

Children of working mothers: Does mother's employment affect children's development?

H. Joshi, E. Cooksey, G. Verropoulou, E. Menaghan and N. Tzavidis

In this paper we use longitudinal panel study data from both Britain and the United States to address the important question of how maternal employment might impact the cognitive and behavioural development of young children. The growth of women's labour force participation in industrialized economies has resulted in growth in the employment of mothers of young children. The question that then arises is whether or not employment and childrearing are incompatible. From the point of view of the study of child development and social reproduction, there is still a lack of consensus concerning whether or not the dual responsibilities of working mothers are harmful for children's outcomes.

The presumption that child development and maternal employment conflict finds mixed support in the literature (Parcel and Menaghan, 1994; Cooksey, Menaghan and Jekielek, 1997; Joshi and Verropoulou 2000; Waldfogel et al. 2002; Brooks-Gunn et al. 2002; Ruhm 2005; Belsky et al. 2007). Negative and positive associations have been found in both cognitive and behavioural indicators of child development, at various ages of child assessment and more importantly for varying intensity and timing of the mothers' employment. If she is employed in the first year of a child's life, there are more negative findings than otherwise. This has important implications for policies affecting maternity leave and means tested support of lone mothers.

In the UK a growing proportion of mothers have been covered by maternity leave and pay. Although an increasing proportion of mothers return to the labour market during the first year of a child's life, this kind of coverage means that labour force re-entry is likely to be after 4-6 months of leave. In contrast, even after the introduction of family leave in the United States, American mothers employed during the child's first year are likely to have started employment within 4-6 weeks of giving birth. Furthermore, although by international standards both countries have high rates of unwed teenage motherhood, the benefit regimes they encounter reinforce early labour market entry for single mothers in the US, while in the UK the income support regime reflects the hitherto normative expectation that mothers should stay at home with their babies.

In this paper we will investigate developmental differences between children whose mothers were employed or not during various stages of their pre-school years. We use data from the second generation of two cohort studies: the British Birth Cohort Study of 1970 (BCS70) and the American 1979 National Longitudinal Study of Youth (NLSY79). This research will update and expand a similar analysis of the children of the 1958 British Birth cohort (Verropoulou and Joshi, forthcoming), which in turn found comparable results to an analysis of the Avon Study (Gregg et al. 2005). Both the BCS70 and the NLSY79 contain multiple outcomes per child, in some cases several children per mother; and a hierarchical structure which we propose to tackle with multivariate multi-level modelling (Goldstein 1995). The BCS70 provides data back to birth for the mothers we

study, and to their early teen years for the NLSY79, supplying us with an array of controls for confounding variables (such as mother's education, ability, and family history) which likely affect whether or not she enters the labour market during the early years of her child(ren)'s life. Both data sources also include variables which may mediate or compensate for maternal employment, such as indicators of family income, child care, family structure, number of siblings, maternal health, child health.

The BCS70 is a longitudinal study whose subjects are all persons living in Great Britain, who were born between the 5th and 11th of April 1970. The original sample therefore consisted of 17,198 babies. The data we use in our analyses are taken from wave 6 of the survey which was carried out over 2004-2005 when the respondents were ages 34-35. For a one in two sample of BCS70 cohort members, information was also gathered about all natural and adopted children currently living with them. A total of 2,846 parents participated in this Parent & Child Interview giving information on 5,207 children (Simmonds et al. 2007).

The NLSY79 is also a longitudinal study. Over 12,000 respondents were first interviewed in 1979 when they were ages 14-21. Our American respondents are therefore a little older than their BCS70 counterparts who would have turned 9 years old in 1979. We will therefore confine our analyses to those who were 17 and under in 1979. NLSY79 respondents have been re-interviewed annually through 1994 and biennially since. By 2004 more than 80% of those eligible for interview were still being followed. Beginning in 1986, in-depth information was collected on and from all children of NLSY79 women. These children have also been followed biennially with exceedingly high retention rates and so we are able to use data on child outcomes from various survey points.

Both data sets contain a variety of cognitive and behavioural child outcomes that will allow for comparisons. We are currently in the midst of building our data files, plan to begin our analyses before the new year, and anticipate having a complete paper ready by early spring.

References:

Belsky J, Burchinal M, McCartney K, Vandell DL, Clarke-Stewart KA, Owen MT (2007) Are there Long-term Effects of Early Childcare? *Child Development* 78(2):681-701

Brooks-Gunn J, Han W, Waldfogel J (2002) Maternal Employment and Child Outcomes in the First Three Years of Life: The NICHD Study of Early Child Care. *Child Development* 73(4):1052-1072

Cooksey E, Menaghan E, Jekielek S (1997) Life Course Effects of Work and Family Circumstances on Children. *Social Forces*, 76(2): 637-666.

Goldstein H (1995) *Multilevel Models in Educational and Social Science Research*. (2nd Edition), Edward Arnold, London

Gregg P, Washbrook E, Propper C, Burgess S (2005) The Effects of a Mother's Return to Work Decision on Child Development in the UK. *The Economic Journal* 115 (February):F49-F80.

Joshi H, Verropoulou G (2000) *Maternal employment and child outcomes*. Smith Institute, London

Parcel T, Menaghan E (1994) *Parents' jobs and children's lives*. Aldine de Gruyter, New York.

Ruhm CJ (2005) Maternal Employment and Adolescent Development. IZA Discussion Paper. 1673, Bonn

Simmonds N, Fuller E, Lessof C, Foudouli V (2007) 1970 British Cohort Study: 2004-2005 Survey. Technical Report, available online: www.cls.ioe.ac.uk

Verropoulou G, Joshi H (forthcoming) Does Mothers' Employment Conflict with Child Development? Multilevel Analysis of British Mothers born in 1958. *Journal of Population Economics*

Waldfogel J, Han W, Brooks-Gunn J (2002) The Effects of Early Maternal Employment on Child Cognitive Development. *Demography* 39(2):369-392