sex Respondent																							
	Bul.		Ger.		Fra.		Hun.		Ita.		Net.		Rom.		Aus.		Est.		Bel.		Pol.		Swe.	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
<i>alone</i>	7.1	4.7	24.9	14.9	21.4	19.2	8.8	10.1	8.0	8.8	23.2	18.2	7.7	7.9	16.8	10.3	12.0	11.6	13.8	10.8	11.4	13.3	16.8	13.5
<i>single parent</i>	1.5	7.4	2.7	11.6	3.0	11.7	1.9	11.8	1.2	6.8	2.3	8.6	1.6	8.1	0.6	9.8	1.4	13.5	3.1	10.7	1.7	11.3	5.6	8.5
<i>parent(s)</i>	16.5	9.9	2.0	1.1	2.7	1.6	14.8	6.9	22.9	13.2	1.6	0.5	9.1	4.7	11.5	4.6	10.4	6.3	7.2	3.2	11.6	6.2	1.4	1.1
<i>couple</i>	15.4	13.5	29.4	22.8	26.7	24.9	20.5	20.2	14.9	19.8	30.7	27.0	22.6	23.4	17.6	14.7	21.0	19.2	24.6	24.6	22.9	19.9	28.2	28.7
<i>nuclear</i>	47.0	58.5	38.5	47.7	44.5	41.7	49.4	46.1	49.9	49.0	40.4	44.9	51.4	52.3	49.2	57.9	50.5	45.3	49.6	49.5	46.0	44.0	46.7	47.3
<i>other types</i>	12.5	5.9	2.5	1.9	1.6	0.9	4.6	4.8	3.1	2.4	1.8	0.9	7.6	3.6	4.4	2.7	4.8	4.1	1.6	1.3	6.4	5.3	1.2	1.0
<i>Total</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: Gender & generations Survey wave 1 and 2 <http://www.ggp-i.org/data/>

Table A3:

Table A2: Logistic regressions of living alone by country for individuals aged 25-64

Variable	Sweden	France	Netherlands	Belgium	Germany	Austria	Italy	Romania	Bulgaria	Hungary	Estonia	Poland
Age												
25-29	(base)	(base)	(base)	(base)	(base)	(base)	(base)	(base)	(base)	(base)	(base)	(base)
30-34	0.53***	0.69**	0.68**	0.82	0.59***	0.80	1.91*	0.83	0.79	0.92	0.76	0.80
35-39	0.28***	0.47***	0.52***	0.71	0.48***	0.79	2.11**	0.54*	0.94	0.80	0.62	0.57**
40-44	0.25***	0.56***	0.45***	0.66	0.38***	0.65**	2.12**	0.78	0.72	0.96	0.71	0.85
45-49	0.28***	0.58***	0.40***	0.78	0.36***	0.64*	2.10**	0.91	0.75	1.02	0.58*	1.18
50-54	0.29***	0.57***	0.46***	0.88	0.30***		3.32***	1.12	0.98	1.03	0.91	0.99
55-59	0.32***	0.58***	0.46***	0.71	0.35***		4.33***	1.09	1.04	0.96	0.80	1.50**
60-64	0.39***	0.52***	0.45***	0.86	0.29***		4.23***	1.35	0.88	1.02	0.95	1.44*
Sex												
M	(base)	(base)	(base)	(base)	(base)	(base)	(base)	(base)	(base)	(base)	(base)	(base)
F	0.44**	0.39***	0.29***	0.36***	0.31***	0.29***	0.77	0.20***	0.26***	0.53***	0.57*	0.31***
Education												
ISCED 0-2	(base)	(base)	(base)	(base)	(base)	(base)	(base)	(base)	(base)	(base)	(base)	(base)
ISCED 3-4	0.77	0.88	0.73***	0.62***	1.05	0.72	1.49***	0.62***	0.85	0.71***	0.64**	0.62***
ISCED 5-6	0.67*	1.09	0.73***	0.61***	0.79	0.84	2.00***	1.06	1.30*	0.79	0.66*	1.03
Education*Sex												
ISCED 3-4#F	1.44	1.30*	1.73***	1.73*	0.92	2.09**	1.34*	2.07***	1.40	1.31*	1.26	2.04***
ISCED 5-6#F	1.72*	1.51**	2.59***	2.09***	1.50	2.38**	1.59*	2.26**	1.32	1.70**	1.44	2.31***
Age*Sex												
30-34#F	0.61	1.16	1.01	0.71	0.85	0.89	0.94	1.79	0.80	0.82	0.63	0.83
35-39#F	0.50*	0.89	0.79	0.93	0.71	0.77	0.72	1.81	0.78	0.65	0.57	0.82
40-44#F	0.74	0.89	0.91	0.75	0.70	1.00	0.80	1.02	0.95	0.50**	0.55	1.07
45-49#F	0.82	1.16	1.51*	1.06	1.20	1.56	0.97	1.63	1.85*	0.75	0.98	0.91
50-54#F	1.30	2.29***	1.87**	1.39	2.34***		1.12	2.57*	2.72***	1.57*	1.25	2.59***
55-59#F	2.25**	3.40***	3.12***	2.58**	3.73***		1.19	5.30***	2.89***	3.50***	2.92***	2.50***
60-64#F	2.50***	5.26***	3.62***	2.75**	6.42***		1.95	8.69***	8.11***	4.94***	3.78***	4.30***
Constant												
	0.70*	0.52***	0.83	0.28***	0.85	0.35***	0.03***	0.12***	0.08***	0.13***	0.24***	0.16***
N	6546	12116	11200	5300	9199	7642	14271	8541	15981	18190	5618	14069

* p<.05; ** p<.01; *** p<.001, Note: Models additionally include control for the survey year

Source: Gender & generations Survey wave 1 and 2 <http://www.ggp-i.org/data/>