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# The Growing Up in Scotland study

**Briefing Paper for the Finance Committee of the Scottish Parliament**



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# The Growing Up in Scotland study

The Growing Up in Scotland study (GUS) is a major longitudinal research project that tracks the lives of several cohorts of Scottish children through the early years and beyond. The study is funded by the Scottish Government and carried out by ScotCen Social Research. GUS provides crucial evidence for the long-term monitoring and evaluation of policies for children, with a specific focus on the early years. It collects a wide range of information about children and their families. The main areas covered include education, childcare, parenting, health and social inclusion.

## 1 The purpose of GUS

The potential impact of early experiences on later life outcomes has been acknowledged in a range of recent policy documents and debates - not least the Finance Committee's own inquiry into Preventative Spending.

GUS has a critical role to play in supporting the development of policy and practice in relation to such issues. The study seeks to generate, through robust methods, specifically Scottish data about outcomes throughout childhood and into adulthood for children growing up in Scotland. It does so across a range of domains:

- Cognitive, social, emotional and behavioural development
- Physical and mental health and wellbeing
- Childcare, education and employment
- Home, family, community and social networks
- Involvement in offending and risky behaviour

Where possible, the study aims to focus, in particular, on topics where Scottish evidence is lacking and policy areas where Scotland differs from the rest of the UK.

GUS findings have contributed to the development of the Early Years Framework and are currently being used to inform the development of the Parenting Strategy.

## 2 The strengths of the study design

GUS is a multiple cohort longitudinal study, meaning that several discrete groups of children are followed over time. The study was launched in 2005 and currently consists

of three cohorts of children: around 3000 children born in 2002/03 (the Child Cohort), 5000 born in 2004/05 (Birth Cohort I), and 6000 born in 2010/11 (Birth Cohort II). For children in Birth Cohort I, data describing their characteristics and circumstances has been collected annually between the ages of 10 months and 6 years.

Information on the child and his/her family is collected primarily through a face-to-face survey interview with the child's main carer, usually their mother. However, children's height and weight (to calculate BMI), and cognitive ability have also been measured. In addition, data from the survey has been linked to education administrative records and will soon be linked to health records.

**Figure 1.1 What can GUS tell us about parenting?**

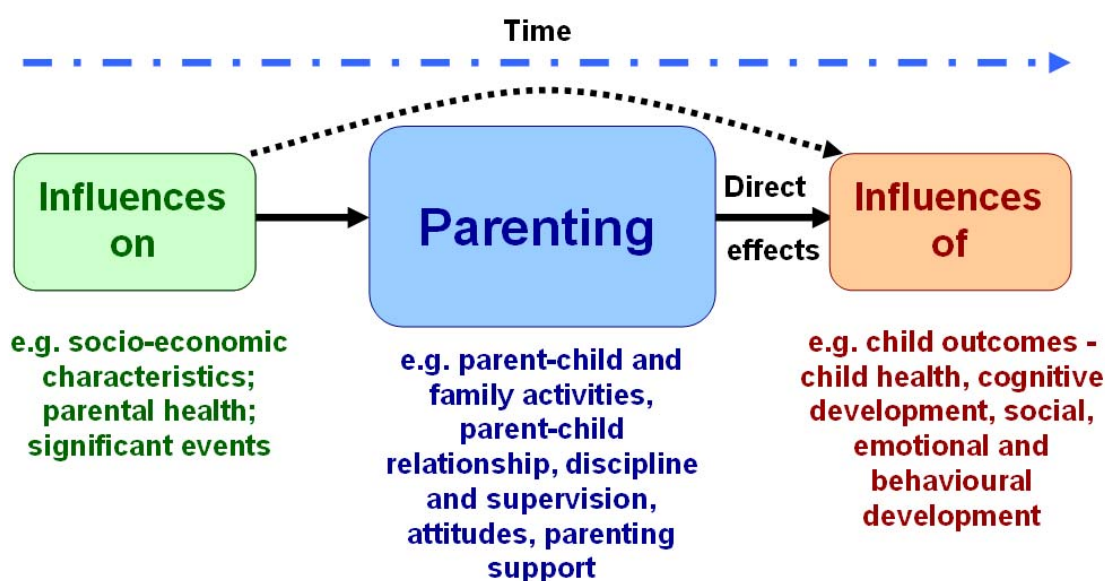


Figure 1.1 provides a visual example of the strengths of GUS as an evidence base in relation to the information it can provide about parenting of young children in Scotland.

The study contains a range of data which ‘describes’ parenting – that is, it measures activities that the child is involved in with his or her parents, the relationship between the parent and child, and parents’ use of services and informal support. Using the considerable additional data collected in GUS, it is possible to explore factors which appear to influence variation in these aspects of parenting, such as household income or parents’ level of education.

As well as looking at factors which influence parenting, using GUS it is also possible to explore the influence of parenting – particularly on child outcomes such as child health, cognitive ability and social, emotional and behavioural development. And statistical techniques allow a clearer understanding of the level of change in child outcomes that might be expected, though not guaranteed, by changing parenting behaviour.

By following the same children and families over time, we can examine how early experiences affect later outcomes, explore the way that change in circumstances affects parenting and how changes in parenting affect outcomes. In addition, by introducing a new cohort, as we did in 2011, we can see how current experiences of children and families in the early years compare with those of six years ago.

'Parenting' is just one topic for which this type of exploration is possible using GUS. The summary of key findings below demonstrates some of the other areas where detailed analysis has been undertaken.

## 3 Some examples of findings from the study

In this short paper, it would be difficult to do justice to the range of analyses already conducted using GUS, or the full potential of the study dataset. So here we simply provide some examples of the type of analyses that are possible, in relation to the specific themes of 'early development' and the relationship of parenting to child health. It is worth noting, however, that in these and other areas, the study demonstrates considerable inequalities in health and development in the early years and the significant impact of disadvantage on child outcomes.

### 3.1 Early development

Children in both the child cohort and the first birth cohort are now attending primary school. Research based on GUS data has examined both children's cognitive ability<sup>1</sup> and their social, emotional and behavioural development<sup>2</sup> around the time they start school.

#### 3.1.1 Cognitive ability

The analysis of cognitive ability demonstrates that children from more advantaged circumstances significantly outperform those from disadvantaged circumstances, particularly in relation to differences in parental level of education: children whose parents had no qualifications were found to have vocabulary ability around 18 months behind children of degree-educated parents. The longitudinal analysis shows that the ability gap between more and less advantaged children is already apparent at age 3 and largely persists during the pre-school period.

**'...children whose parents had no qualifications were found to have vocabulary ability around 18 months behind children of degree-educated parents.'**

In terms of reducing the gap, a range of factors were found to positively affect children's cognitive development during the pre-school period over and above the effect of parental education, including aspects of their home environment and the choices and behaviours of parents. Improved vocabulary ability between age 3 and 5, specifically amongst children from more disadvantaged groups, was associated with a greater consistency of parenting, stronger parent-child attachment, attendance at ante-natal classes and having been breastfed. Having better, earlier communication skills (e.g. at age 22 months) was also important.

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<sup>1</sup> Bradshaw, P. (2011) *Growing Up in Scotland: Changes in child cognitive ability in the pre-school years*, Edinburgh: Scottish Government

<sup>2</sup> Bradshaw, P. and Tipping, S. (2010) *Growing Up in Scotland: Children's social, emotional and behavioural development at entry to primary school*, Edinburgh: Scottish Government

### 3.1.2 Social, emotional and behavioural development

GUS analysis shows that around the time they enter school, about 1 in 10 Scottish children have moderate or severe social, emotional or behavioural difficulties. This rises to around 1 in 4 in relation to difficulties with conduct. Whilst difficulties tend to decrease between ages 3 and 5, many of the children with difficulties at age 5 also had them at age 3.

Children in lower income households and those who experienced poorer general health were consistently more likely to show more negative change in social development during the pre-school period. Early developmental delay and parenting factors, such as harsh punishment, were also associated with poorer development in this domain.

## 3.2 Parenting and children's health

One of our analysis projects has explored the relationship between parenting and child health outcomes<sup>3</sup>. The analysis revealed a complex network of relationships between parenting and child health suggesting that many different aspects of parenting are involved, and that parents need to develop a wide range of different skills in order to positively influence their child's health outcomes.

Negativity in parenting (including high conflict between the parent and the child), parental consistency and control (defined via levels of supervision, rules and home chaos) and joint mother and child activities were each shown to be associated with either child health behaviours, such as physical activity or consumption of fruit and vegetables, or child health outcomes, such as limiting long term illness and behavioural or emotional difficulties.

Analysis also indicated that parenting skills varied considerably with levels of family adversity. In addition, the nature of the relationship suggests that some of the differences in child health outcomes observed between children who experience different levels of family adversity occur because of the related differences in parenting.

## 4 Dissemination and impact

GUS has an extensive and wide-ranging dissemination programme, ensuring that results from the study are shared with a wide range of audiences, including policy makers (national and local), strategic planners, practitioners, the voluntary sector, academics and parents.

### Impact - some examples :

- Revised Birth to 3 Guidance 'Positive Outcomes for Scotland's Children and Families' (Education Scotland)
- Glasgow Parenting Support Framework
- Play Talk Read campaign
- Tackling Poverty discussion paper
- Core syllabus for antenatal education (Healthcare Improvement Scotland)

<sup>3</sup> Parkes, A. and Wight, D. (2011) *Growing Up in Scotland: Parenting and child health*, Edinburgh: Scottish Government

## 5 What next for GUS?

The study is now in its eighth year. The next set of findings will be published in May. Three reports are currently being prepared which draw on the first six years of data from the first birth cohort. These reports will separately address: early experiences of primary school; the involvement of grandparents; and overweight, obesity and activity. The next wave of data collection with this cohort begins in May 2012. At this wave, the children themselves (now 8 years old) are being asked to complete a questionnaire which will ask about their friendships, parents and school.

We have recently completed the first full year of data collection with the new birth cohort and expect to report on the findings in late 2012 or early 2013. Amongst other things, this report will provide a comparison of the circumstances of children born in 2004/05 with those born in 2010/11.

GUS is a unique resource, providing a range of stakeholders with invaluable evidence about the experiences of and outcomes for children and families in Scotland. And its value continues to grow as, with each round of data collection, it becomes possible to map further and more fully the varied and complex pathways taken by Scottish children as they move through the early years into later childhood and beyond.