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Climate change and reproductive intentions in Europe

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BACKGROUND

On the relationship between environment and population

Climate change is largely anthropogenic and, in turn, a continuous worsening of environmental conditions has strong impacts on the well-being of both populations and individuals (Lutz 2009).

BACKGROUND

On the relationship between environment and population

- Population as a cause of climate change
- Consequences on population dynamics:
 - Morbidity and mortality
 - Migration
 - Reproductive health
 - Family behaviours
 - Values and beliefs
 - Policy

AIM OF THIS STUDY

To investigate the effects of worsening environmental conditions on human reproduction in most highly industrialized countries

- **Biological effect** on fecundity and reproductive health of women and men
(not dealt with in this presentation)
- **Behavioural effects** → *human choices and responsible behaviours*:
 - individuals afraid of a foreseen unhealthy environment tend to delay childbearing or give up having children altogether
 - Individuals revise their reproductive plans in order to reduce their ecological footprint

HYPOTHESIS

**THE MORE CONCERNED INDIVIDUALS ARE
ABOUT CLIMATE CHANGE,**

**THE FEWER CHILDREN THEY HAVE, OR THE
FEWER CHILDREN THEY PLAN TO HAVE IN
THE FUTURE.**



What is the level of «concern» about climate change?

A review of public opinions and attitudes on climate change in Europe and the U.S. (Lorenzoni & Pidgeon, 2006):

- 1992 Gallup Survey on Global Health:
in 13 out of 24 countries world-wide, more than half of the respondents reported climate change as a serious problem;
- Special Eurobarometer (EB) surveys 1992, 1995, 2002, 2004 and 2007 with specific question items on environment show:



- a) A WIDESPREAD CONCERN FOR ENVIRONMENTAL ISSUES
- b) AN INCREASING AWARENESS OF THE ENVIRONMENT'S ROLE NOT ONLY AT A SOCIETAL LEVEL BUT ALSO IN PEOPLE'S OWN LIVES

DATA

Eurobarometer survey, 2011, in the 27 EU countries

- A cross-country survey on public opinions, attitudes and expectations of European citizens

<http://www.europarl.europa.eu/aboutparliament/en/00191b53ff/Eurobarometer.html>

- Our analytical sample: 8278 people aged 20 to 45 who answered the question on fertility intentions: 3556 childless, 2096 with one child, and 2626 with two children.

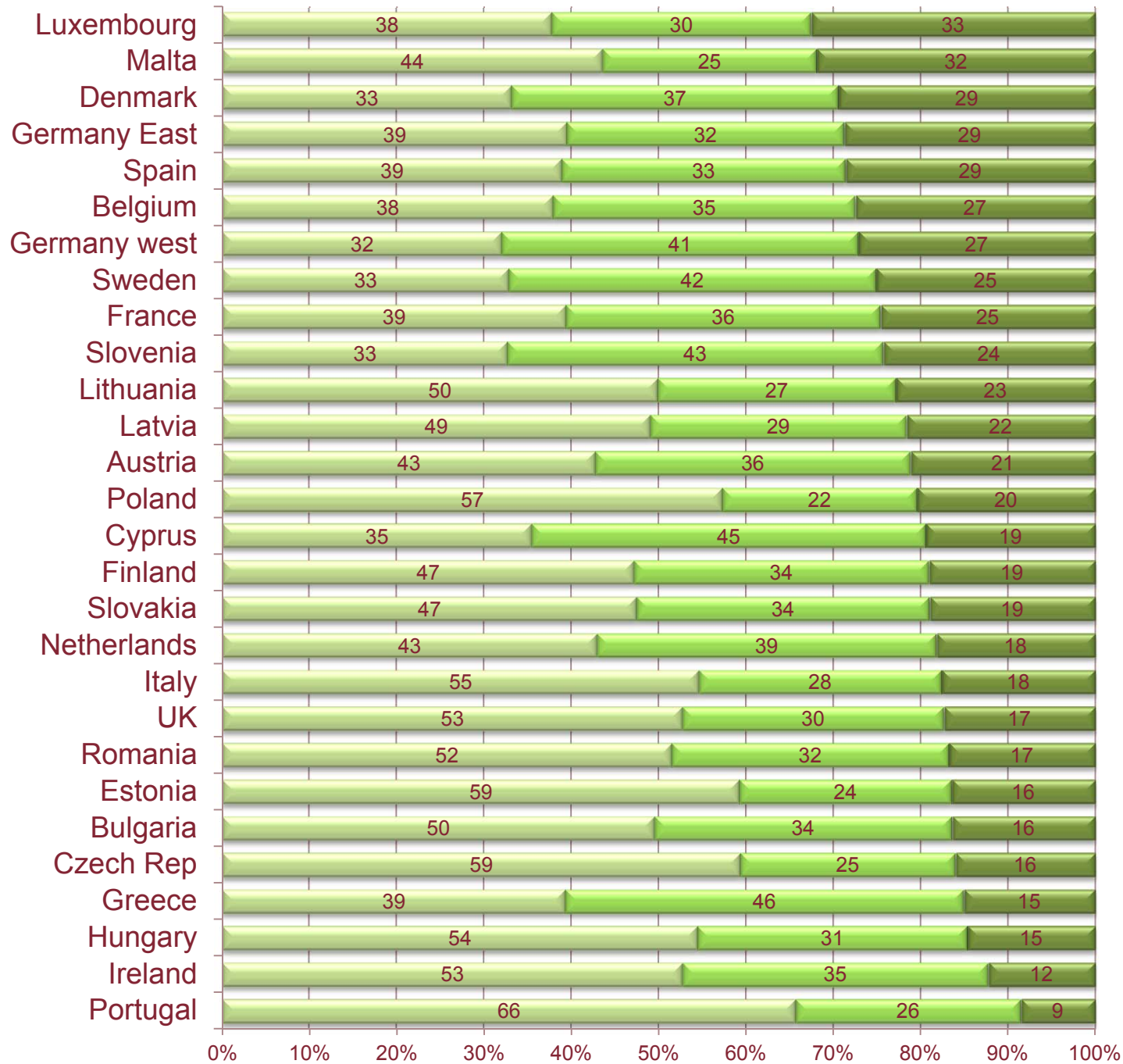
WHERE ARE THE MORE CONCERNED PEOPLE ?

Figure I

Women and men of reproductive age (20-45) who consider climate change a problem or the biggest problem for the future (%)

Source: Eurobarometer survey, 2011, in the 27 EU countries

Figure I



CLIMATE CHANGE SEEN AS

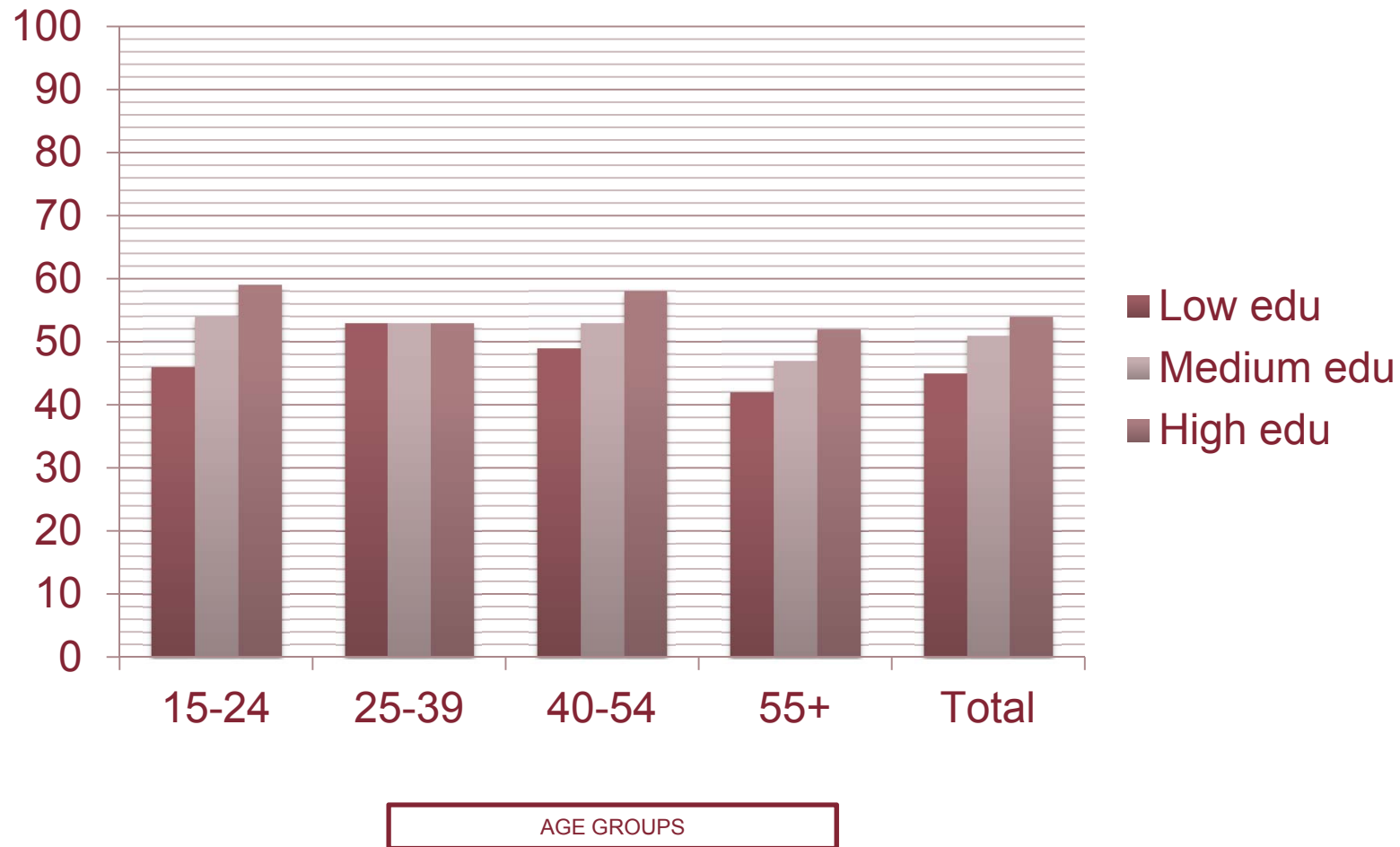
- not a problem
- one of the problem
- the biggest problem

Source: Eurobarometer, 2011

WHO ARE THE MORE CONCERNED PEOPLE?

- Overall, the highest percentages of “unconcerned” people are in the eastern and southern European countries (except for Spain): an effect of good policies?
- People from an urban context are more worried than those living in the countryside
- Positive educational gradient: those more educated are more worried than less educated persons
- Positive age cohort gradient: the youngest are more worried than the oldest

Figure II Persons reporting concerns about climate change by age and level of education (in %). 27 EU countries pooled together.



Estimating the effects of environmental concern on intended fertility

Statistical model: Multilevel ordinal regression models on additionally intended number of children

First-level units: Individuals

Second-level units: Countries

Controlling for: Age, gender, education, activity status, self-positioning on social scale

Stratified by: Number of children: 0, 1, 2

RESULTS

- People's concerns about climate change is positively associated with their intended number of children: the stronger the concern, the higher the intended number of children (weak statistical significance)
- No significant variability in the relationship between concerns about climate change and reproductive intentions by education and social status (no significant interaction effects)
- High country-level variability in fertility intentions, but not related to (the extent of) environmental concern in the various populations

CONCLUSIONS

No responsible behaviours in Europe?

Concern related to climate change is growing in all EU countries but there is still a huge cross-country variation

People do not change their family plans because of their environmental concerns

The relationship also works the other way around: individuals who already have or are willing to have a family with a large number of children are more sensitive to environmental issues

IMPLICATION

No responsible behaviours in Europe?

The concern of mothers and fathers to pass on a healthy and enjoyable environment to future generations could have a positive effect on social behaviours and stimulate proper policies at institutional level