Gender differences in the relationship between household position and health in Europe

Jordi Gumà[1], Gabriele Doblhammer[2]

Introduction

In recent decades, populations in western countries have experienced increased longevity and improved mortality whereas health differentials have remained constant or even increased (Stephens, 1998; Marmot, 2005). Social sciences have approached this paradox by studying the social determinants of health inequalities. The first factors being analyzed were in the context of socioeconomic status, but the certainty that health inequalities are defined by a heterogeneous range of social factors have led to the inclusion of other factors in the field.

Among those factors, marital status and household arrangements are becoming more important in the current literature (Waite, 1995; Lillard and Waite, 1995; Lillard and Panis, 1996; Brockmann and Klein, 2004; Martikainen et al., 2005), mainly after checking that socioeconomic factors do not explain completely the sign and the intensity of the health inequalities. In fact, the interest in household arrangements is the natural evolution of the study of the relationship between marital status and health status (Hughes y Waite 2002; Joutsenniemi 2007). This evolution is an attempt of adding more information to the benefits on health of living with a partner with the inclusion of the ties within a household.

Those who live with a partner have showed an advantaged health status in both partners in comparison with those who not (Waite, 1995; Martikainen et al., 2005). The fact of living with children, one of the main family ties that we can find within a household, can also imply some effects on individuals' health. These effects evolve from an initial worsening at the immediate time after the birth due to the process of adaptation to the new family status, to a posterior improvement due to the effect of the increase of both the feeling of responsibility and the social control (Bernstein, 2001; Bartlett, 2004).

The two family situations above mentioned interplay together within a household. Being member of a household exposes individuals to a certain degree of burden according to the kind of family ties that we find within the household (Hughes and Waite, 2002). The burden can be defined as the combination of the resources that a certain individual gets or provides as a consequence of the interaction with the other members of the household. Balanced or unbalanced (in both directions) situations can modify the burden from being member of a household, affecting in a positive or negative way to the health status of individuals. This burden is affected by the gender roles defined within the household because these roles establish the kind and quantity of resources that an individual is supposed to provide. Although the tendency is to a convergence between the gender roles within the household, this process is still unfinished (McDonald 2000, Goldsheider 2000).

The complexity of the study of the relationship between household arrangements and health rises when different countries are compared due to their differences in terms of household arrangements profile. The degree of diversification of the kind of household arrangements that we can find in a country is really heterogeneous even among western countries. The patterns of change in the demographic behaviors stated in the Second Demographic Transition (SDT) (rise of cohabitation instead of marriage, postponement of parenthood, increase of the acceptance of divorce, etc) have been spread in Europe from the Northern and Western countries to the Southern and Eastern ones with a different timing (Liefbroer and Fokkema, 2008).

[1] PhD Candidate. Centre for Demographic Studies of Barcelona and Autonomous Un iversity of Barcelona
[2] University of Rostock and Rostock Centre for the Study of Demographic Change

However, the pattern of those countries which experienced earlier the beginning of the SDT does not anticipate the future pattern of the other ones due to the interplay between demographic behaviors and the country differences.

We propose in our work a new approach to study the association between family ties within a household and individual's health: the analysis of the effect of the individual's position within the household instead of using the household as a common context for all the members. This position is defined according to three issues: 1) the partnership situation (living or not living with a partner); 2) living with children and 3) the relationship with the family nucleus (member or not of the nucleus). This third point is important in order to perform an international comparison because it permits to analyze all the individuals, even those who remain in their parent's home at adulthood, situation which is more frequent in Southern European countries (Table 1). Moreover, the household position is a proxy of the range of burden to which a person is exposed due to the fact of being member of a certain household. For instance, in the case of a couple with two children, we suppose that the burden experienced by the mother due to her role as a provider of resources is different to the burden of her children, who are mainly taking the most of these resources. In addition, a gender approach would suggest that there are also differences between the load supported by the mother and the father.

Table 1. Household position profile of population aged 30-59 by sex and country. 2010.

		Living alone	Son/daughter	Living with partner no children	Living with partner and child	Living with partner and children	One-parent nucleus	Other position	Total
Spain	Men	8,1%	13,6%	49,2%	15,7%	10,2%	0,9%	2,5%	100% (n=7542)
	Women	6,5%	8,0%	47,3%	18,2%	12,5%	5,2%	2,4%	100% (n=7550)
France	Men	18,1%	3,4%	55,4%	12,9%	6,8%	1,5%	1,9%	100% (n=4620)
	Women	18,3%	1,7%	51,0%	14,8%	7,2%	5,4%	1,5%	100% (n=4641)
Germany	Men	24,6%	3,3%	50,2%	14,3%	6,2%	0,6%	0,8%	100% (n=5160)
	Women	23,9%	1,5%	48,0%	15,2%	6,1%	4,5%	0,7%	100% (n=5106)
United Kingdom	Men	14,1%	4,9%	52,3%	14,8%	9,9%	1,3%	2,6%	100% (n=3134)
	Women	13,4%	1,9%	49,1%	16,1%	9,9%	7,8%	1,8%	100% (n=3246)
Poland	Men	5,3%	10,2%	45,2%	18,6%	15,7%	0,9%	4,1%	100% (n=7111)
	Women	7,7%	4,9%	39,7%	19,9%	16,6%	5,9%	5,4%	100% (n=7862)

Source: EU-SILC

The aim of this study is to assess the association between the different household positions and the self-perceived health status in individuals aged between 30 and 59 in different European countries in 2010. Men and women are analyzed separately due to possible gender effects caused by e.g. different roles within the household or differences in labor force participation. We compare 5 countries divided in three groups taking into account both cultural and political background differences: Spain (Southern country); France, Germany and the United Kingdom (Central European countries); and Poland (Eastern country).

Data and Methods

We use the cross-sectional microdata of EU statistics on income and living conditions (EU-SILC) in 2010 (last year with available data). This survey allows for working with representative samples for the five selected countries (Spain, France, Germany, the United Kingdom and Poland). The questionnaire compiles information about demographic, socioeconomic, family and general health issues.

The age of the target populations has been restricted to the range 30-59. First, the lower boundary has been fixed under the assumption that young people usually leave their parental home at earlier ages than 30. Therefore, this age allows for distinguishing between those who have already started a new family and those who likely remain in their parents' home due to their lower attractive in the marriage market. Second, the

upper boundary has been defined in order to compile ages under the working life to avoid the possible bias of retirement on health (Demakakos et al., 2009). Although the legal age of retirement is 65, the age of reference taken is 59 due to the differences in the mean ages at retirement in the selected countries (i.e. the average age at which employed people starts to receive a retirement pension was 58.5 in Spain and 56.2 in the United Kingdom in 2006 (Eurostat)).

Health of individuals (the dependent variable) has been measured by the self-perceived health status from the item "What is your state of health in general?" This item has been categorized in two possible health statuses: Good (very good and good) and poor (fair, poor and very poor). This indicator pertains to the subjective dimension of health. Its main advantage is that it fits the definition of health[3] proposed by the World Health Organization which goes farther than only the presence or absence of a certain disease.

It must be added to the abovementioned definition of position within the household that in case of a household with more than one family nucleus, we have prioritized the youngest one. The final categories of the position within the household are the following:

- Living alone
- Position as a son/daughter
- Living with a partner (no children)
- Living with a partner and a child
- Living with a partner and children (2 or +)
- Single father/mother
- Other position (grandfather/mother, brother/sister-in-law, etc)

Our analysis has been controlled for the socio-economic status of individuals. This status is approached by three different variables that cover different dimensions of this factor: the highest educational attainment, the self-defined economic status and the self-defined ability to make ends meet in the household.

Analysis

The study is composed of two stages. The first one is the descriptive analysis of the household position patterns of the five analyzed countries. The second stage comprises the multivariate analysis estimating the association between the interaction of household positions with sex and poor health by logistic regression models, controlling for the abovementioned socio-economic covariates. Independent models for the five selected countries have been calculated in order to explore the country specific differences.

Results

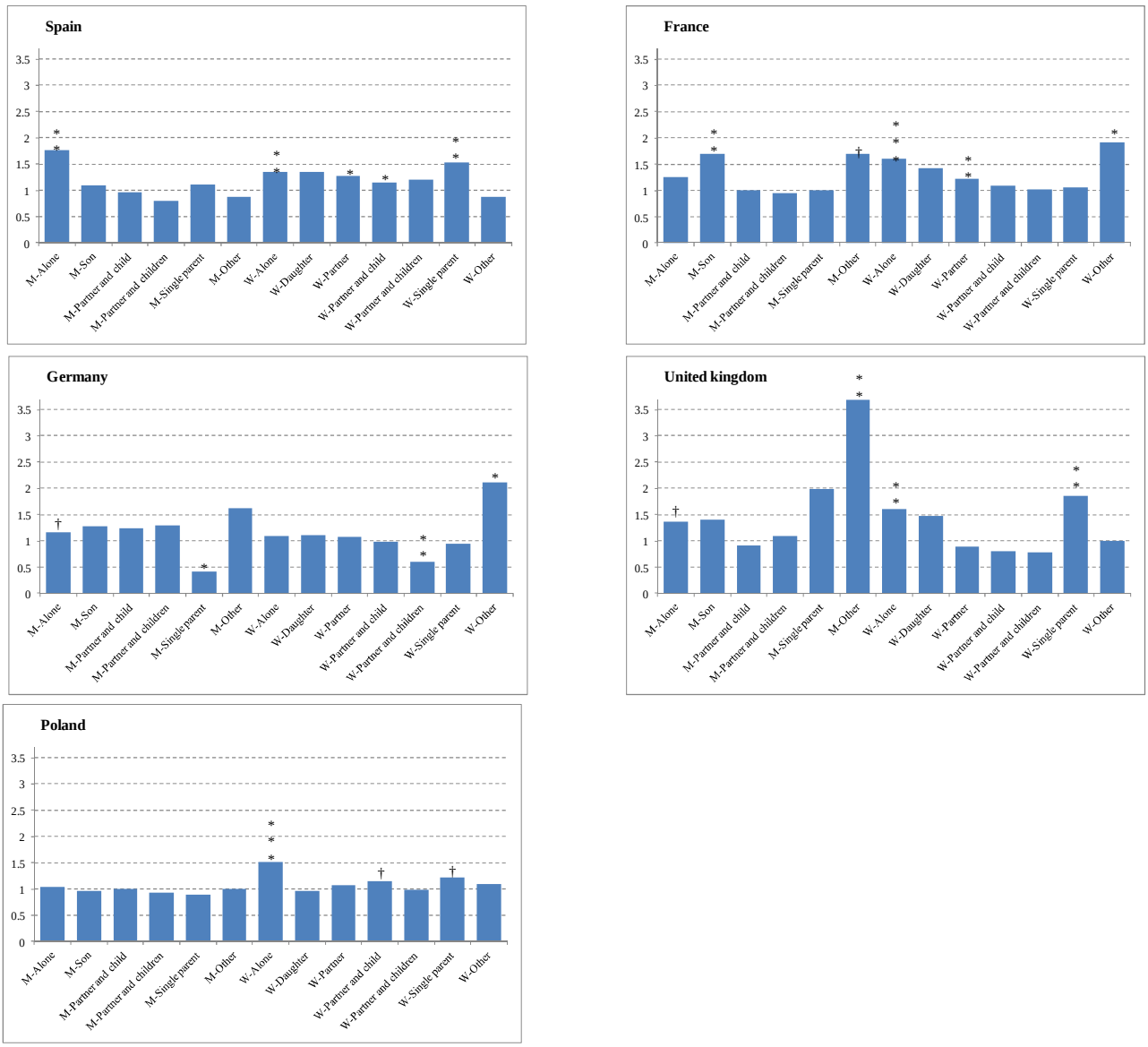
The most frequent household position among the target population in all the countries is living with a partner and without children, followed by the two positions related to living with a partner and children (one or more than one) (Table 1). The two positions which imply to live neither with a partner nor with children (living alone and position as a son or daughter) represent the third group of household positions according to their relative weight in the analyzed countries. However, there are two different groups of countries: countries where living alone present higher values than living in their parents' home (France, Germany and the United Kingdom); and countries where living in their parent's home show higher percentages than living alone

[3] Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (WHO, 1946)

(Spain and Poland). Looking to sex differences in household positions, the two positions with higher differences between men and women are two: being the father/mother in a one-parent nucleus and living in their parent's home (son or daughter). In the first case, this position is meaningfully more frequent in the female case than in the male one. Conversely, the fact of remain in their parent's home in ages 30-59 is more frequent among men than among women.

Sex differences in health according to household position are divergent among countries (Group of Figures 1). Spain and France show values of odds ratios of poor health close or higher to 1 among the female values of the different household positions when men living with partner a no children are taken as a reference category. This is not the case in the other three countries where we can see values lower than 1, but only significant in the German sample for women living with partner and children.

Group of Figures 1. Odds ratios[4] of poor health of population aged 30-59 by household position and sex in Spain, France, Germany, the United Kingdom and Poland. 2010



Source: EU-SILC <0.001 *** <0.01 ** <0.05 * <0.1 †

[4] Controlling for age, the highest educational attainment, the self-defined economic status and the self-defined ability to make ends meet in the household

However, some similar patterns among countries can be pointed out from our results. The fact of living alone seems a disadvantaged situation in terms of health in almost all the countries for both sexes (with the exception of Germany for women and France and Poland for men). The case of the single mother must be also highlighted because is the household position which show the highest odds ratio values of poor health among women in Spain, the United Kingdom and Poland. This household position is interesting because is the situation which a priori we can suppose that is related to a higher burden.

Conclusions

Our results provide evidence of country differences in the relationship between household position and health according to sex. The main similarity among countries found is the disadvantaged situations in terms of health of those who live alone, independently of sex. However, situations of a higher range of burden from the household like being a single parent, mainly for women, show meaningful differences among the five countries. These differences go in the direction of the different range of gender differences among countries, which can modify the association between the different household positions and individual's health status. In addition, the different models of the Welfare State with differing policies in terms of moderating possible disadvantages related to certain household positions in the five countries can also explain the differences in our results.

Implications

The promotion of policies on gender equity also reduces the inequalities in population health status. Countries with a higher level of sensitivity with the new kind of families seem to be more efficient to mitigate the effect of household's burden on individuals

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