

Social demography

Seminar given by Juho Härkönen & Federica Querin

Tuesday, 11:00 – 13:00

Register [online](#)

Contact: Monika.Rzemieniecka@eui.eu

The objective of this seminar is to provide an introduction to population studies, both in terms of substance and method. Demography is a core social science: without populations, there are no societies and the three primary demographic processes of mortality, fertility and migration strongly shape the structure of societies and the social processes associated with it. The seminar discusses some classical and contemporary topics in social demography and population studies, and introduces the basic tools for analyzing these. Topics include: trends and social disparities in mortality, fertility and migration, the demographic transition, family change, life tables and associated measures, summary measures. At the end of the seminar researchers will have developed a critical understanding of the main theories in demography on fertility, mortality, and migration. They will know how to interpret, compute, and appropriately use the most common demographic measures, such as total fertility rates and life expectancy.

Each session has two parts: a substantive part (first hour) and a methods lab (second hour).

Learning objectives

By the end of the seminar, the participants should

- In terms of substance
 - Know how population change and structure depends on mortality, fertility and migration
 - Become familiar with major themes in recent research in social demography
 - Identify and develop a high-quality social demographic research question
- In terms of methods:
 - Understand the sources and structure of basic demographic data
 - Become familiar with basic demographic methods
 - Be able to apply basic demographic methods for empirical research questions

Course requirements

The participants are expected to do the assigned readings before each class. Each substantive session will have a researcher who leads the discussion. Each lab session comes with small assignment. The final assignment consists of a research plan and design for a study in social demography, which will be presented in the last two sessions of the seminar. A fellow researcher will act as a discussant.

Readings

There are assigned readings for each week (lists to be completed). General sourcebooks include

Livi-Bacci, M. 2017. *A Concise History of World Population*. Sixth Edition (or earlier). Wiley Blackwell.

Preston, S., Heuveline, P. & Guillot, M. 2001. *Demography: Measuring and Modeling Population Processes*. Blackwell. (PHG)

Rowland, D. T. 2003. *Demographic methods and concepts*. Oxford University Press.

Weeks, J. R. 2012. *Population: An Introduction to Concepts and Issues*. 12th Edition (or other). Cengage Learning.

The structures of the book chapters and labs do not exactly follow each other, and book chapters can thus appear under several sessions. Also, PHG and Rowland can be generally used as alternative sources for the same method.

1 Introduction: The Demographic Transition and population growth

The first session discusses the sources of population change and the long history of human population development. The lab covers basic types and sources of demographic data, the balancing equation and basic measures of population growth.

Readings: Livi-Bacci, Ch. 1, 2, 4.

2 The mortality transition

Life expectancy has increased dramatically across the world, with a rate of 2 more years each decade (that is, 5 hours every day). Why, and is there an upper limit? The lab introduces demographic rates and estimation of life expectancy.

Readings: Weeks, Ch 5., Rowland, Ch. 8, PHG, Ch. 2.

Oeppen, J. & Vaupel, J. W. 2002. Broken limits to life expectancy. *Science*, 296, 1029-1031.

3 Social differentials in morbidity and mortality

Topics covered include mortality and morbidity differentials by class, gender and migration background. The lab session introduces the life table and age-specific rates as well as the survival function.

Readings:

Elo, I. 2009. Social class differences in health and mortality: Patterns and explanations in comparative perspective. *Annual Review of Sociology* 35:553-72.

Rowland, Ch. 8, PHG, Ch. 3.

Additional readings:

Link, B. G. & Phelan, J. 1995. Social conditions as fundamental causes of disease. *Journal of Health and Social Behavior* 35 (Extra issue): 80-94.

Drefahl, S. et al. 2020. A population-based cohort study of socio-demographic risk factors for COVID-19 deaths in Sweden. *Nature Communications*, 11: 5097.

4 Fertility

The fourth session discusses trends and determinants of fertility in developing and rich countries. In the lab session we introduce period and cohort rates and calculate the Total Fertility Rate.

Readings:

Balbo, N., Billari, F. C., & Mills, M. 2013. Fertility in advanced societies: A review of research. *European Journal of Population*, 29(1), 1-38.

Rowland, Ch. 7; PHG, Ch. 5, Weeks, Ch. 6

5 Family change

The fifth session focuses on the Second Demographic Transition toward less marriage, lower fertility, and more divorce and cohabitation, and socioeconomic differences therein. The lab covers the standardization and decomposition of rates.

Readings:

Lesthaeghe, R. 2010. The unfolding story of the second demographic transition. *Population and Development Review*, 36(2), 211-251.

McLanahan, Sara S. 2004. Diverging destinies: how children are faring under the second demographic transition? *Demography*, 41(4): 607-627.

Rowland, Ch. 4, PHG, Ch. 2

Additional readings:

Cherlin, A. 2012. Goode's *World Revolution and Family Patterns*: A reconsideration at fifty years. *Population and Development Review*, 38(4), 577-607.

Pesando, L.M., & GFC Team. 2019. Global family change: Persistent diversity with development. *Population and Development Review*, 45(1), 133-68.

6 Migration

Basic theories of migration are introduced and discussed. The lab introduces event history analysis as a regression-based method for micro-level demographic data.

Readings:

Massey, D.S., J. Arango, G. Hugo, A. Kouaouci, A. Pellegrino & J.E. Taylor 1993. Theories of international migration: A review and appraisal. *Population and Development Review*, 19, 431-466.

Weeks, Ch. 7.

7 The demographic perspective: individual-level change as a demographic process

The seventh session proceeds to considering how the demographic perspective, in terms of substantive questions and methodological approaches, can inform social scientific questions that are not strictly demographic. This session considers the demographic perspective for studying micro-level change (e.g., labour market careers, introduction of policies, etc.). The lab continues with event history analysis.

Readings: TBC

8 The demographic perspective: macro-level change as a demographic process

In the eighth session we discuss how the demographic perspective can be used to think about societal change at the macro-level. We discuss cohort replacement and population momentum as examples of demographically-fuelled change.

Readings:

Lutz, W. 2013. Demographic metabolism: A predictive theory of socioeconomic change. *Population and Development Review* 38: 283-301.

Blue, L., & Espenshade, T. J. 2011. Population momentum across the demographic transition. *Population and Development Review*, 37(4), 721-47.

Additional readings:

Breen, R. & Ermisch, J. 2017. Educational reproduction in Great Britain: A prospective approach. *European Sociological Review*, 33(4), 590-603.

Kolk, M., Crowden, D., & Enquist, M. 2014. Correlations in fertility across generations: Can low fertility persist? *Proceedings of the Royal Society B: Biological Sciences*, 281(1779), 20132561.

Lutz, W., Kritzinger, S., & Skirbekk, V. 2006. The demography of growing European identity. *Science*, 314(5798), 425.

Preston, S.H., & Campbell, C. 1993. Differential fertility and the distribution of traits: The case of IQ. *American Journal of Sociology*, 98(5), 997-1019.

9 & 10 Presentations

Topics in social demography

1 Introduction: The Demographic Transition and population growth

Livi-Bacci, Chs. 1, 4.

Lee, R. 2003. The Demographic Transition: Three centuries of fundamental change. *Journal of Economic Perspectives*, 17, 167-190.

2 Mortality and morbidity

3 Fertility and family change

Balbo, N., Billari, F. C., & Mills, M. 2013. Fertility in advanced societies: A review of research. *European Journal of Population*, 29(1), 1-38.

4 Migration

Massey, D.S., J. Arango, G. Hugo, A. Kouaouci, A. Pellegrino & J.E. Taylor 1993. Theories of international migration: A review and appraisal. *Population and Development Review*, 19, 431-466.

Demographic data and methods

5 Demographic data and basic measures

- Aggregated data
- Micro-level data
- The life table: Rates and survival
- Lexis diagram

6

- Crude rates
- Standardization and decomposition
- Aggregated measures: Life expectancy and TFR

7 Event history regression

1 Introduction: The Demographic Transition and population growth

Livi-Bacci, Chs. 1, 4.

Rowland, Ch 1-2

2 Demographic data and basic measures

- Aggregate and micro-level data
- Balancing equation
- Person-years, rates and probabilities
- Cohort and period rates

Preston, Ch 1

3 Mortality and morbidity

4 Methods II

Preston Ch 2, 3

- The life table: rates, survival, cumulative hazard, cumulative probability
- Lexis diagram
- Standardization and decomposition
- Life expectancy

5 Fertility and family change

6 Methods III

Preston, Ch. 5

- Fertility models

7 Migration

8 Methods IV

Event history regression

9 The demographic perspective

- Population replacement
- Population momentum

10 Methods V

Stable population