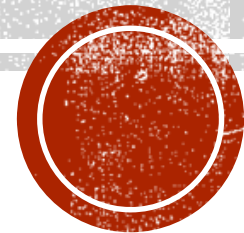


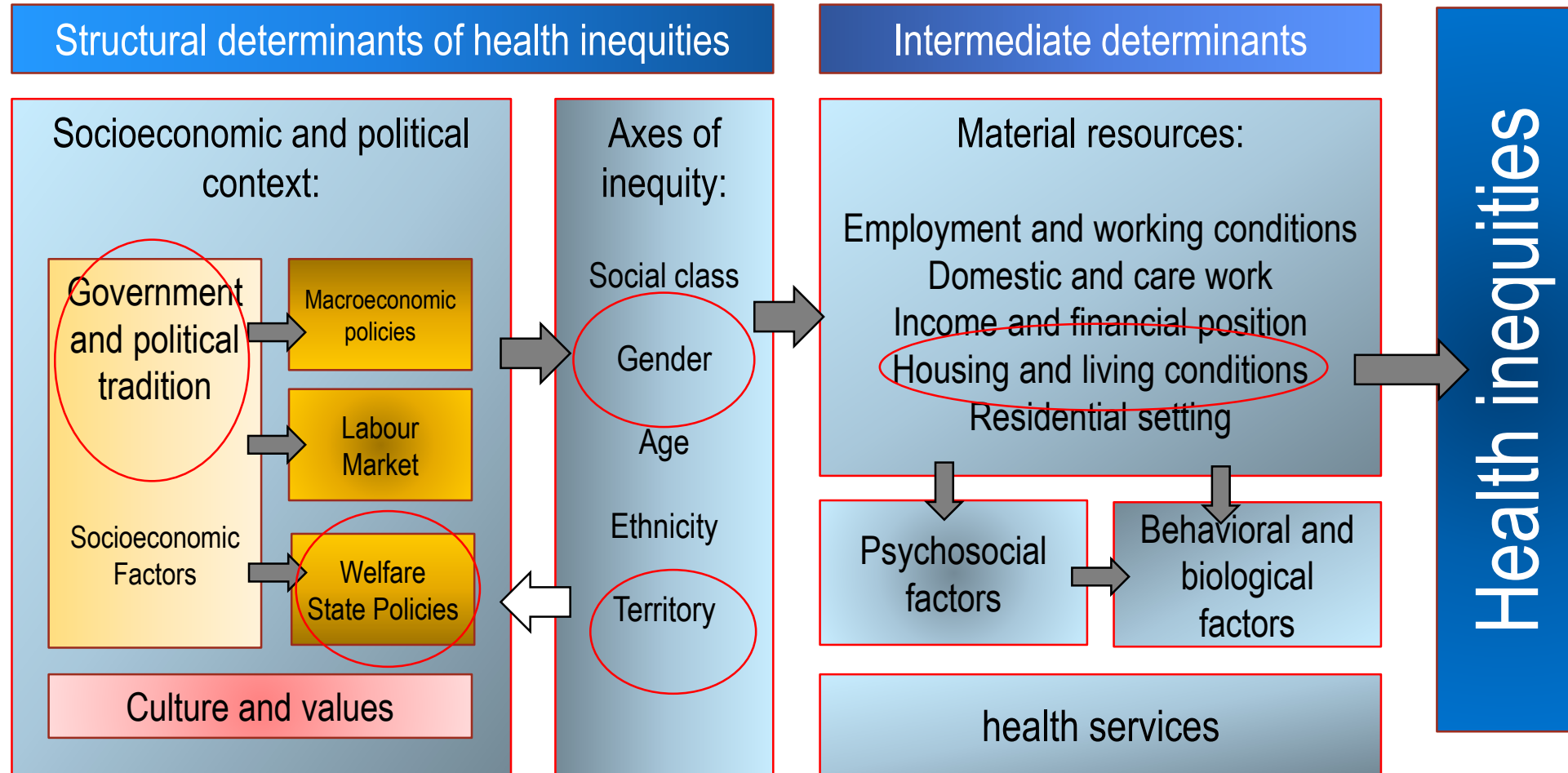
A LONGITUDINAL STUDY ABOUT HEALTH, GENDER, THE LABOUR MARKET, AND SOCIAL PROTECTION POLICIES DURING THE FINANCIAL CRISIS IN EUROPE

Araceli Rojo Gallego-Burín, Luisa Delgado Márquez, Manuel Correa
Gómez, Silvia Calzón Fernández



A longitudinal study about health, gender, the labour market, and social protection policies during the financial crisis in Europe

JUSTIFICATION



SOURCE: COMISIÓN PARA REDUCIR LAS DESIGUALDADES SOCIALES EN SALUD EN ESPAÑA, 2012

OBJECTIVES

- 1) To analyze the gender differences in the relationship between the characteristics of residence housing and the type of tenure, and the health of the European population in the period 2011-2014
 - 2) To study the relationship between the institutional quality of the EU countries and social protection spending, and the health of the European population in the period 2011-2014
-

ANTECEDENTS (I):

- Prior literature analyzes the relationship between housing and health at both the individual and neighborhood level.
 - Poor housing conditions are related to poor health and life quality reduction. (Dunn, 2000; Evans, et al. 2003; Bonnefoy, 2007; Pevalin et al., 2008; Thomson and Thomas, 2015).
 - Physical conditions: humidity, mold, poor energy efficiency, can lead to allergic and respiratory problems, in addition to mental health problems, even reaching mortality (Leventhal y Newman 2010; WHO 2011; Rauh et al. 2008; Suglia et al. 2011).
-

A longitudinal study about health, gender, the labour market, and social protection policies during the financial crisis in Europe

ANTECEDENTS (II): ENERGY POVERTY



Situation in which a household “is unable to pay an amount of energy sufficient to satisfy their domestic needs and / or when they are forced to allocate an excessive part of their income to pay the home energy bill”
(Boardman 1991, 2012; Moore 2012)

A longitudinal study about health, gender, the labour market, and social protection policies during the financial crisis in Europe

ANTECEDENTES (II): ENERGY POVERTY

- Method used in the EU to measure energy poverty:
 - Consensual method: subjective impressions of households on the level of energy service achieved in the home. Initially proposed by the Irish researchers Healy & Clinch (2002), based on the use of the results of the Eurostat Living Conditions Survey (EU-SILC).
-

ANTECEDENTS (III): ENERGY POVERTY

- Consensual method: (3 Questions, it is enough if you answer Yes to any of them)
 - Are you able to keep your home at a suitable temperature during the cold season?
 - Do you have delays in the payment of electricity or gas bills?
 - Does your home have any deficiencies related to energy poverty, leaks, rot or humidity?
-

ANTECEDENTS (IV): HOME OWNERSHIP

- Some literature states that home ownership has positive effects on health. Reasons: the stability and accumulation of wealth offered by own housing (Smith et al., 2003; Macintyre et al. 2003); greater psychosocial well-being (Cairney & Boyle 2004, p.171; Kearns et al. 2000); and, lower mortality risk rates (Breeze et al. 1999).
 - However, other studies do not find that being homeowner protects health (Rohe and Stewart; 1996; Mehdipanah et al. 2017)
-

ANTECEDENTS (V): GENDER PERSPECTIVE

- The impact of gender on the relationship between housing and health is controversial:
 - The link between housing problems (especially humidity, mold and leaks) and general health is stronger for men than for women (Boomsma et al., 2017).
 - Home ownership affects men's mental health more than women's (Pevalin et al., 2008).
 - Home ownership affects women's perceived health more than men's (Pevalin et al., 2008).
 - The most vulnerable households from a financial point of view, and therefore those with a higher risk of mortgage default, are those whose head of household is a woman and self-employed (Sánchez-Martínez et al., 2016).
-

ANTECEDENTS (): CORRUPTION AND HEALTH

- Theoretical framework:
Corruption of institutions in general as a proxy variable for the corruption of the health system. (Bate & Mathur, 2018)
It is associated with low quality in health care, poor practice in contracting and supply. And low control and absence of responsibility of the managers. (Li et al., 2018)
Social and human cost especially pronounced in the most disadvantaged people. (Mackley et al., 2018; Witvliet et al., 2013).
 - Gender differences:
UN (2011). Women most affected by corruption (greater demand for services).
-

A longitudinal study about health, gender, the labour market, and social protection policies during the financial crisis in Europe

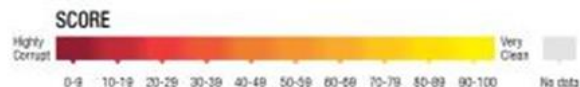
ANTECEDENTS (): CORRUPTION AND HEALTH

CORRUPTION PERCEPTIONS INDEX 2018

WESTERN EUROPE & EUROPEAN UNION

66/100

AVERAGE SCORE



SCORE	COUNTRY/TERRITORY	RANK	SCORE	COUNTRY/TERRITORY	RANK
88	Denmark	1	64	Portugal	30
85	Finland	3	60	Poland	36
85	Sweden	3	59	Slovenia	36
85	Switzerland	3	59	Cyprus	38
84	Norway	7	59	Czech Republic	38
82	Netherlands	8	59	Lithuania	38
81	Luxembourg	9	58	Latvia	41
80	Germany	11	58	Spain	41
80	United Kingdom	11	54	Malta	51
78	Austria	14	52	Italy	53
76	Iceland	14	50	Slovakia	57
75	Belgium	17	48	Croatia	60
72	Estonia	18	47	Romania	61
72	Ireland	18	45	Hungary	64
72	France	21	45	Greece	67
			42	Bulgaria	77

#cpi2018

www.transparency.org/cpi

This work from Transparency International (2018) is licensed under CC BY-ND 4.0

A longitudinal study about health, gender, the labour market, and social protection policies during the financial crisis in Europe

METHODS



Database:

- Individual data: Survey of Living Conditions (EU-SILC, Eurostat), rotating panel 2011-2014. 174.000 women and 155.000 men from 24 european countries. Criteria for inclusion: citizen of any age.
- National data: Corruption Perception Index from Transparency International. Public social expenditure as a percentage of GDP from Eurostat.

Longitudinal multilevel logistic model with 3 levels (level 1: year, level 2: individual, level 3: country) with random intercept:

$$\text{logit}(y_{ijk}) = \beta_0 + \sum_{h=1}^H \beta_h X_{hijk} + \sum_{m=1}^M \alpha_m Z_{mik} + \nu_{0k} + \mu_{0jk} + \epsilon_{ijk}$$

A longitudinal study about health, gender, the labour market, and social protection policies during the financial crisis in Europe

METHODS

LEVEL 1 (year): 435.172 women observations and 381.095 men observations		
Years		2011-2014
LEVEL 2 (individual) 174.410 women and 155.584 men		
Dependent Variable: Perceived Health		Logit model: Good (Very good/ Good) – Bad (Fair/ Bad/ Very bad) {0,1}
Independent Variables		
Individuals	Control	Age Level of education (Primary/Secondary/Higher). Chronic disease
	Housing conditions and tenure	Energy poverty No homeownership without charges.
	Social exclusion	Disposable household income quintiles
LEVEL 3 (Country) 24 european countries		
Country	Institutional quality	Corruption Perception Index, 99 higher – 0 lower (absence of perceived corruption).
	Social expenditure	Percentage of GDP allocated to Social Protection Expenditure.

A longitudinal study about health, gender, the labour market, and social protection policies during the financial crisis in Europe

RESULTS

Women

- VPC: 8.2%
- Odd ratios (p-value):
 - Energy Poverty: 1.53 (0.00)
 - No homeownership without charges: 1.31 (0.00)
 - Income:
 - Quintile 1: 1.22 (0.00)
 - Quintile 2: 1.10 (0.00)
 - Quintile 4: 0.88 (0.00)
 - Quintile 5: 0.69 (0.00)
 - Social Expenditure as % GDP: 0.97 (0.00)
 - Corruption Perception Index: 0.98 (0.00)

Men

- VPC: 8.0%
 - Odd ratios (p-value):
 - Energy Poverty: 1.63 (0.00)
 - No homeownership without charges: **1.18 (0.10)**
 - Income:
 - Quintile 1: 1.27 (0.00)
 - Quintile 2: 1.12 (0.00)
 - Quintile 4: 0.86 (0.00)
 - Quintile 5: 0.72 (0.00)
 - Social Expenditure as % GDP: 0.97 (0.025)
 - Corruption Perception Index: 0.98 (0.021)
-

CONCLUSIONS

- Our results coincide with the literature that energy poverty is associated with poor perceived health, both in men and women, but only partially coincide in relation to home ownership , which is only significant for women.
 - Aid to reduce energy poverty, such as the thermal or electrical social bonus, can be effective in improving the health of the most disadvantaged families.
 - The variables at the country level, social protection spending and perceived corruption are significant, although the former may have a lower impact on health, the design of public policies and legislation that contribute to reducing corruption and increasing institutional quality may have a great impact on the perceived health of the European population.
-

THANK YOU FOR YOUR KIND ATTENTION



A longitudinal study about health, gender, the labour market, and social protection policies during the financial crisis in Europe

Araceli Rojo Gallego-Burín, Luisa Delgado Márquez, Manuel Correa Gómez, Silvia Calzón Fernández

