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Poster session 1

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Title: Living Arrangements of elderly Adults. Determinants of residential Dependency.

## Short Abstract

In the context of an increase in the number and proportion of old people, this study aims to chart the living arrangements of elderly people in Catalonia. We focus in particular on their residential independence, as well as on identifying the effect of health deterioration on residential dependency. The data come from the Catalan Survey of Health (ESCA 2006) and the individuals are a sample of people living in private households. Most people (44%) aged 65 and over are living with a partner only, 19% are living alone and, among those living with others –especially children–, only 12% are residentially dependent. But when we consider sex and age, we observe different patterns of living arrangements. Living arrangements of men and women are relatively similar at the early ages, but among those aged 80 and over the differences are very noticeable. The main differences are caused by widowhood. However, after controlling for marital status, sex differences in patterns of living arrangements become insignificant. Being married, being highly educated and living in urban municipalities seem to be protector factors against residential dependency. However, its proportion increases dramatically between the ages of 75 and 80, a key moment marked by an increase in widowhood and deterioration in health. Residential dependency is also associated with functional dependency in activities of daily living. In order to identify the determinants of residential dependency, we set a logistic regression model both with sociodemographic and health variables.

## **Extended Abstract**

<u>Introduction</u>: In the context of an increase in the number and proportion of old people, this study aims to chart the living arrangements of elderly people in Catalonia. We focus in particular on their residential independence, as well as on identifying the effect of health deterioration on residential dependency.

<u>Data and methods</u>: This paper uses data from the Catalan Survey of Health (ESCA 2006). The individuals are a sample of people living in private households (N=3566). In order to identify the residential independence, the dependent variable was created taking into account the head of the household. We consider residential independents those persons who declare themselves or their partner as the head of the household. Otherwise, we consider them residential dependents. We distinguish three possibilities of being residential independent: living alone, with a partner only and other independent arrangements.

The study has two parts. The first part is a descriptive analysis of living arrangements patterns of older people focusing on residential independence. We are taking into account socio-demographic variables (sex, age, marital status, educational level and municipality size) as well as functional dependency in activities of daily living.

In the second part, a set of socio-demographic and health variables associated with residential dependency are analysed through bivariate and multivariate logistic regression. The health variables are self-rated health, and 2 variables created from questions about disabilities and need for help with 13 different activities of daily life. These two are quantitative and qualitative indicators. They measure the degree of functional dependency to develop the Basic Activities of Daily Life (BADL) and the Instrumental Activities of Daily Life (IADL). They consider three possibilities: being dependent on 0 activities, 1 to 2 and 3 or more.

<u>Results</u>: Being married, being highly educated or living in urban municipalities seem to be protector factors against residential dependency. However, its proportion increases dramatically between the ages of 75 and 80, a key moment marked by an increase in widowhood and deterioration in health. Being dependent on at least one of the daily life's activities increases the prevalence of residential dependency (Figure 1).

After controlling for marital status, sex differences in patterns of living arrangements become insignificant. The main differences in marital status are due to a higher mortality of men.

Hence, the outputs of the logistic regression show more interesting information when we perform different models for men and women (Table 1).

Marital status is the variable that most shapes residential dependency. There is a significant difference between being married or not. Furthermore, being a widower for men is not the same as being a widow is for women. If we consider that in most cases these women, when married, were not participating in the labour market, becoming a widow supposed a loss of income; but it is not the case for men. Since we did not include a satisfactory economic indicator in this model, some variables will shed light on economic differences.

Among health indicators, the IADL dependency variable is the one that best predicts residential dependency. Although women are more affected by functional dependency, its effect is higher among men than among women.

Having a low level of education increases the likelihood of being residentially dependent. However, it is not relevant in the case of women. We should remember that these generations were living in a male bread-winner society. So, probably for women, the educational level of their partners would have been more influential in their living conditions during their lives.

These are the main differences between men and women. However, we can also see the effect of two transversal variables that are not affected by gender: living in small municipalities and being aged 80 or over. This suggests an effect of generation. In the past, multigenerational cohabitation was quite frequent in Catalonia and in other regions of northern Spain. This had to do with transfer rules based on indivisibility of inheritance. And this social norm seems to be stronger and might still be valid in small villages and rural areas because is linked to the land tenure.

<u>Conclusion</u>: Beyond age, marital status and health are the two variables that most shape living arrangements and cohabitation. Widowhood is a greater predictor of loss of residential independence for women than for men. On the other hand, functional dependency is more relevant in residential dependency for men than for women. Finally, the fact that age, once controlled for the rest of the variables in the model, maintains an important effect on residential dependency for those aged 80 and over, suggests a generational effect, which will be studied in future research.











## By educational level and age

By municipality size and age





Source: Catalan Survey of Health (ESCA 2006).

Independent variables		MEN		WOMEN	
		Bivariate	Multivariate	Bivariate	Multivariate
		analysis	analysis	analysis	analysis
		Exp(B)	Exp(B)	Exp(B)	Exp(B)
Age	65-69	1,00	1,00	1,00	1,00
	70-74	0,91	0,78	2,56 *	2,16
	75-79	3,08 *	2,45	3,29 **	2,04 *
	80-84	7,80 **	4,15 **	10,70 **	4,03 **
	85 and over	18,53 **	5,53 **	21,72 **	5,49 **
Marital status	Married	1,00	1,00	1,00	1,00
	Never married	4,95 **	6,33 **	9,92 **	6,83 **
	Ever-married	9,80 **	6,45 **	19,53 **	11,80 **
Educational level	Less than Primary	4,09 **	2,47 **	2,48 **	
	Primary	2,56 **	2,11 *	1,45 **	
	Secondary & High	1,00	1,00	1,00	
Municipality size	< 5.000 inhab.	2,30 **	2,42 *	2,19 **	2,86 **
	5.001 - 50.000 inhab	1,19	1,33	1,30	1,43 *
	> 50.000 inhab.	1,00	1,00	1,00	1,00
Self-rated	Good	1,00		1,00	
health	Not good	2,00 **		1,32 *	
BADL dependency	0 activities	1,00		1,00	
	1 to 2 act.	3,72 **		2,81 **	
	3 or more act.	5,27 **		5,60 **	
IADL dependency	0 activities	1,00	1,00	1,00	1,00
	1 to 2 act.	4,19 **	2,84 **	1,80 **	1,26
	3 or more act.	8,66 **	4,31 **	6,02 **	2,69 **
Constant			0,004		0,007
R2L			0,269		0,279

Table 1. Determinants of residential dependency.

\*\* Significant at p < 0,01</li>
\* Significant at p < 0,05</li>

Source: Catalan Survey of Health (ESCA 2006).