

MAP2030
Modelling Ageing Populations to 2030

nda new dynamics of ageing
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PROGRAMME

Where have all the children gone?
Increasing reports of childlessness in a large-scale continuous household survey
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Why have children?

- personal development and fulfilment
- pleasure
- inheritance
- intergenerational exchange
- gatekeeper to, for example, grandchildren
- *care of the elderly (in a cross-national European survey, 49 per cent of family carers of cared-for older people were children compared with 22 per cent who were spouses/partners)*

Data

- *1986 to 2006 General Household Survey fertility histories women aged up to 59 (to 49 formerly)*

Synthetic cohort approaches

- information obtained from different individuals (as usual)
- *the internal consistency of reports of the same events by members of the same cohorts at different time points in the same survey may be assessed*

GHS Fertility Section

- Women asked: *'Have you ever had a baby - even one who only lived for a short time?'* ('had' replaced by 'given birth to' from 2004)
- if 'yes', then asked *'How many children have you given birth to, including any who are not living here and any who may have died since birth?'*

Repeated cohort measurements

- comparisons possible of reports by women of the same cohort but at different time periods
- information on the proportion of childless women born in a year such as 1946 is available from 18 rounds of the survey between 1986 and 2005 as their age increases from 40 to 59.

Response rates and sample sizes in selected years

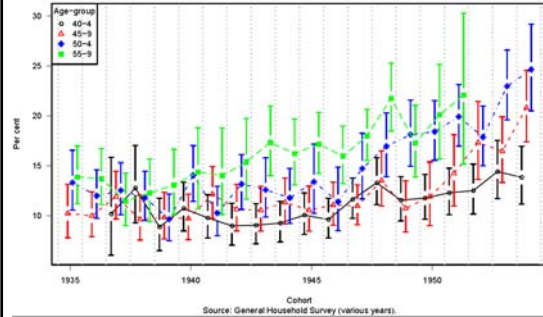
Year	Response rate (%) ¹	Sample size of women	Item non-response rate for childlessness (%)
1981	84	1836	4.7
1986	84	2914	4.1
1991	84	3058	3.2
1996	76	2808	4.7
2001	72	2877	4.0
2006	76	3299	8.6

Proportion childless and mean fertility of parous women by selected age-groups and birth cohort, GHS, 1981-2006

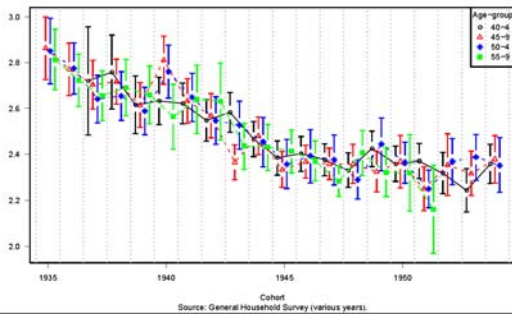
Cohort	Age-group	Childless (%)	Children per parous woman	Total number of respondents
1935-9	40-4	10.4	2.68	965
(11.8)	55-9	12.9	2.71	2712
1940-4	40-4	9.5	2.57	3826
(10.8)	55-9	15.7	2.52	1909
1945-9	40-4	11.2	2.38	4448
(11.0)	55-9	17.9	2.35	3221
1950-4	40-4	12.8	2.33	3544
(14.6)	55-9	20.7	2.27	421

Blue values are official estimates of cohort percent childless; red are own analyses

Estimated proportion of women childless by age-group with 95% confidence intervals



Estimated average family size of parous women with 95% confidence intervals



Results

- the anomalous fertility results are due to an increasing propensity of older women to report themselves as childless as they age
- the discrepancy increases over time

Comparability of estimates over time

- To maximise comparability, as far as practicable, samples drawn from the same cohort at different time points
- The cohort here is women with the same birth year AND resident in the GB private household sector.

The balancing equation

- Changes between two time points in the study population are due to only three types of events to these women in the intervening period:
 - deaths
 - international migration
 - moves between the community and communal sectors
- (internal movements from childless to parous)

The role of differential response

The difference in reported proportions childless with changing age could arise from a **differential response** of childless and parous women in the Survey **over time**

Look at
magnitude of effects
likely direction of effects

Migration as a possible confounder (e.g. 1945-9 cohort)

Place of birth	Age-group	Proportion childless	Fertility of parous women	Total sample size	Item non-response rate for childlessness
UK	40-4	11.1	2.35	4201	2.6
	45-9	11.4	2.32	3646	3.2
	50-4	15.1	2.35	2358	4.3
Abroad	55-9	17.7	2.33	3179	5.0
	40-4	13.1	2.75	382	8.1
	45-9	10.3	2.68	332	12.7
	50-4	16.7	2.67	187	13.4
	55-9	21.4	2.66	240	16.3

Migration as a possible confounder

- Emigration rates are small (0.24% p.a. for UK women 45-59 per annum (includes many returning immigrants)
- **MIGRATION IS NOT THE EXPLANATION**

Mortality as a possible confounder

- about 5% of women born in 1945 in England and Wales died between ages 40 and 60
- if all these deaths of women occurred to parous women, the initial figure of 11 per cent would increase only trivially to 11.6%
- under-reporting of dead (adult) children not a factor
- **MORTALITY IS NOT THE EXPLANATION**

Institutionalisation as a possible confounder

- proportion of women in institutions at age 40 in the 2001 Census of England and Wales was 0.35% & 0.45% at age 60 (institutionalisation is more likely among childless than parous women, but effect trivial)
- **INSTITUTIONALISATION IS NOT THE EXPLANATION**

Changes in Survey organisation over time

- the sampling basis
 - the introduction of computer assisted interviewing
 - some telephone interviewing
 - small financial incentives for respondents
 - some restructuring of content
- BUT
- "all changes were designed to ensure no loss in utility for analysis of surveys across different years" (Uren 2006)

Survey response

- If the 'true' proportion of childlessness was 10% and the survey response rate was 75% as found for those born in the mid-1940s, the theoretically maximum possible value of reported childlessness due to differential non-response would be 13.3% (IF AND ONLY IF the response rate for childless women was 100%)
- **DIFFERENTIAL UNDER-REPORTING OF PAROUS COMPARED WITH CHILDLESS OLDER WOMEN AS THEY MOVE THROUGH LATER WORKING AGES IS NOT THE EXPLANATION**

Differentials

- The same patterns are found within different education-level and marital status groups so e.g. not due to 'air-brushing out' out-of-wedlock children

The conventional view

"When large-scale surveys first began collecting retrospective demographic information, such as marriage and birth histories, many demographers expressed doubt about the quality of these data. However, studies showed that in many contexts women reported births and marriages with a high level of accuracy."

(Hayford and Morgan, *Demography* 2008:129)

Why is studying childlessness unimportant?

"This focus appears motivated more by issues in survey methodology than by general issues in demographic research ... It is unlikely a paper focusing on this narrow topic will be of interest to a broad range of demographic researchers."

– Reviewer for journal *Demography*

Summary: why increasing reported childlessness?

- Other possible reasons considered for increased reported childlessness around age 50
 - adoption etc
 - 'disrupted marriage' effect
 - major problems with sample selection
- None seems adequate (even in combination)
- **Therefore conscious concealment of adult children acknowledged 10 to 20 years earlier?**
 - estrangement
 - boredom?

Some implications

- Fertility histories obtained from women aged 50 and over are increasingly important for research and policy purposes and include half of the population in the developed world.
- If childbearing at such ages is poorly reported, how well answered are more complicated, more detailed, and possibly less important life history events such as full work, health or partnership histories?

Some implications (contd)

- EITHER
 - Fertility is deliberately poorly reported from women aged 50 and over in Britain (and possibly elsewhere?)
- OR
 - The benefits of childbearing for old-age benefits are less than assumed because the effective availability of children is less than expected

Reference

Michael Murphy (2009) Where have all the children gone? Reports of increasing childlessness in a large-scale continuous household survey. *Population Studies* 63(2): 115-133.