



# Fertility Variations in Scotland:

## actual, expected and ideal fertility

Scotland is one of many developed countries whose fertility is below the level required to replace their populations. Its fertility rate (1.62 in 2005<sup>1</sup>) is slightly above the average for the EU but below that of other countries and regions in the UK and just over half the post-war peak rate of 3.09 in 1964. However, there are marked variations in fertility rates across Scotland, with rates in some areas much higher or lower than the average (General Register Office for Scotland 2003, Graham and Boyle 2003). Low fertility is a controversial issue because of its possible implications for population ageing, labour supply and the costs of sustaining health and welfare services. This briefing reports some key findings of a recently completed research project that investigated the attitudes to fertility of men and women of child-bearing age in Scotland. It is based on a specially commissioned module on fertility in the 2005 Scottish Social Attitudes survey. It reviews some general findings about respondents' attitudes to and experiences of childbearing, and how these vary according to a number of factors.

### Key Findings

- Men and women would like to have more children than they actually have, with the average ideal family size being 2.48 children, whilst in practice the average is 1.24 for this group
- Of the childless people in this study (42%), only 1 in 10 expected to remain so, and only 7% wanted to have no children
- Most – 65% of those who wanted larger families (3 or more children) had not yet achieved this
- Both men and women with higher educational qualifications were more likely to start their families later and were less likely to have larger families than others. They were also most likely to have fewer children than they would like
- Those with no qualifications were likelier to have larger families – about one third (33%) having three or more children, compared with nearer one in ten (11%) of those with degrees
- Well over one third of the women in the sample (39%) thought their work progress would be affected a great deal or quite a lot if they had another child, rising to well over half (60%) of those who were in full-time work. Fewer men (10%) thought their work would suffer to the same degree if they had another child
- Those who said their employers were very bad or quite bad at providing a 'good fit' between work and family life were twice as likely as others to express concern about their work progress if they had a(nother) child
- While nine out of ten people in this study thought that housework should be shared equally between partners, those households that tried to practice equality were also least likely to have larger families
- People with lots of friends who had children, or living in an area that they thought was a good place to bring up children, also had higher fertility rates

## Background

Many different theories have been advanced to explain low fertility, although there is no consensus amongst researchers about the factors that may have led to below replacement fertility levels (Castles 2003, Hobcraft 2004, Lesthaeghe 1998, Kohler et al. 2002). There are varying possibilities, such as the effects of 'post-modern' individualist values, changing family patterns, the rise in female employment or the growing financial and opportunity costs of having children. Fertility decline is attributable in some part to delays in child-bearing, suggesting some 'catch-up' may occur. However, despite small increases in the fertility rate in Scotland in recent years, there seems no prospect of an early return to replacement level fertility.

## The study

This project aimed to improve our understanding of attitudes to fertility in Scotland by examining the following.

1. The relationship between fertility ideals, expectations and experiences and socio-economic factors such as income, employment and education.
2. Variations in fertility attitudes and experiences in Scotland, and how these relate to attitudes to lifestyle, the costs/benefits of children and work aspirations.
3. The relationship between fertility attitudes and experiences and variations in social contexts and interactions, most especially interactions with families and friends.
4. Fertility variations in relation to local contexts, and in particular perceptions of local area as a place to bring up children.

The research explored the main theoretical themes associated with falling fertility, including the role of different lifestyle aspirations, attitudes towards the social and economic costs of children, and issues of gender equity and work/life balance. It also examined the socio-economic contexts associated with fertility variations, such as levels of education and female employment. We were also interested in whether fertility variations were related to variations in social interaction, especially amongst families and friends. There is some evidence that fertility is subject to 'diffusion' effects, with varying social norms about fertility becoming established in different places. Do those in 'child-rich' networks aspire to or have more children than those in relatively child-free social contexts?

## Methods

The study was based on a sub-sample of respondents of childbearing age taken from the 2005 Scottish Social Attitudes [SSA] survey. The SSA Survey is conducted annually by the Scottish Centre for Social Research. It involves face-to-face interviews with a representative sample of over 1500 adults aged 18 or over living in Scotland, who are also asked to return a self-completion questionnaire. The sample was weighted to take account of the under-representation of rural areas in Scotland, resulting in a total of approximately 781 cases, 406 men and 375 women. We included men in the sample as they have been relatively under-researched in studies

of fertility attitudes and behaviour. The sample included respondents in the age ranges of 18-45 for women and 18-49 for men, thereby including the main years of childbearing for both sexes. Questions on fertility in the survey were asked after first allowing an opt out for those who considered them too intrusive.

The main survey included questions on individual characteristics and household composition. The fertility module asked about the reproductive experience of respondents, their ideals and expectations with regard to childbearing, their general attitudes to various aspirations, costs and constraints associated with childbearing, and their family, social and local contexts. Data on the latter were supplemented by small area statistics drawn from the 2000 census.

## Findings

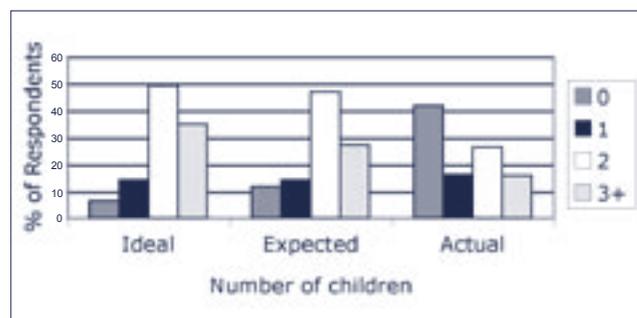
### Family size: ideal, expected and actual experience

We compared actual childbearing with expectations and aspirations. With regard to expectations, we asked men and women whether they thought they would have children or have more children one day, and if so how many children they were likely to have in all. With regard to aspirations, we asked how many children they would ideally like to have 'thinking in general and regardless of your present circumstances'. This gave us three separate measures - of fertility ideals, expectations and actual experience (Figure 1).

People in this study had 1.24 children on average, well below the 2.48 they would ideally like to have. The evidence that childbearing aspirations amongst respondents were comfortably above replacement levels suggests that Scotland's below replacement fertility cannot be attributed to low fertility ideals. Many people expected to have more children, but even allowing for age there was a gap between fertility ideals and expectations, especially amongst those who wanted larger families.

Although two in five people in this study (42%) were childless, only one in ten (10%) expected to remain so, and only 7% had voluntary childlessness as an ideal. Few respondents had more children than they desired. On the other hand, those who wanted larger families were less likely to have achieved them. Most (65%) of those wanting three or more children had not yet realised this aspiration.

Figure 1. Actual, expected and ideal fertility

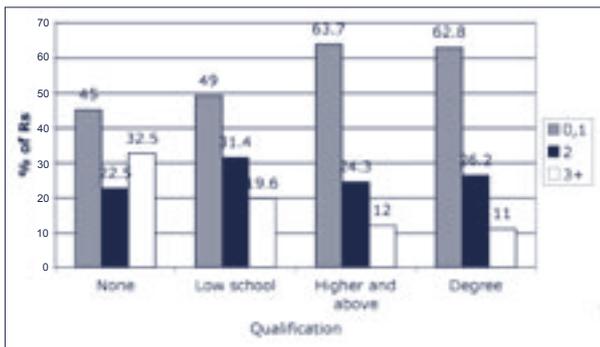


Comparing fertility ideals, expectations and experience by age, we found, not surprisingly, that actual fertility rose steadily with age, but fertility ideals were unrelated

to age. The gap between ideal and actual fertility narrowed with age, though never approaching zero – on average those in their late thirties and early forties were half a child short of their ideal.

Amongst a range of possible factors associated with low fertility – health, education, income, class, religion, female employment and housing tenure – two factors stood out: higher levels of education, and whether women worked full time or part time. Both men and women with higher qualifications were more likely to start their families later and were less likely to have larger families. They were also most likely to expect to have fewer children than they would ideally like. Those with no qualifications were more likely to have larger families – about one third (33%) having three or more children, compared with nearer one in ten (11%) of those with degrees (Figure 2). Amongst older people who were more likely to have completed their families, about one quarter (25%) of the highly qualified had three or more children, compared with nearer one half (44%) of those with no qualifications. Those older people with educational qualifications at Scottish Higher level or above were more likely to have no children or only one child.

**Figure 2. Actual fertility by highest educational qualification, %, N=782**



Were those who stayed longest in the education system most likely to start their families late and for that very reason least likely to have larger families? We can obtain some sense of the impact of educational qualifications by considering the time of first birth. Almost all those without qualifications had their first child before their mid-20s. Those with low qualifications also made an early start. By contrast, people in this study with higher qualifications (highers and above or with degrees) started later, with age at first birth peaking in the late 20s and early thirties.

There has been considerable debate about whether female employment has a positive or negative association with fertility. Our survey found that there was no obvious relationship between female employment and fertility, probably because almost all the women in the sample were in paid work. However, on average, women working in part-time jobs had started their families a little earlier and had more children than those in full-time jobs. This was true right across the age range. It suggests that it may be more difficult for women to combine full-time work with having more children.

Well over one third of the women in the sample (39%) thought their work progress would be affected a great

deal or quite a lot if they had another child, rising to well over half (60%) of those who were in full-time work. Fewer men (10%) thought their work would suffer to the same degree if they had another child. We also asked whether employers provided a ‘good fit’ between work and family life. Those who said their employers offered a very bad or quite bad fit were twice as likely to express concern about their work progress if they had a(nother) child.

Some fertility research has suggested that declining fertility may be related to greater gender equality in personal relationships and in the domestic division of labour (Macdonald 2000). While nine in ten respondents claimed to approve of an equal allocation of housework in principle, those households that tried to practise equality in sharing housework were also least likely to have larger families.

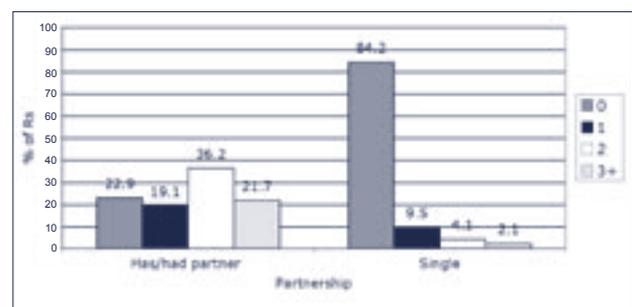
Low fertility has been attributed to individualist lifestyle aspirations, negative perceptions of costs and benefits of children, and sensitivity to financial and other constraints. We explored these issues in our study by asking a number of questions about values associated with childbearing and the costs and benefits of having children. Our evidence, though limited, suggests that values play some role in relation to fertility ideals. People who agreed that –

- an only child can be as happy as one with siblings;
- men and women can feel fulfilled without children;
- the anxieties of raising children are enough to deter people from having them;
- children are dependent on their families for too long;
- financial security is a prerequisite to having children;
- couples cannot afford more than two children;
- it is difficult for both parents to work if they do have more than two

– were more likely to have below replacement fertility as an ideal. Those who disagreed with these propositions were more likely to have above replacement fertility as an ideal.

We were interested in the social contexts in which people experienced childbearing, most especially their interactions with family and friends. We found that having a partner or having ‘child-rich’ social networks were closely linked to fertility. Those with partners were far more likely to have children than those without partners, even allowing for age (Figure 3). Most people thought their partners shared their fertility ideals.

**Figure 3. Number of children by whether has/ has had a partner, N=781**



Friendship networks may also have a role in shaping fertility behaviour. Those with lots of friends who had children were more likely to have children themselves (and vice versa).

We asked people to assess their local area as a good or bad place to bring up children. Most (74%) were positive about their local area. The one in eight who were negative were more likely to live in urban than rural areas, and more likely to live in deprived areas. They also expected to have or had fewer children than those who were more positive about their local area. In general good schools and low crime were seen as key factors; better facilities for children, less dangerous traffic and more accessible housing figured as priorities along with crime when it came to improving their own local area.

## Conclusion

Our evidence suggests that low fertility in Scotland cannot be attributed in a simplistic way to low fertility aspirations. Other factors seem to have a bearing on fertility variations in Scotland. Amongst these are the relationships between fertility and educational qualifications, female full-time employment, life-style aspirations and family values, perceptions of socio-economic costs of children, financial and work constraints, partnership and partnership status, gender equity in allocating household tasks, 'child-rich' friendship networks, and the quality of local areas as places to bring up children.

<sup>1</sup>The replacement fertility rate is the rate at which the population of a society would remain stable, excluding migration and is 2.1

## About the study

This study was one of the projects commissioned in the joint ESRC and Scottish Executive initiative on Scottish demography. It investigated the attitudes to fertility of men and women of child-bearing age in Scotland, and is based on a specially commissioned module on fertility in the 2005 Scottish Social Attitudes survey conducted by the Scottish Centre for Social Research. The research aims to contribute to theorising about variations in fertility and contribute to wider public and policy debates about fertility and social change. It was carried out between March 2005 and November 2006 by a team from CRFR at the University of Edinburgh (Professor Kathryn Backett-Milburn, Dr Ian Dey, Professor Lynn Jamieson and Professor Fran Wasoff) and the University of St. Andrews (Professor Paul Boyle and Dr Elspeth Graham).

## The authors

This briefing was written by Fran Wasoff and Ian Dey and edited by Sarah Morton.

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