

British Society of Gerontology
47th Annual Conference
4-6 July 2018, Manchester, UK

Session: Global perspectives on health and social care

Demographic analysis of socioeconomic health inequalities in Catalonia in the context of the recent economic crisis

Jeroen Spijker
Antonio Medina
Teresa Menacho
Pilar Zueras

recerCaixa

ACUP


Obra Social "la Caixa"

This work forms part of the project "Anàlisi demogràfica de les desigualtats socioeconòmiques de la salut a Catalunya en el context de la darrera crisi econòmica: gènere, generació i territori", financed by RecerCaixa and lead by J. Spijker. Financial support also came from the Spanish Ministry of Economy and Competitiveness under the "Ramón y Cajal" program (RYC-2013-14851) for Dr. Spijker and the "Juan de la Cierva" program (FJCI-2015-27107) for Dr. Zueras.



CED
Centre d'Estudis
Demogràfics

Motivation

Although plenty of studies have analysed the effect of economic cycles on health there is still **NO CLEAR AGREEMENT AMONG SCIENTISTS** (is it **cyclical** or **anti-cyclical?**).

¿Why?

Depends on the **outcome** (global health vs. some specific condition)

Depends on the **characteristics of the crisis**:

- Of the **period itself** (intensity, duration, most affected population)
- **Economic and social policies** (pre-existing and “reforms”)
- The dominant **sociocultural values**
- The **level of** formal and informal **welfare**
- **Changes** in industry and the labor market

Context

Differences in health and mortality are known in terms of **age** (health worsens with increasing age), **gender** (women live longer than men but do worse in terms of health) and **socioeconomic status** (higher social classes have higher survival rates and do better in health).

Since the beginning of the **economic crisis** in 2008 and the expansion of unemployment have created more extensive **problems** for a large sector of the working class, including the expansion of **poverty**.

Context. Catalonia 2006-2015.

Population 50-64

	Men					Women				
	2006	2008	2010	2013	2015	2006	2008	2010	2013	2015
Employed	74,9	77,1	66,6	60,9	64,7	43,3	48,0	47,0	48,7	52,7
Unemployed	2,5	3,5	9,8	14,6	15,1	3,6	2,9	7,4	10,9	12,6
Permanently disabled	4,0	2,7	3,4	4,6	3,7	0,7	0,7	1,3	1,3	2,1
Homemakers	6,3	4,9	5,9	6,9	4,9	46,3	42,0	37,0	29,9	25,9
Retired	9,0	9,5	11,3	11,2	9,2	4,7	4,8	6,1	7,5	5,3
Other situation	3,3	2,4	2,9	1,8	2,5	1,4	1,7	1,3	1,7	1,5

Macro indicators

	2006	2008	2010	2013	2015
Annual change in GDP	8,5	2,8	0,6	-1,1	3,8
Non-contributive pension – Average per month, 14 payments (€)	289,4	316,2	330,2	367,2	373,8
Health care costs – % of GDP	4,3	4,7	5,3	4,8	4,8
Health care costs – out-of-pocket (Spain)	20,5	20,3	20,2	23,5	24,5

Research objectives

■ To study the impact of the economic crisis on the health of the late-middle age and elderly population (50+).

■ The general baseline hypothesis is that the effect of the crisis on health has been unequal according to age, sex and socioeconomic status (SES).
Regarding the latter we analyse the association with employment status, educational attainment, social class, monthly household income and medical coverage.

Data and methodology

Study population

Population 50 years and older resident in private households in Catalonia

Data source and methodology

Catalan Health Survey (ESCA) held in 2002, 2006, 2010-15.

Sample size of the analysed population:

2002: 2909 2006: 6731 2010-12: 4466 2013-15: 5693

Proportions are standardized by age, using the European population of 2013.

For the multivariate analysis logistic regression was used. Separate models were produced for men and women and ages 50-64 and 65+.

Main health indicators analysed

- Self-reported health
- Disability
- Mental health (based on the General Health Questionnaire - GHQ-12)
- Medicine intake
- Sedentarism

+ 29 other health indicators (less detail and for descriptive study only)

Output

Descriptive analysis

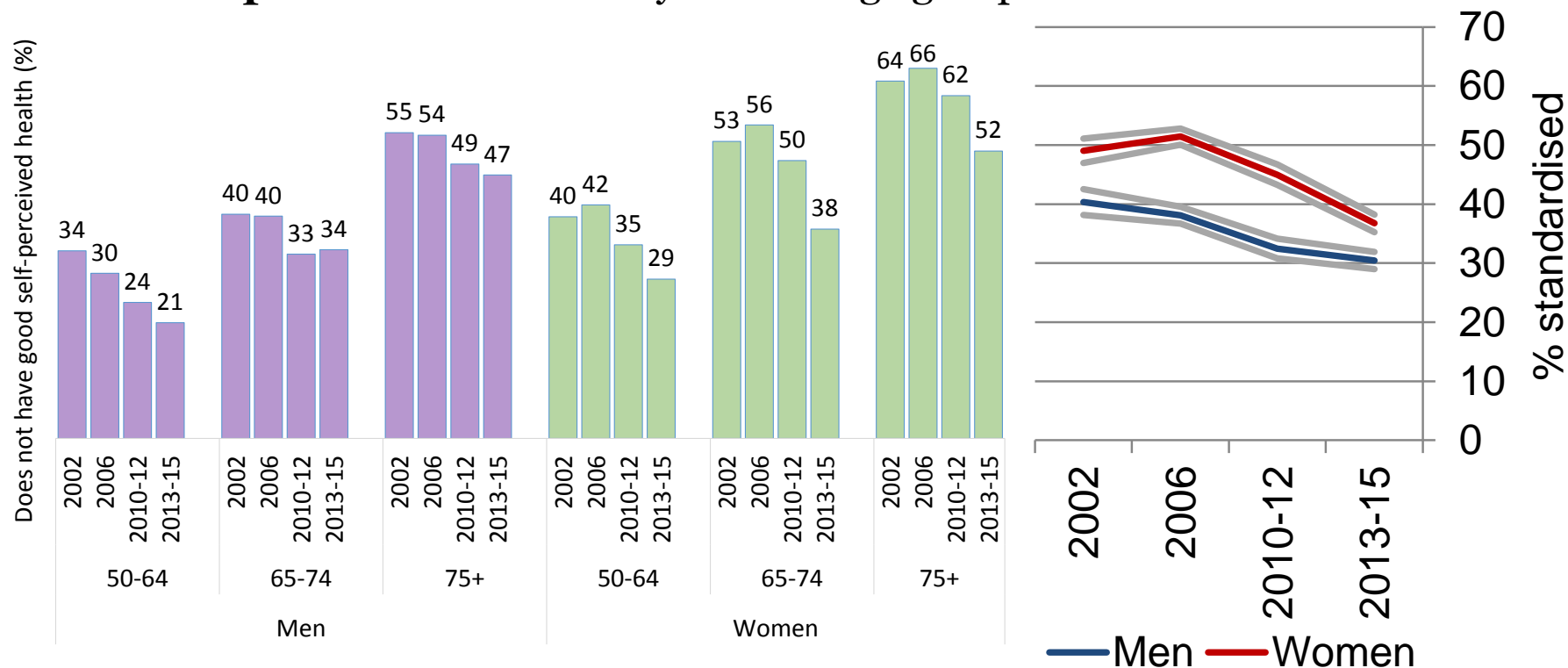


Multivariate analysis

Spijker J, Zueras P (currently being written) Demographic analysis of socioeconomic health inequalities in Catalonia in the context of the last economic crisis

Results (I) Self-perceived health

Proportion of population aged 50+ that **does not have good self-perceived health*** by sex and age group

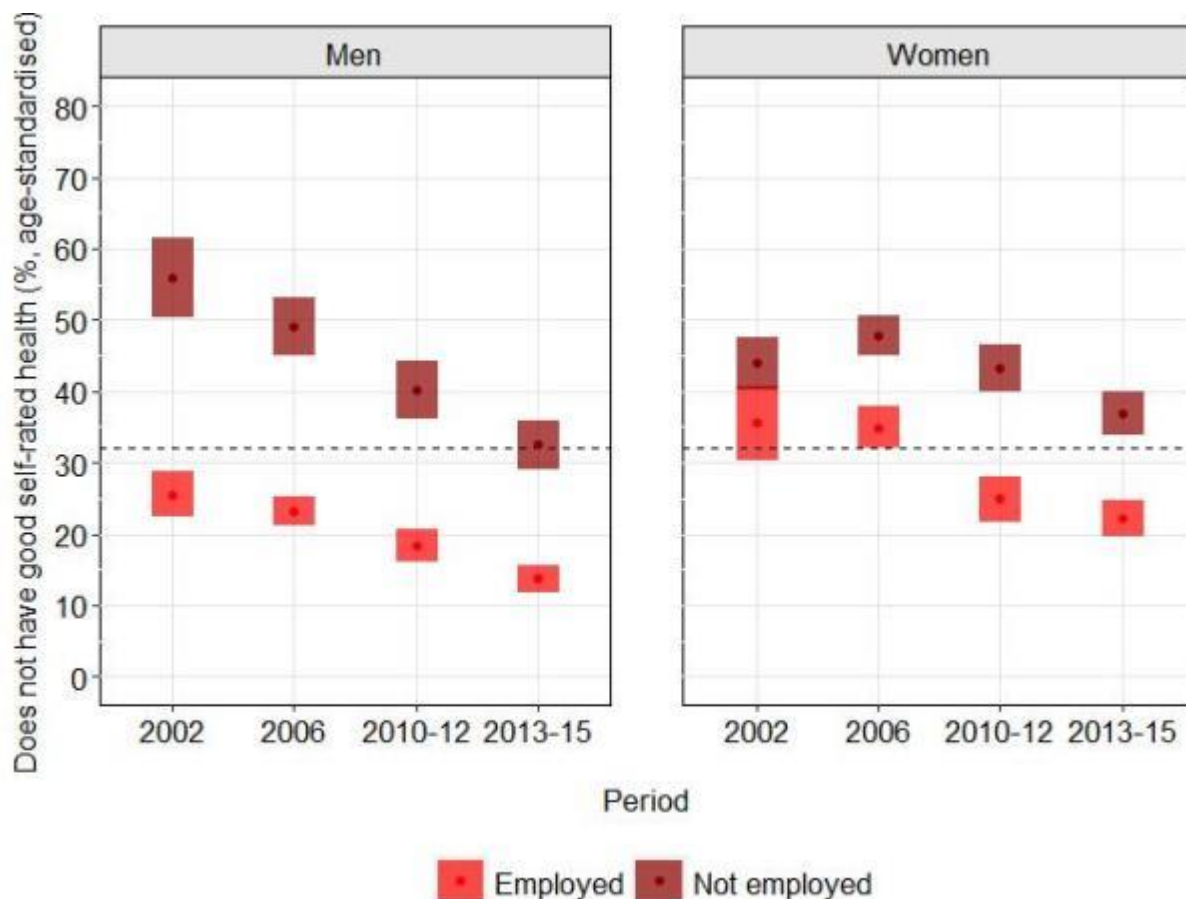


*Results based on the question "How is your health in general?". The aggregated categories are 'regular' and 'bad' (health the remaining categories are 'good', 'very good' and 'excellent')

Source: Enquesta de Salut de Catalunya (ESCA)

Results (I) Self-perceived health

Proportion of population aged 50-64 that **does not have good self-perceived health*** by labour force participation and sex

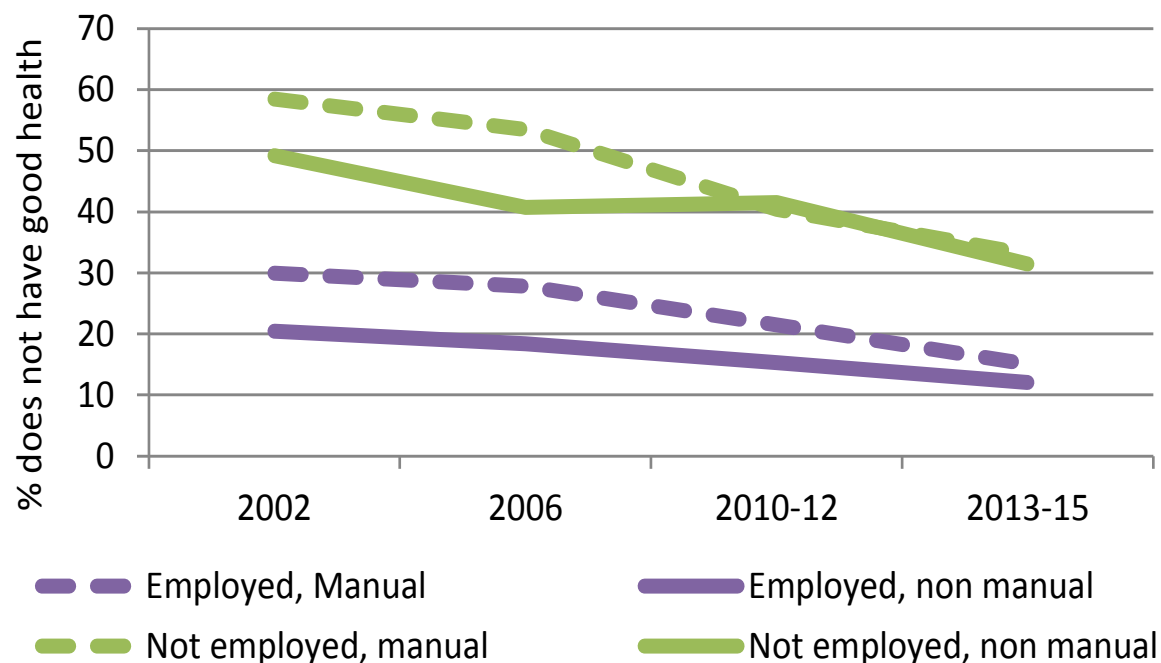


*Regular and bad.

Source: Enquesta de Salut de Catalunya (ESCA)

Results (I) Self-perceived health

An interesting result: Proportion of 50-64 year-olds who **do not have good self-reported health*** by employment status and social class. Men, Catalonia, 2002-15



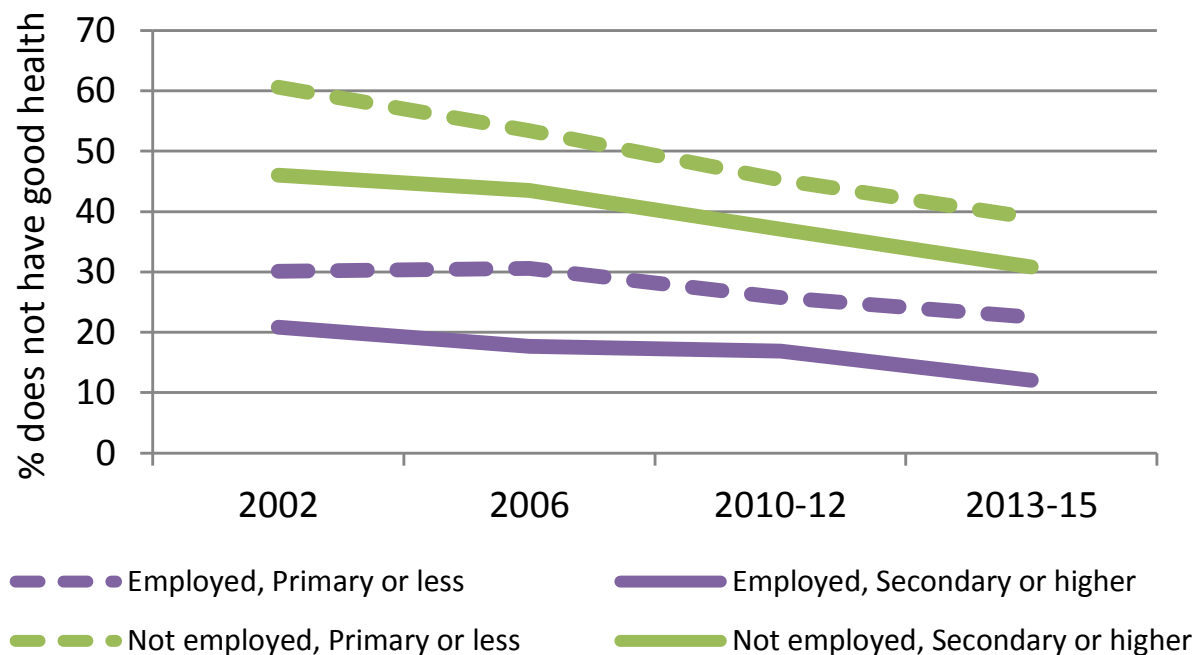
When crossed with employment status, the importance of social class (and other SES variables except education) disappeared during the crisis. **What makes a difference is being employed or not being employed.**

*Regular and bad.

Source: Enquesta de Salut de Catalunya (ESCA)

Results (I) Self-perceived health

An interesting result: Proportion of 50-64 year-olds who **do not have good self-reported health*** by employment status and education. Men, Catalonia, 2002-15



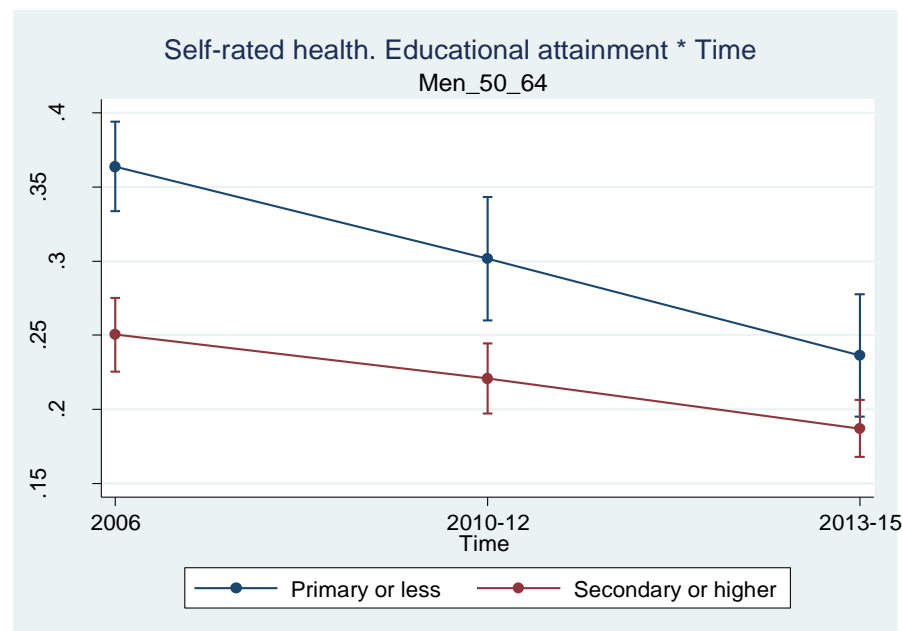
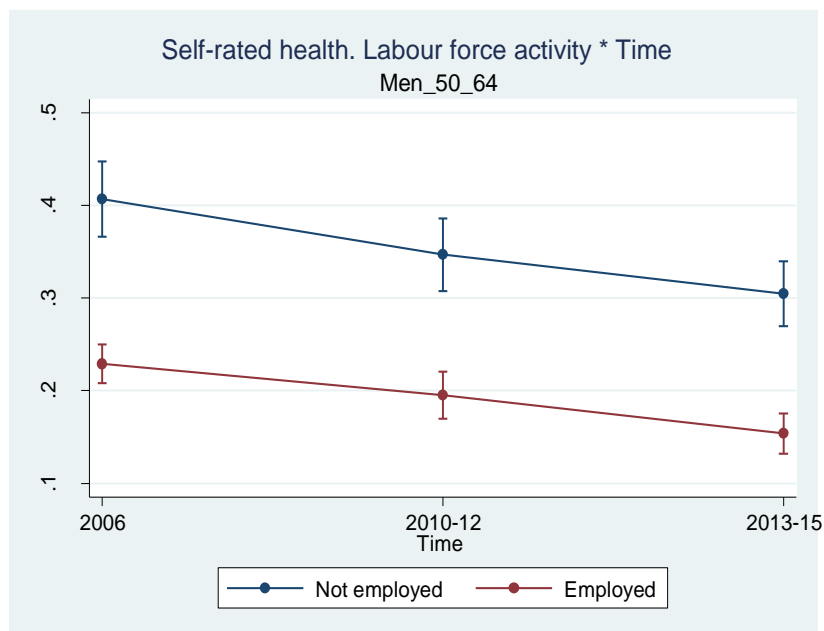
Having a higher level of education still has a protective effect for those who do not work.

*Regular and bad.

Source: Enquesta de Salut de Catalunya (ESCA)

Results (I) Self-perceived health

Proportion of population **does not have good self-perceived health***. Multivariate model results for men aged 50-64#.



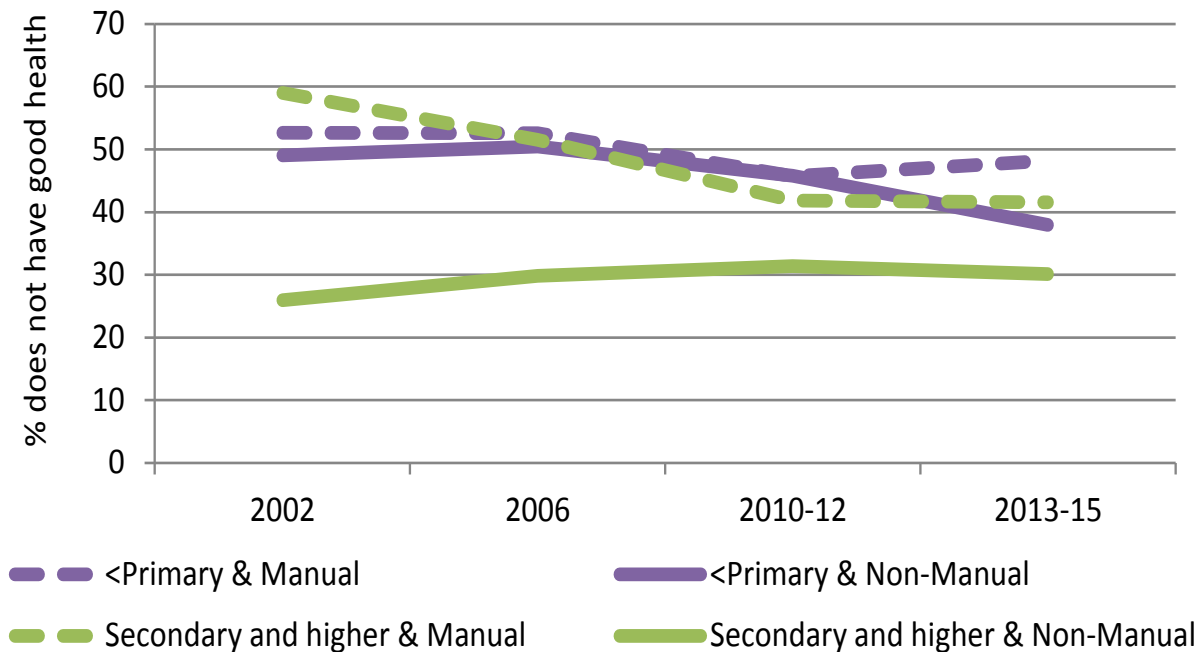
*Regular and bad health.

Controlled for age, sex, place of origin (Catalonia, other spanish regions, outside of Spain), partner co-residence, number of household members, social class, household income, type of health insurance coverage and employment status or educational attainment.

Source: Enquesta de Salut de Catalunya (ESCA)

Results (I) Self-perceived health

An interesting result: Proportion of 65+ year-olds who **do not have good self-reported health*** by education and social class. Men, Catalonia, 2002-15



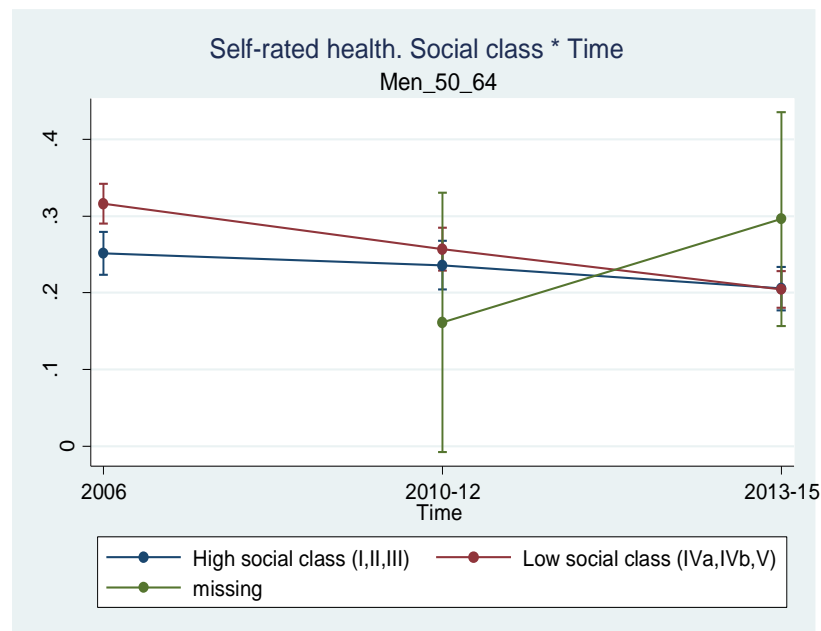
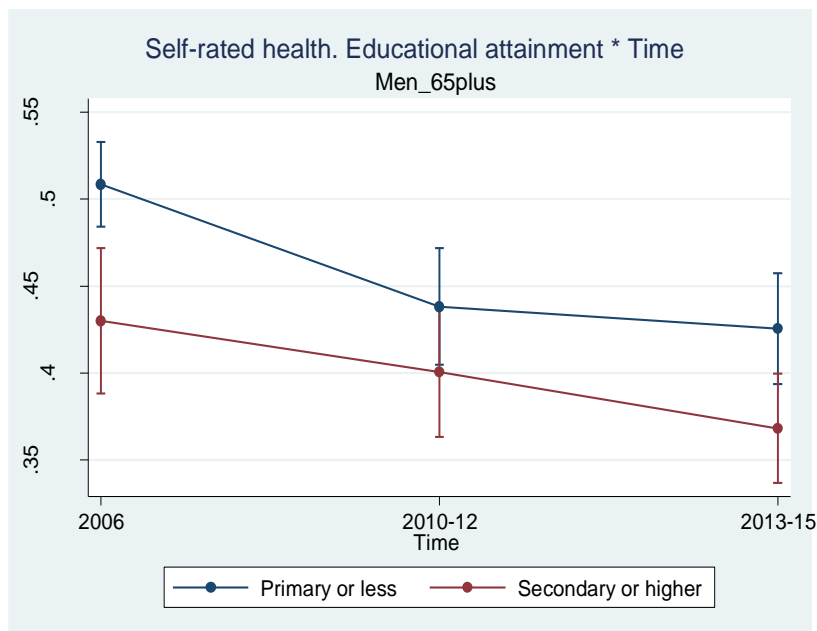
Among 65+ having a higher level of education does not reduce having regular or bad health if the person lives in a manual class household.

*Regular and bad.

Source: Enquesta de Salut de Catalunya (ESCA)

Results (I) Self-perceived health

Proportion of population **does not have good self-perceived health***. Multivariate model results for men aged 65+.#.



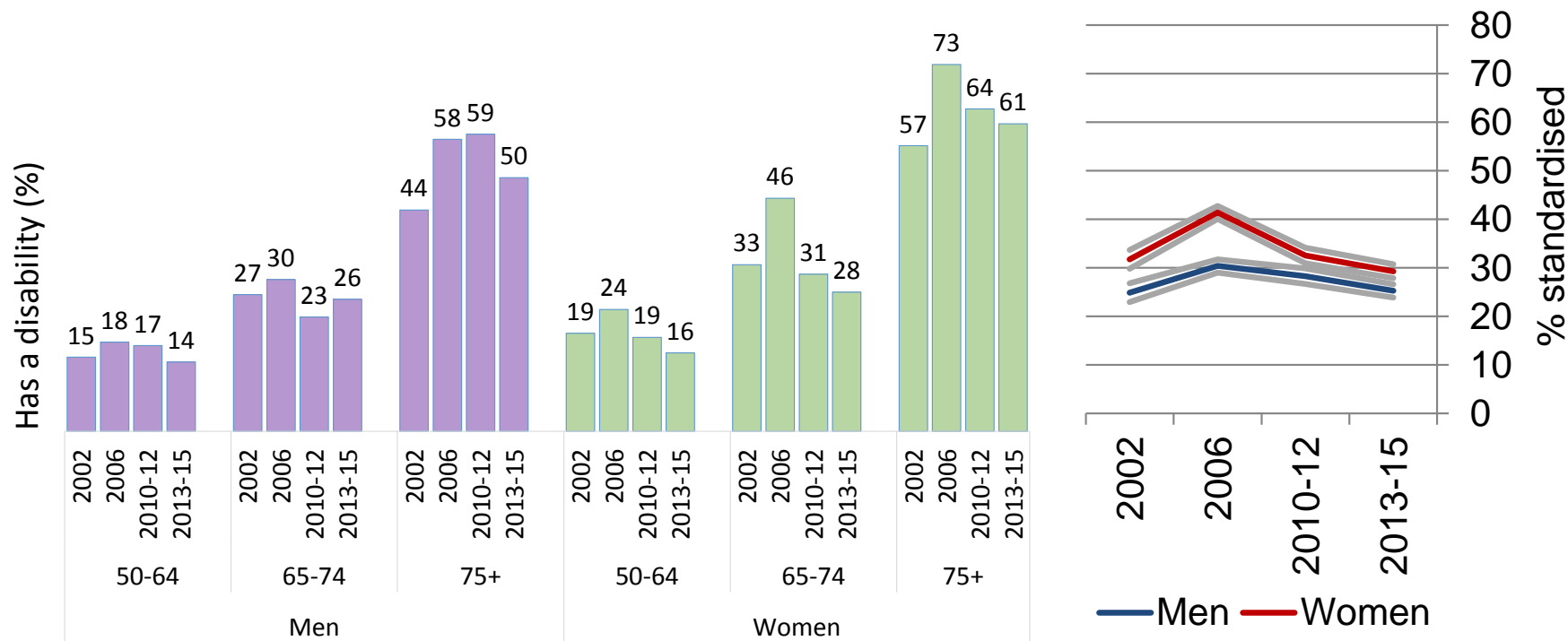
*Regular and bad health.

Controlled for age, sex, place of origin (Catalonia, other spanish regions, outside of Spain), partner co-residence, number of household members, employment status, household income and type of health insurance coverage and social class or education.

Source: Enquesta de Salut de Catalunya (ESCA)

Results (II) Disability

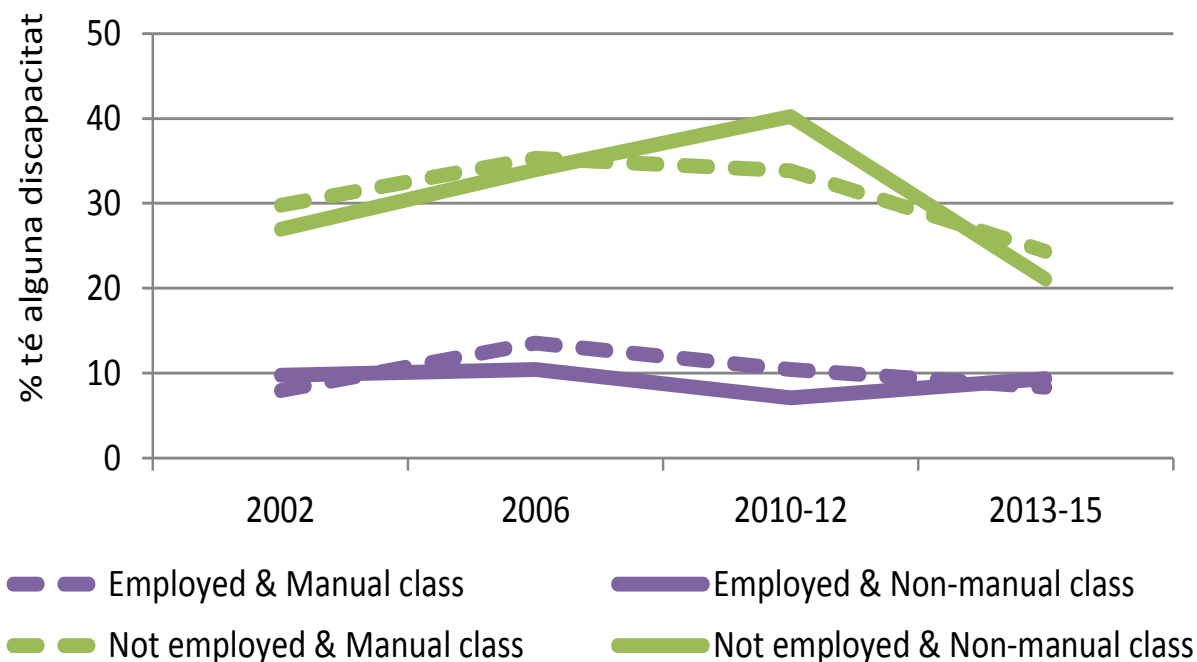
Proportion of population aged 50+ that **has a disability** by sex and age



Source: Enquesta de Salut de Catalunya (ESCA)

Results (II) Disability

An interesting result: Proportion of 50-64 year-olds who **have a disability** by employment status and social class. Men, Catalonia, 2002-15

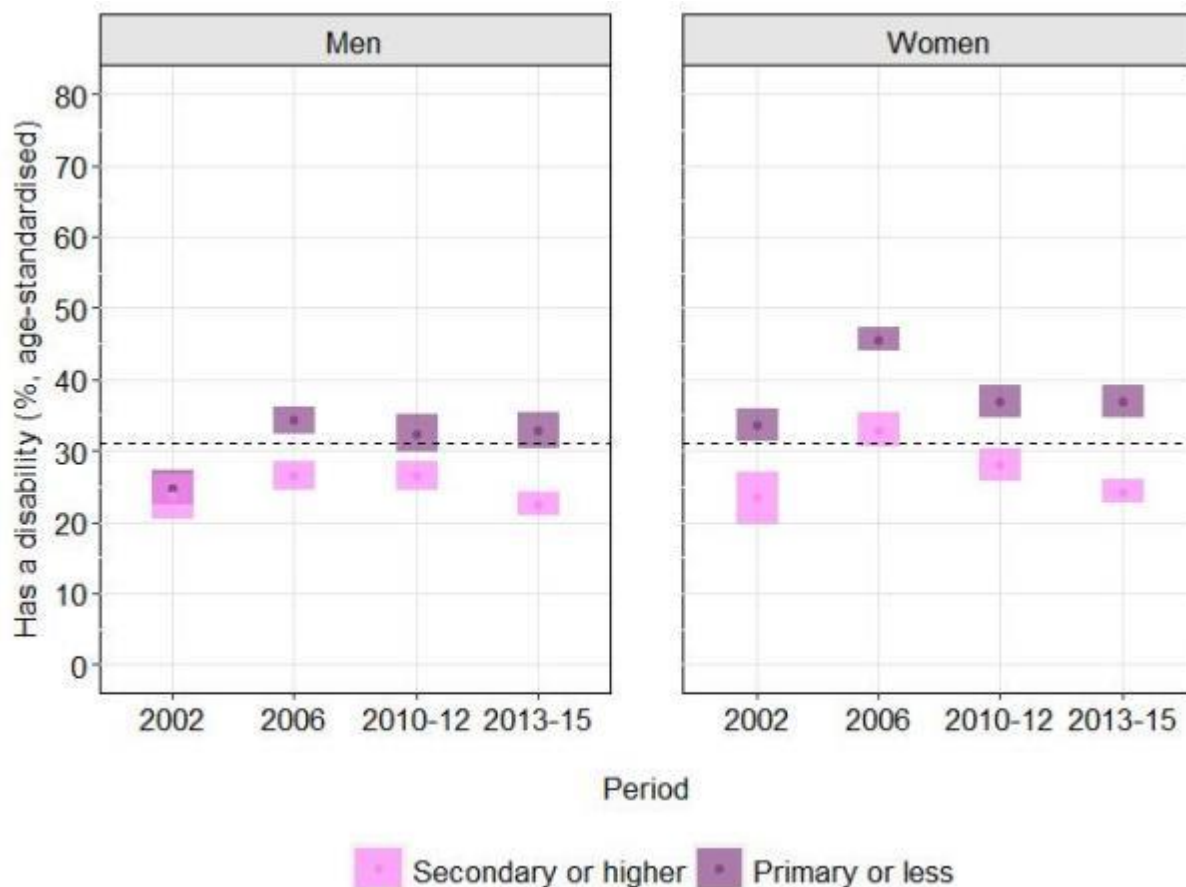


The importance of social class (and other SES variables except for education) is minimal. **What distinguishes is working or not working.**

Source: Enquesta de Salut de Catalunya (ESCA)

Results (II) Disability

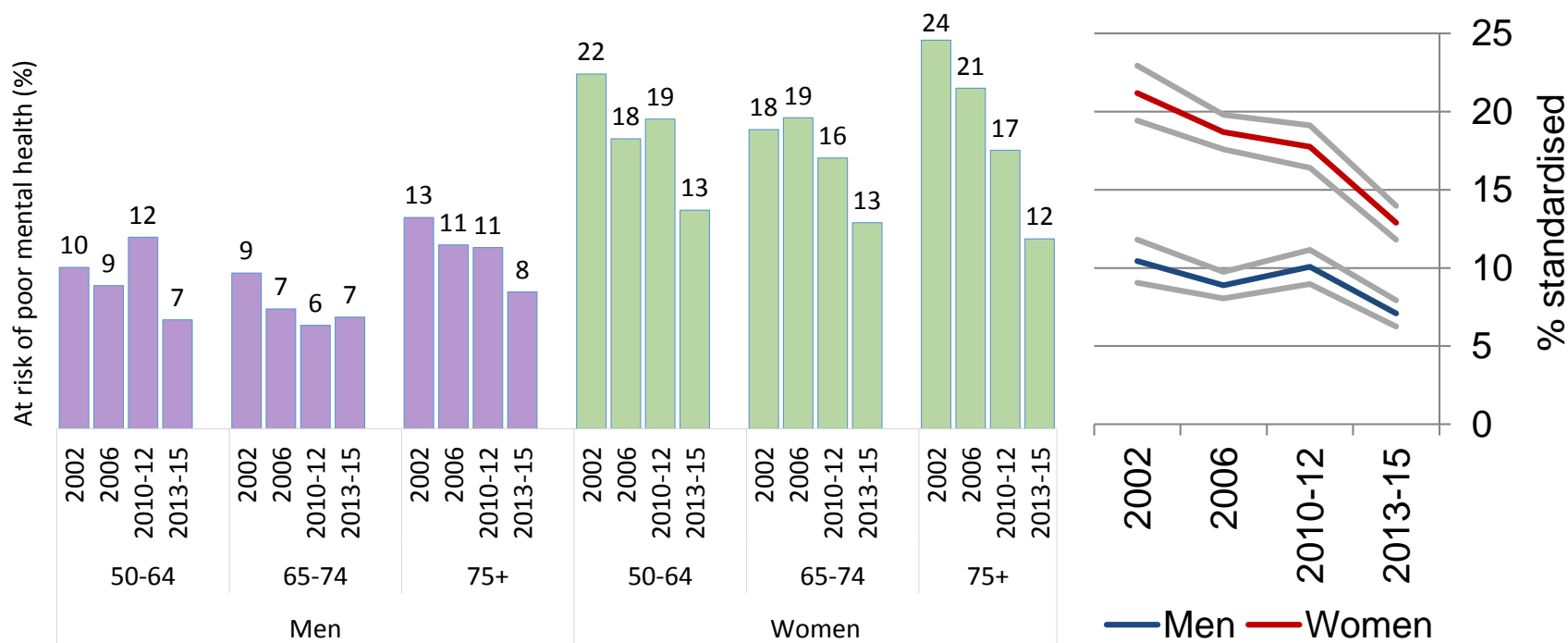
Proportion of population aged 50+ that **has a disability** by educational level and sex



Source: Enquesta de Salut de Catalunya (ESCA)

Results (III) Mental health

Proportion of population over 50+ who is **at risk of poor mental health*** by sex and age



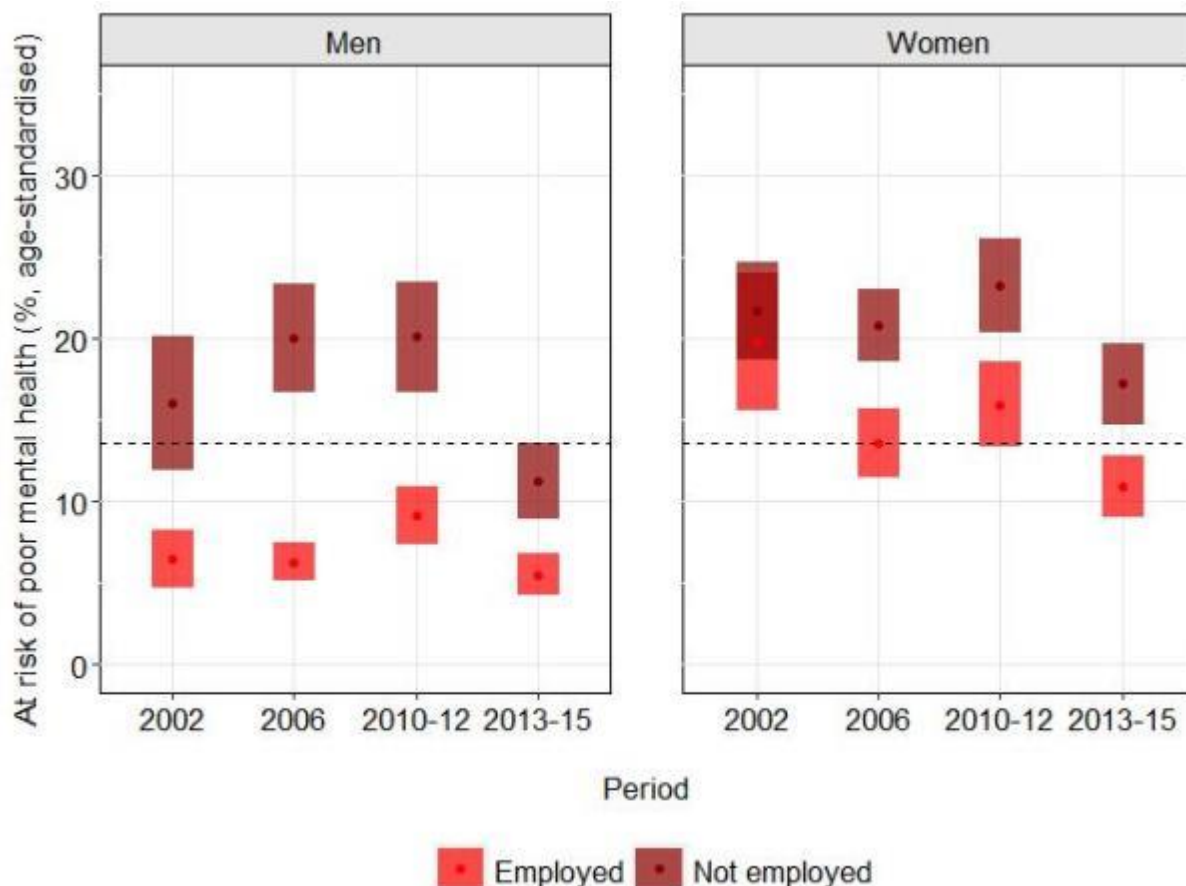
*Persons with a score of 3+ in the 12 questions on mental health (GHQ-12).

Fuente: Enquesta de Salut de Catalunya (ESCA)

Source: Enquesta de Salut de Catalunya (ESCA)

Results (III) Mental health

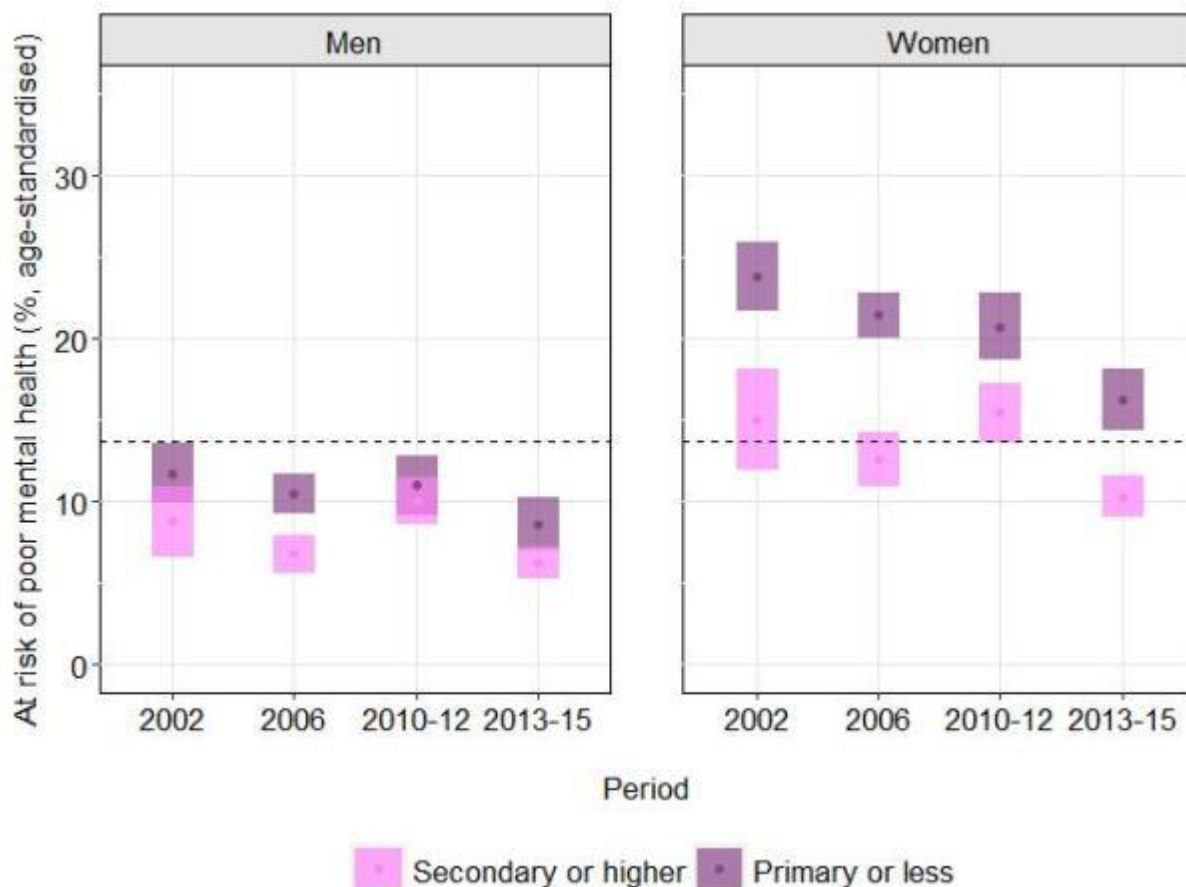
Proportion of population aged 50-64 who is **at risk of poor mental health*** by employment status and sex



*Personas con una puntuación de 3+ en las 12 preguntas sobre salud mental (GHQ-12).
Fuente: Enquesta de Salut de Catalunya (ESCA)

Results (III) Mental health

Proportion of population aged 50+ who is **at risk of poor mental health*** by education and sex

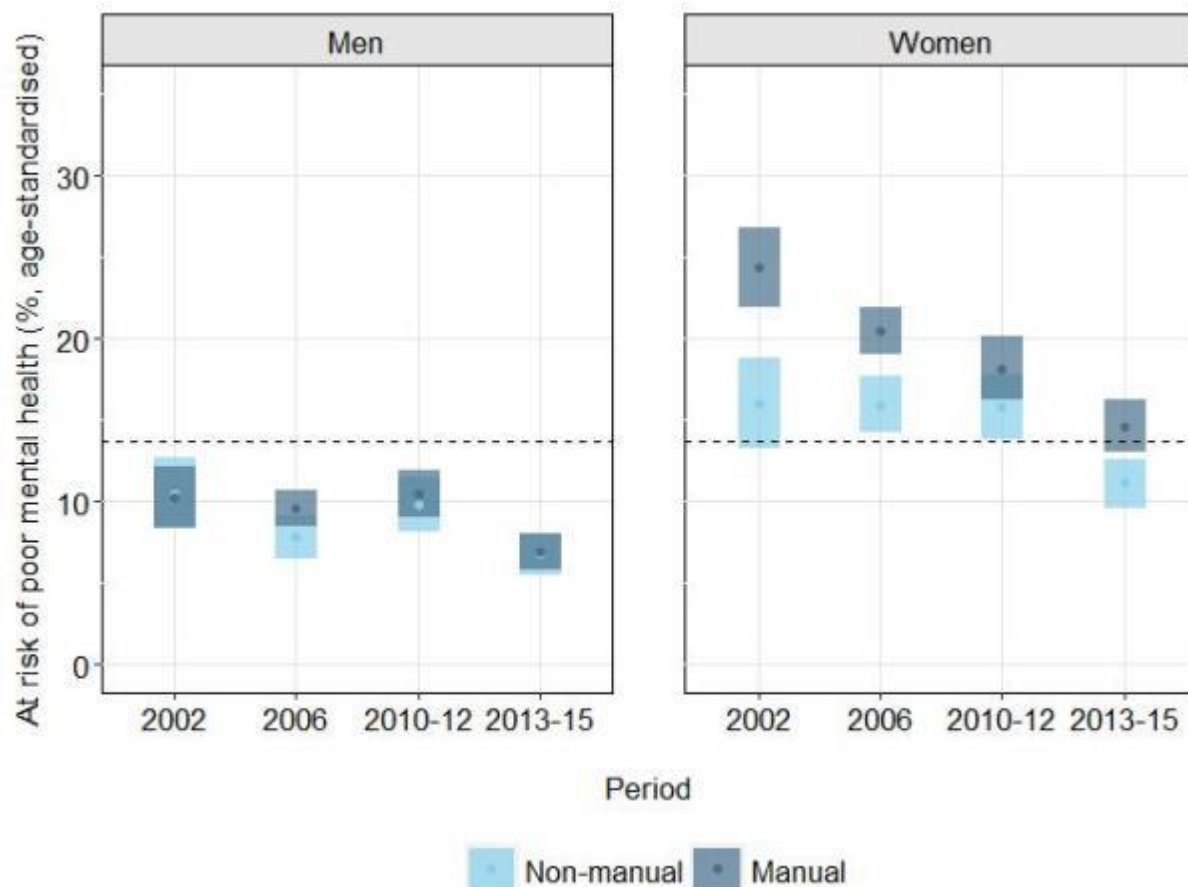


*Persons with a score of 3+ in the 12 questions on mental health (GHQ-12).

Source: Enquesta de Salut de Catalunya (ESCA)

Results (III) Mental health

Proportion of population aged 50+ who is **at risk of poor mental health*** by social class and sex

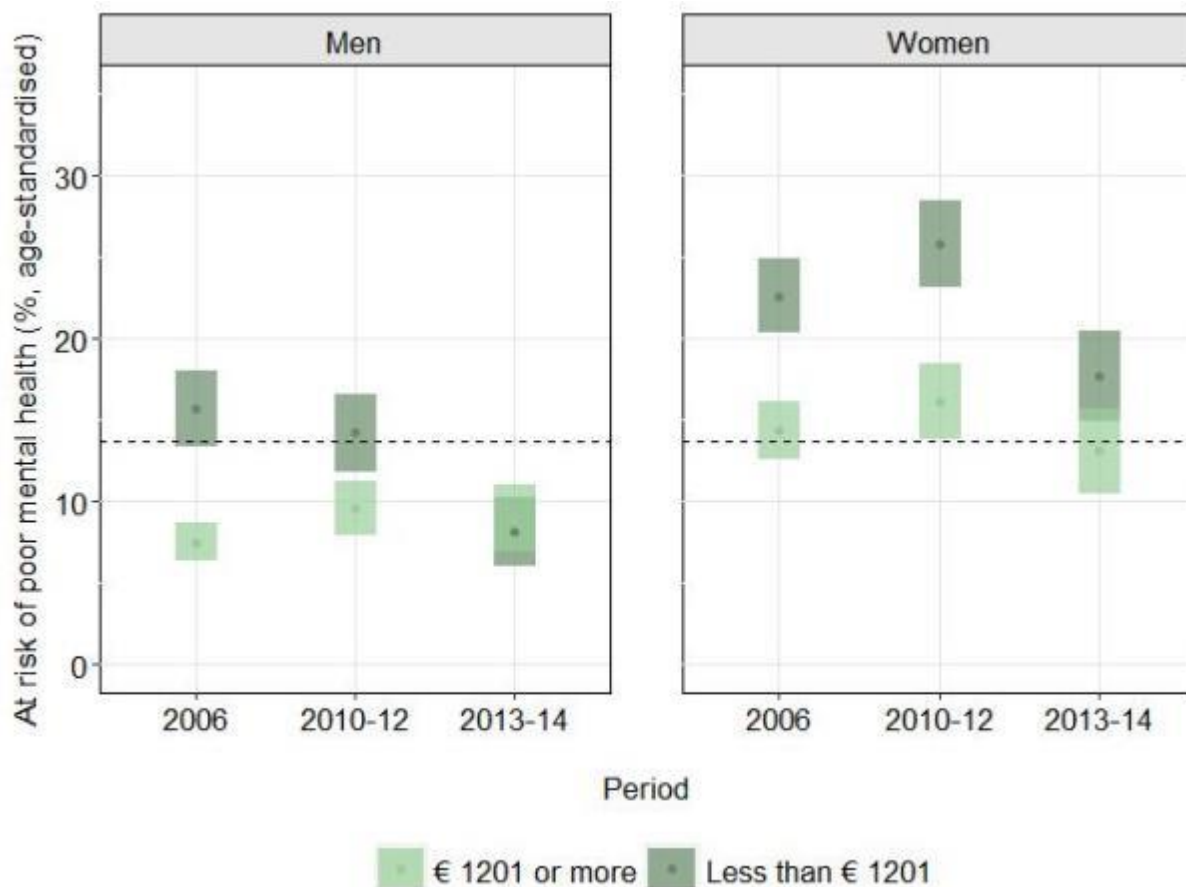


*Persons with a score of 3+ in the 12 questions on mental health (GHQ-12).

Source: Enquesta de Salut de Catalunya (ESCA)

Results (III) Mental health

Proportion of population aged 50+ who is **at risk of poor mental health*** by household income and sex



*Persons with a score of 3+ in the 12 questions on mental health (GHQ-12).

Source: Enquesta de Salut de Catalunya (ESCA)

Results (III) Mental health

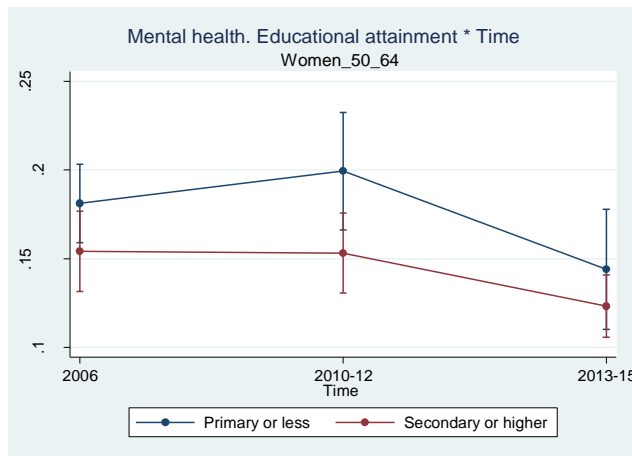
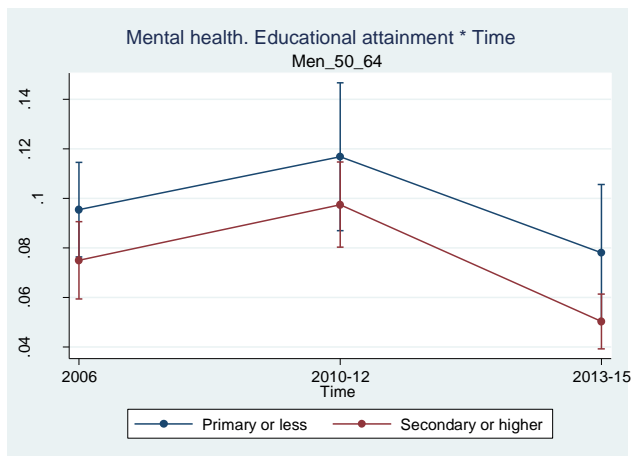
Proportion of population **at risk of poor mental health***

Multivariate model results for **education** for men and women aged 50-64 and 65+#

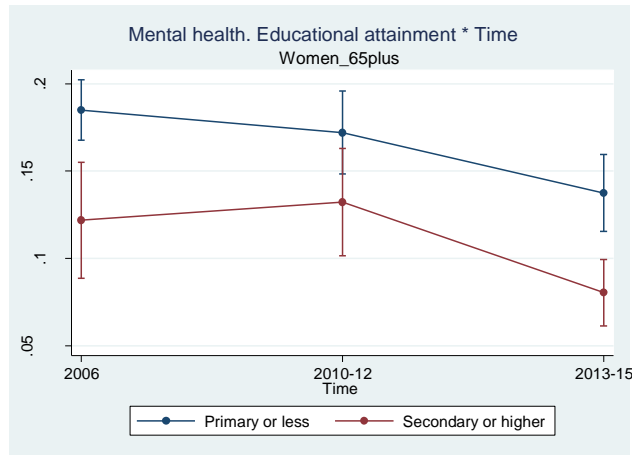
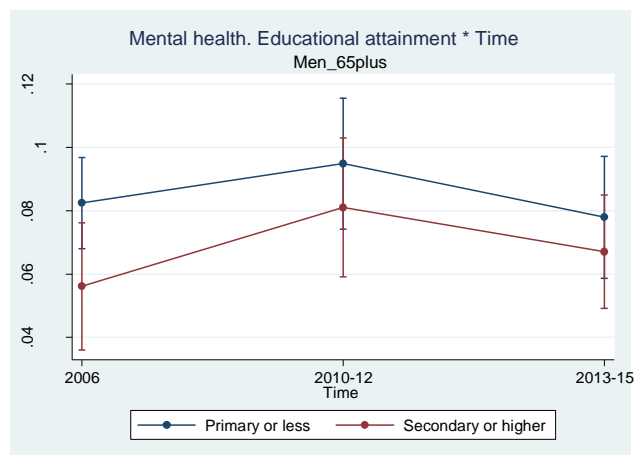
Men

Women

50-64



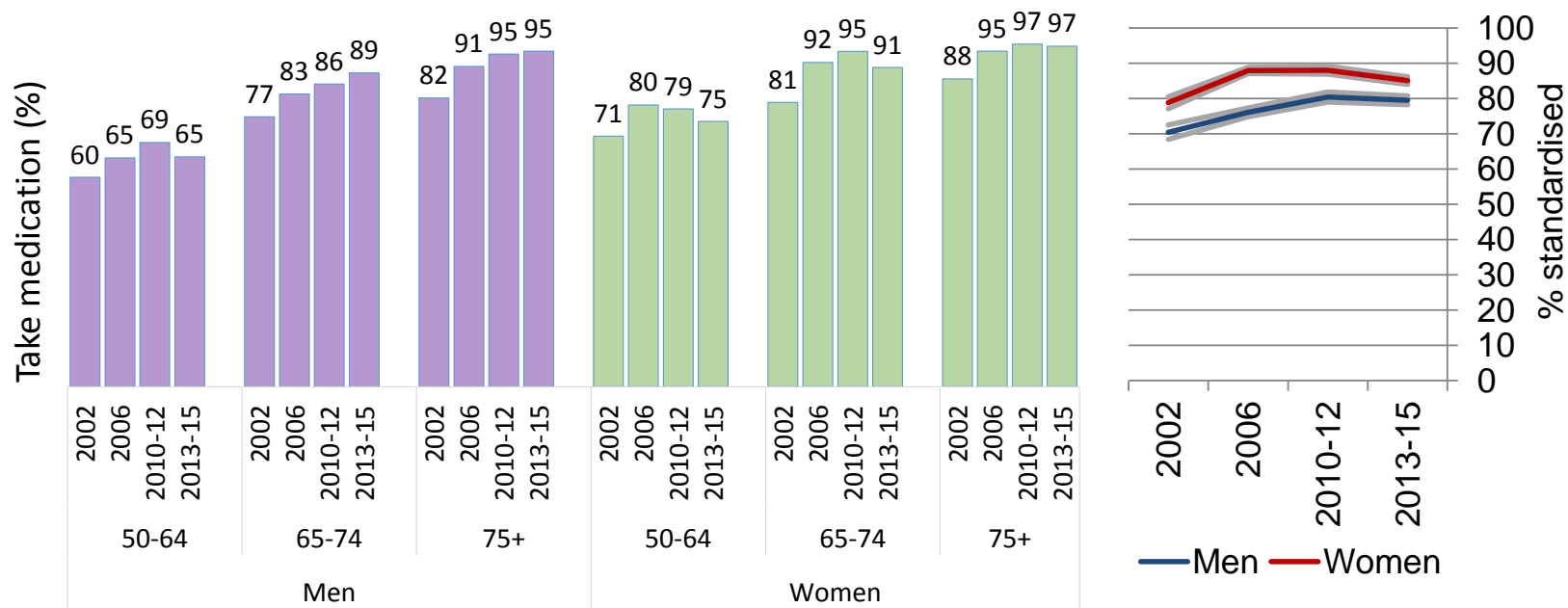
65+



*Persons with a score of 3+ in the 12 questions on mental health (GHQ-12). # Controlled for age, sex, place of origin, partner co-residence, number of house-hold members, employment status, household income and type of health insurance coverage and social class. Source: Enquesta de Salut de Catalunya (ESCA)

Results (IV) Medicine intake

Proportion of 50+ year old population that has taken medication* by sex and age

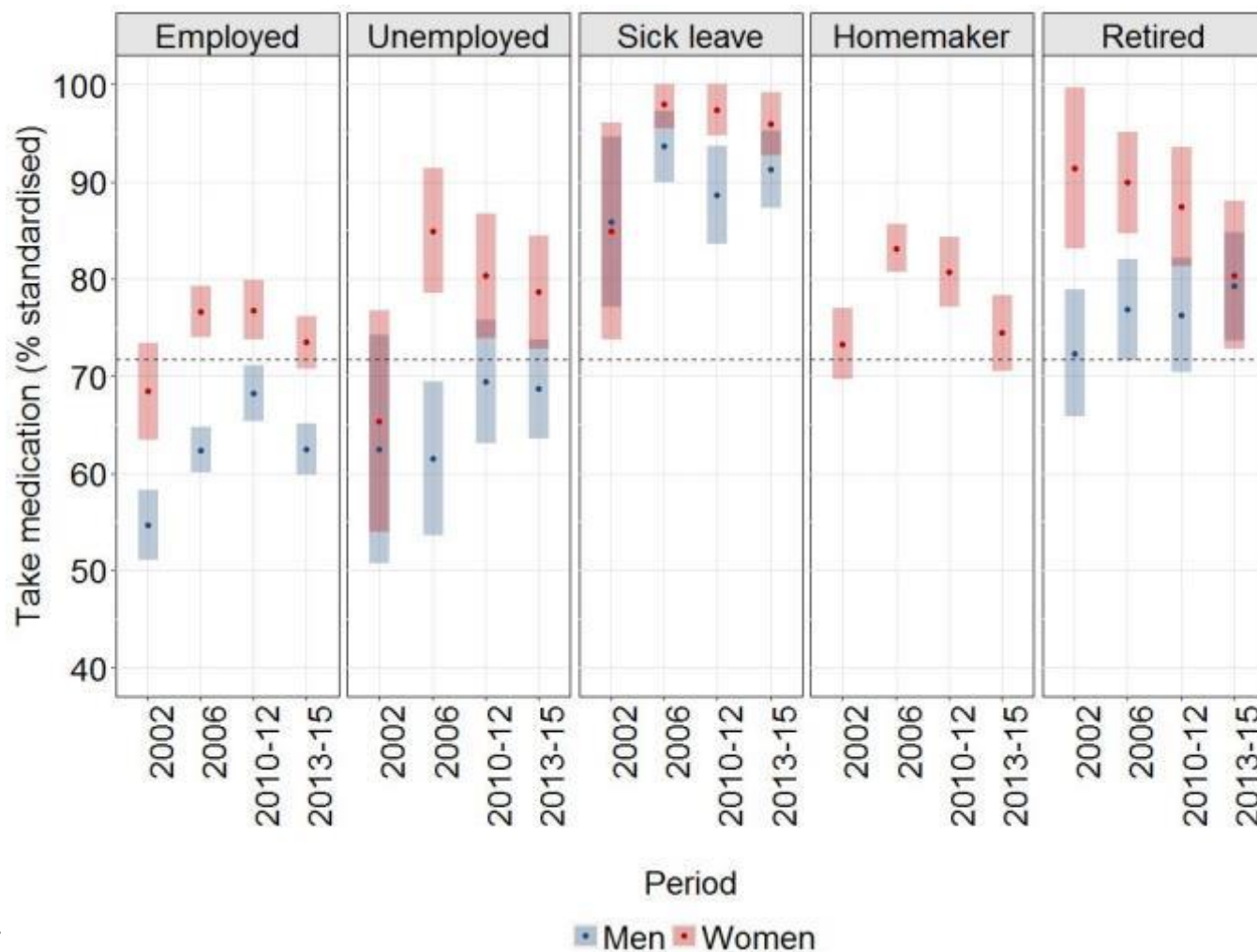


* During the last 2 days.

Source: Enquesta de Salut de Catalunya (ESCA)

Results (IV) Medicine intake

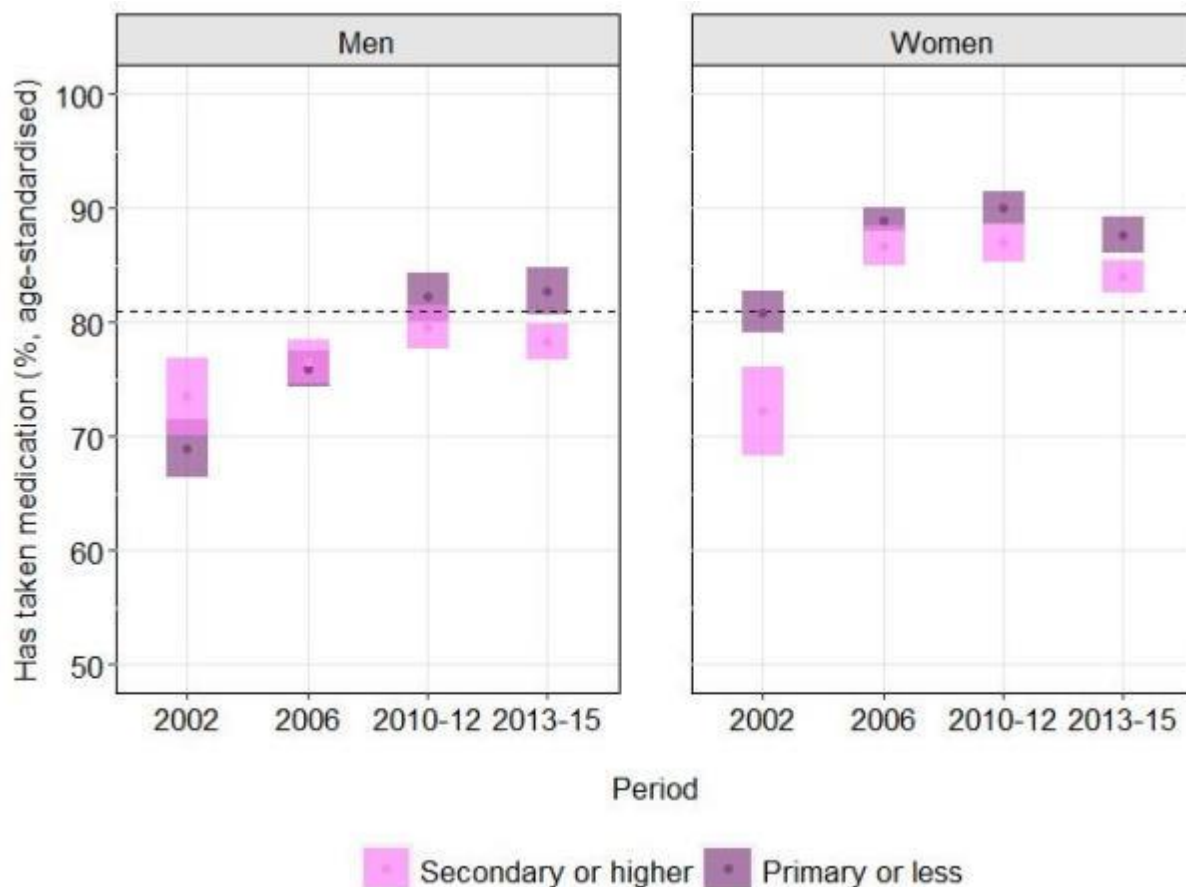
Proportion of population aged 50-64 that **has taken medication*** by employment status and sex



*During the last 2 days.
Source: Enquesta de Salut de Catalunya (ESCA)

Results (IV) Medicine intake

Proportion of population aged 50+ that **has taken medication*** by educational attainment and sex

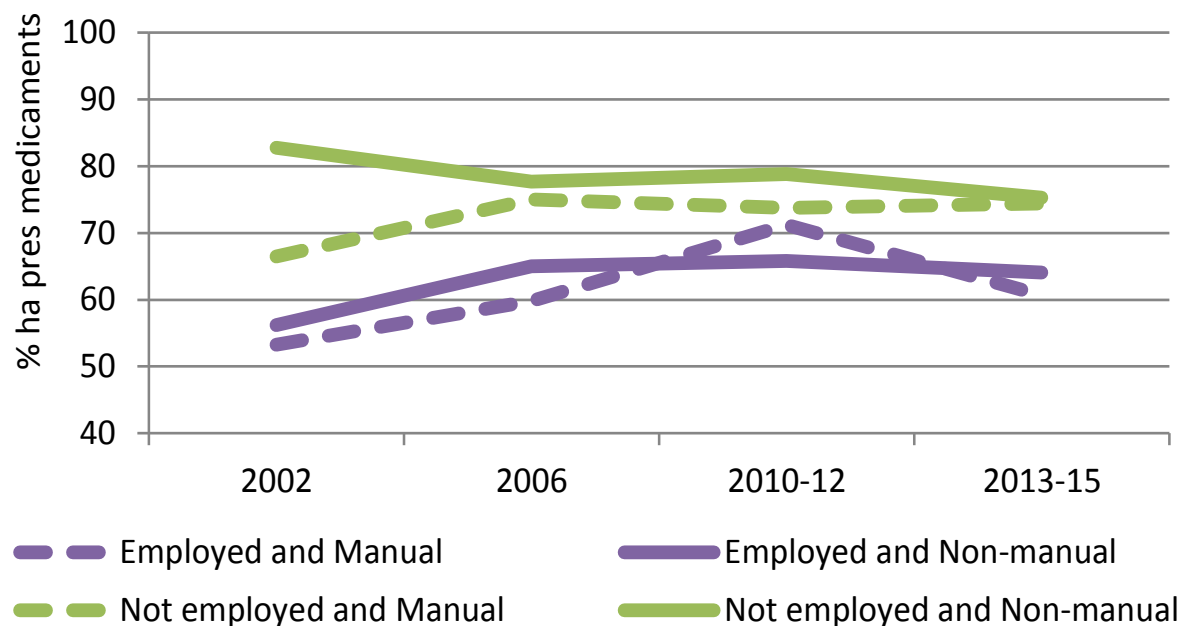


* During the last 2 days.

Source: Enquesta de Salut de Catalunya (ESCA)

Results (IV) Medicine intake

Proportion of population aged 50-64 who **has taken medication*** by employment status and social class. Men, Catalonia, 2002-15



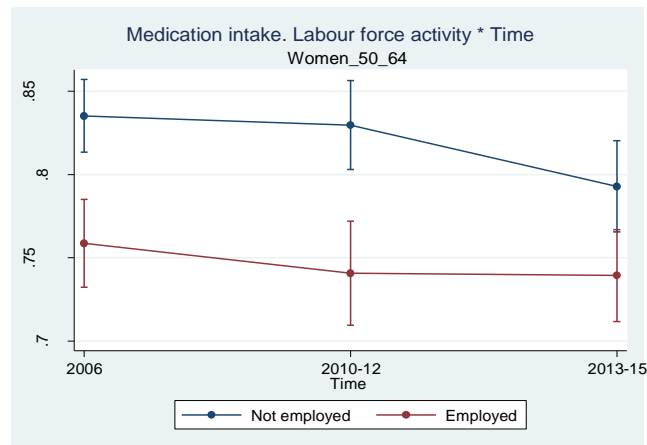
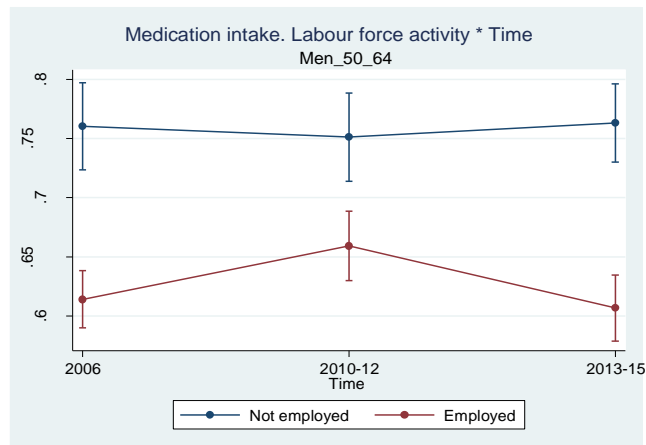
Again, what makes a difference is employment status.

* During the last 2 days.
Source: Enquesta de Salut de Catalunya (ESCA)

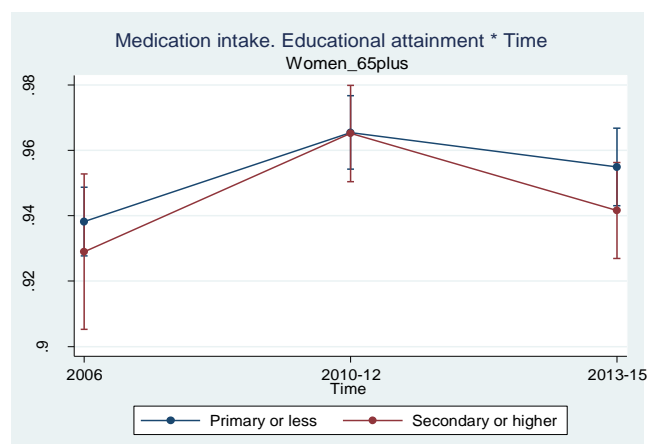
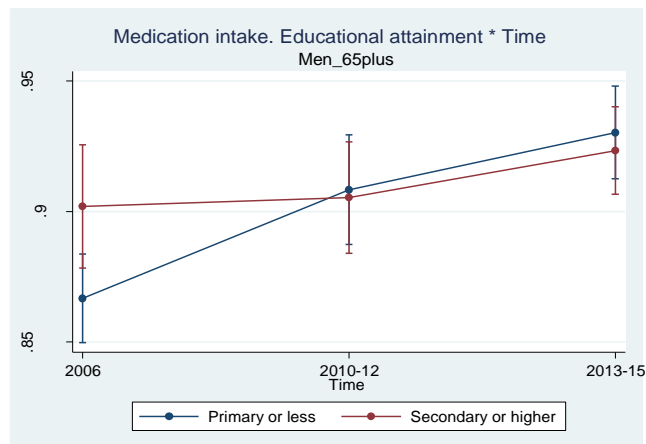
Results (IV) Medicine intake

Proportion of population that **has taken medicine***

Multivariate model results for **employment status** for men and women aged 50-64



Multivariate model results for **education** for men and women aged 65+



*Persons with a score of 3+ in the 12 questions on mental health (GHQ-12). # Controlled for age, sex, place of origin, partner co-residence, number of house-hold members, employment status, household income and type of health insurance coverage and social class. Source: Enquesta de Salut de Catalunya (ESCA)

Conclusions (I)

General self-perceived health

- Overall, it did not get worse during the crisis period, including among the lower SES categories, **BUT IT DID SO DURING THE BOOM IN THE CASE OF WOMEN.**
- Crossing different SES variables, the importance of social class (and other SES variables except education) disappeared during the crisis. **What differentiates is working or not working.**

Disability

- Overall, it did not get worse during the crisis period, including among most lower SES categories. However, it increased among 50-64 year olds who did not work, both during the boom and the first period of the crisis (2010-12) and without improvement among the less educated.

Risk of having bad mental health

- Worsened during the FIRST period of the crisis among men aged 50+ and women aged 50-64, not only among the lowest categories of SES but even more among the highest categories. **WHY?**
- However, during the second period, the risk of having poor mental health reduced to previous levels.

Conclusions (II)

H4: Medicine intake

- Already increased between 2002 and 2006. Stabilized among women in 2010-12 and among men in 2013-15. However, **continued to increase among long-term unemployed men (not shown here)**, but **declined particularly among the (pre-)retired (were laid off under good conditions?)**. Few differences between the high and low categories in the other variables. **What differentiates is working or not working (except for retirees)**.

One possible explanation for the apparent anti-cyclical relationship in relation to labour force activity is the increase in the relative weight of the population with a less favorable profile, a profile that is associated with poor health. For example, the socioeconomic profile of the Spanish population shows a deterioration due to the increase in unemployment. However, the group of unemployed has not only become much larger because of the crisis, but has also become more heterogeneous in terms of health since it includes more people in good health.

Thanks!

Jeroen Spijker

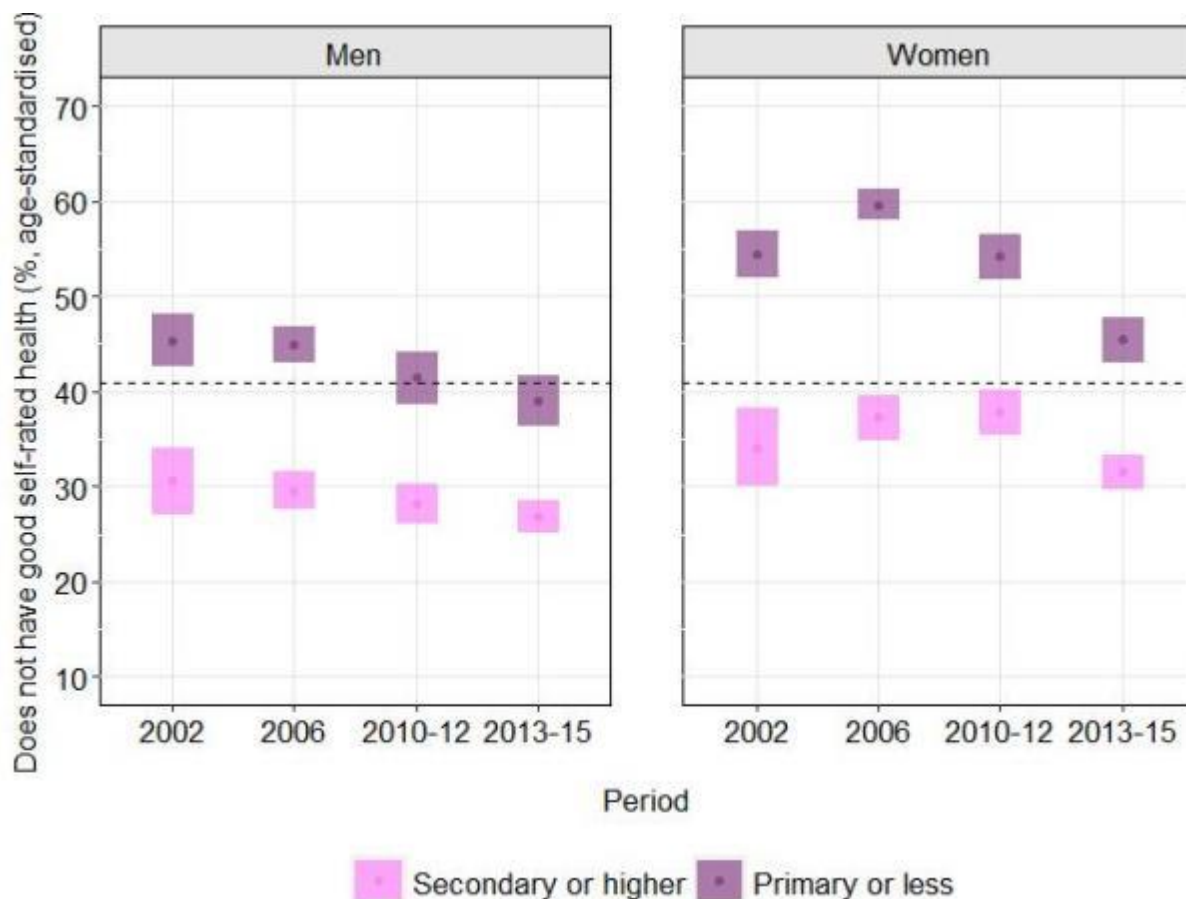
jspijker@ced.uab.es



reCERCaixa

Results (I) Self-perceived health

Proportion of population aged 50+ that **does not have good self-perceived health*** by educational level and sex

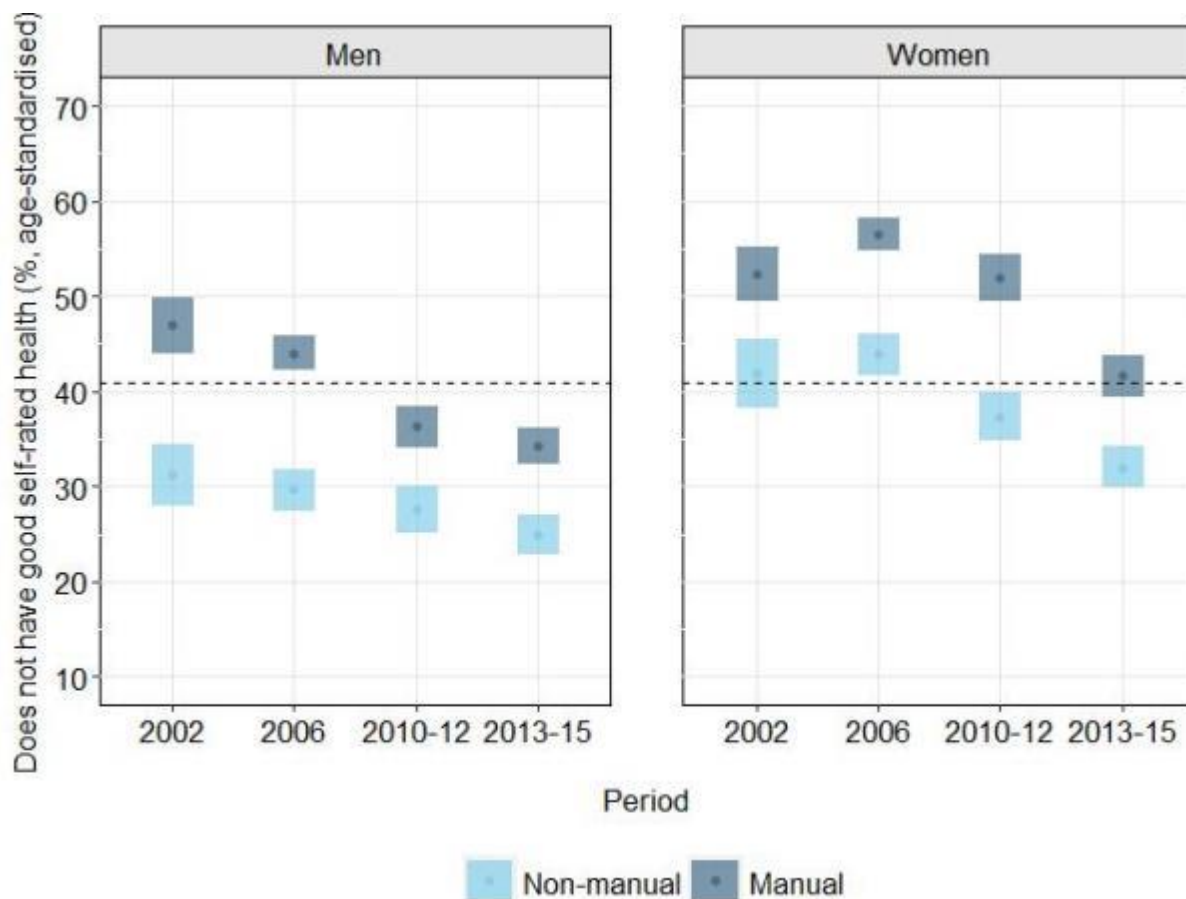


*Regular and bad.

Source: Enquesta de Salut de Catalunya (ESCA)

Results (I) Self-perceived health

Proportion of population aged 50+ that **does not have good self-perceived health*** by household social class and sex

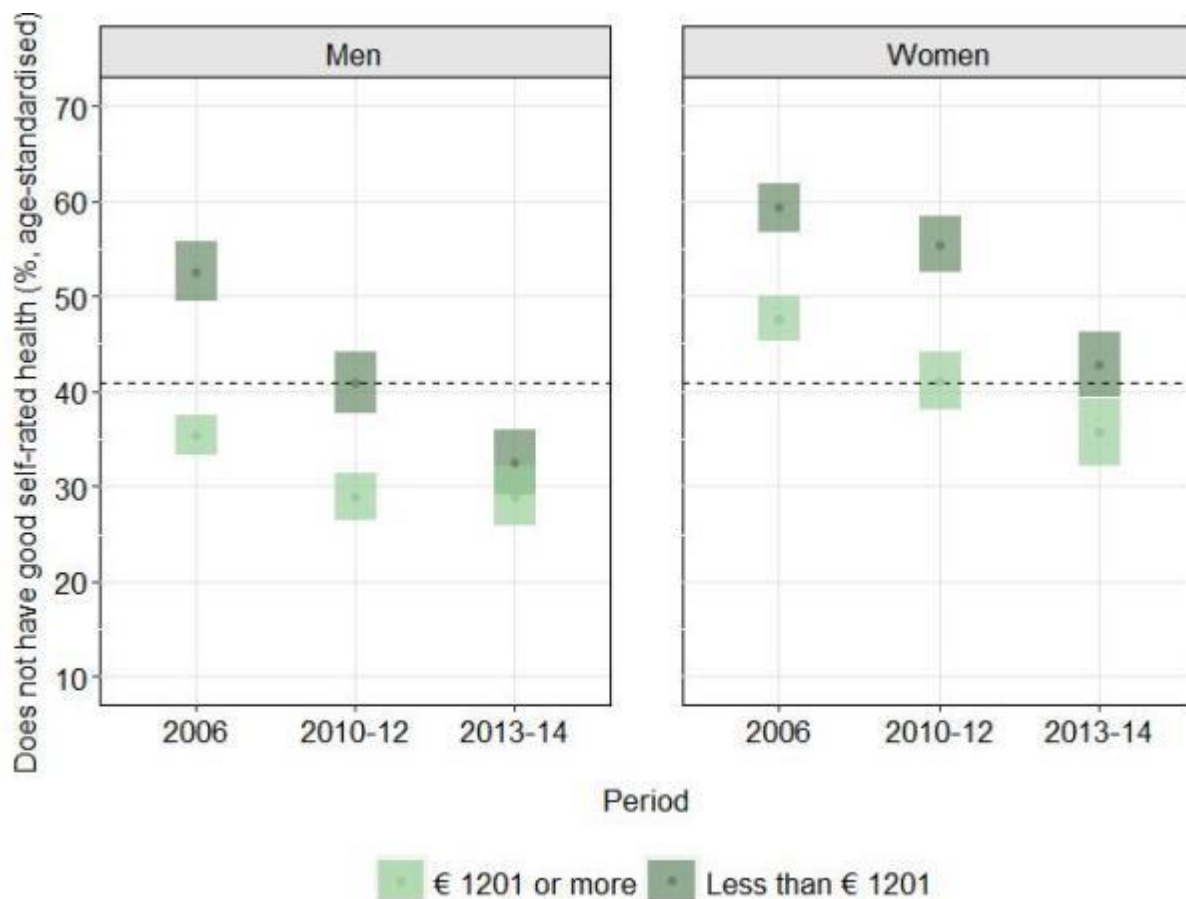


*Regular and bad.

Source: Enquesta de Salut de Catalunya (ESCA)

Results (I) Self-perceived health

Proportion of population aged 50+ that **does not have good self-perceived health*** by household income and sex

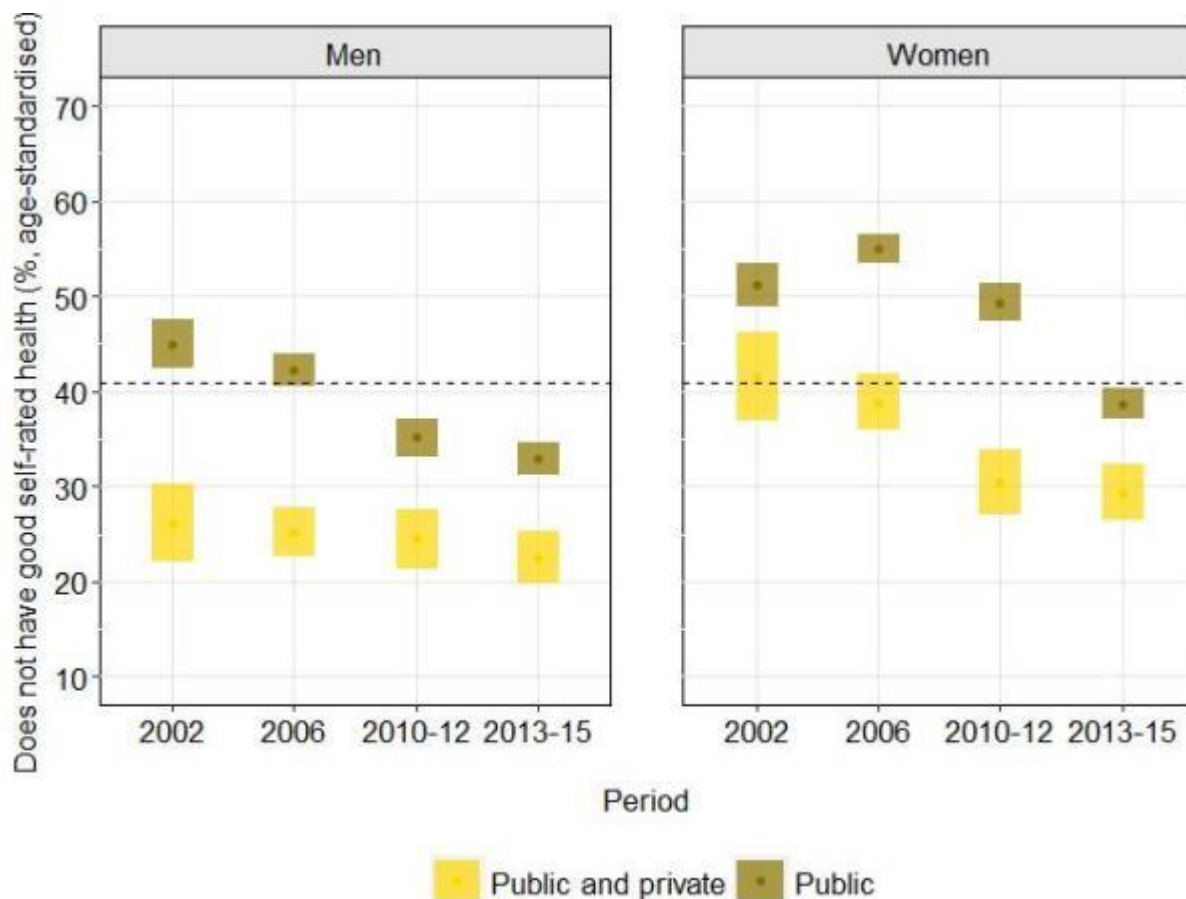


*Regular and bad.

Source: Enquesta de Salut de Catalunya (ESCA)

Results (I) Self-perceived health

Proportion of population aged 50+ that **does not have good self-perceived health*** by health care coverage and sex

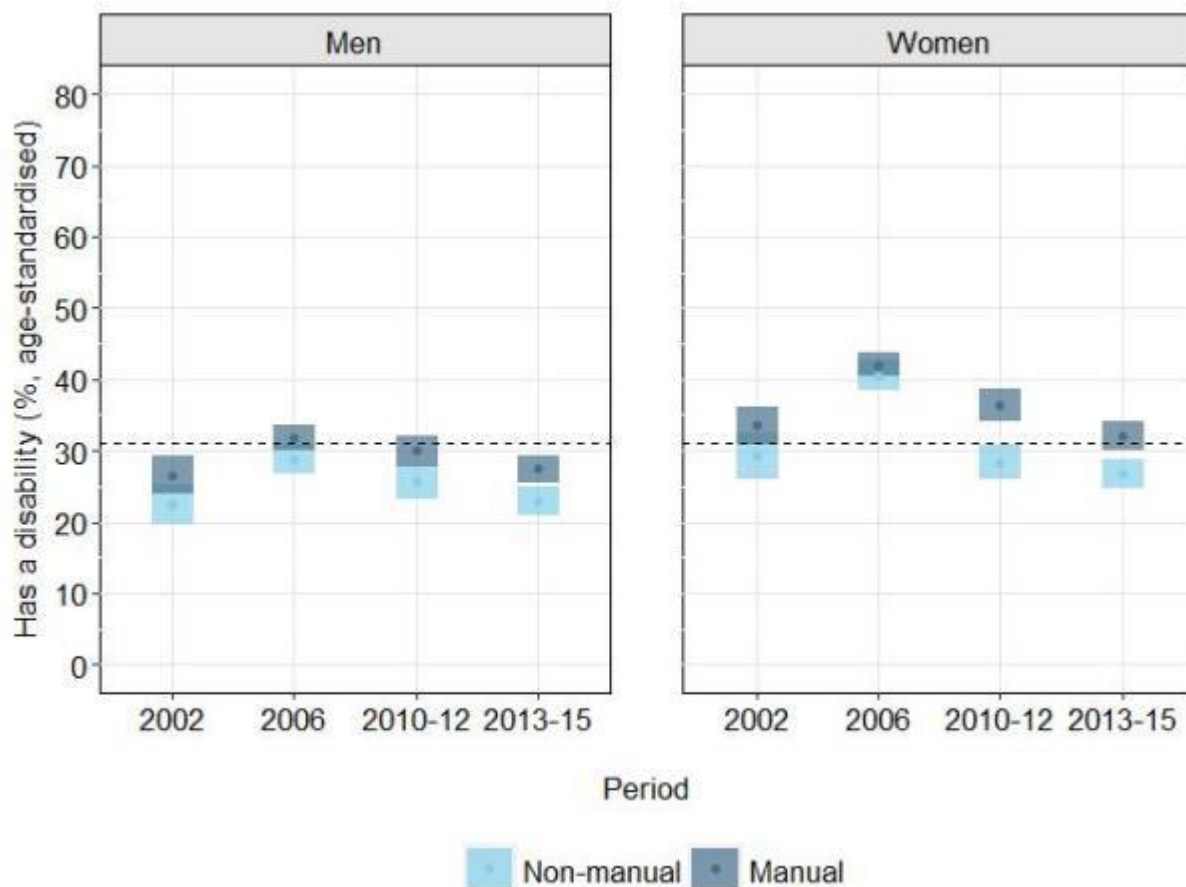


*Regular and bad.

Source: Enquesta de Salut de Catalunya (ESCA)

Results (II) Disability

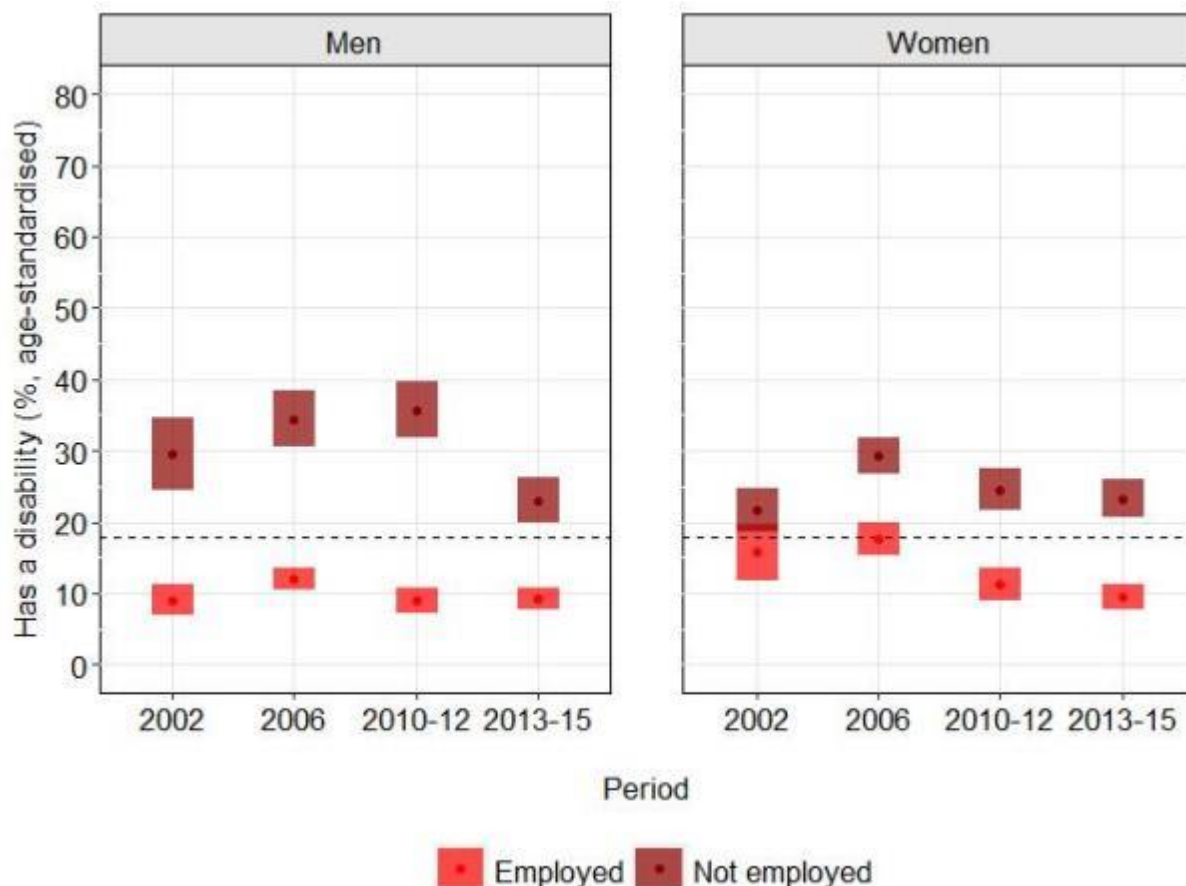
Proportion of population aged 50+ that **has a disability** by social class and sex



Source: Enquesta de Salut de Catalunya (ESCA)

Results (II) Disability

Proportion of population aged 50-64 that **has a disability** by employment status and sex



Source: Enquesta de Salut de Catalunya (ESCA)