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**Institute of Psychiatry**

**Psychology & Neuroscience**

**The long-term consequences of infant domestic adoption (KID 41956)**

**End of grant report**

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**Aims of the study**

The life-long nature of adoption is enshrined in law across the UK; at this stage however, systematic evidence on outcomes of adoption beyond the early adult years remains limited. Further, much of the existing literature examines heterogeneous samples (e.g. international adoptions) and those where children have been exposed to considerable early adversity, including neglect/maltreatment or institutional care. This study was designed to explore the long-term consequences of adoption in more homogeneous samples: domestic adoptions, where infants without known post-natal adversities were placed at or shortly after birth.

**Data and Sample**

We used data from the 1958 and 1970 British birth cohorts (the National Child Development Study, NCDS and BCS70 respectively). NCDS and BCS70 are longitudinal, nationally-representative prospective studies following the lives of over 17000 individuals born in England, Scotland and Wales in single weeks in 1958 and 1970. Since the initial birth contact, NCDS cohort members have been studied on nine subsequent occasions, most recently at age 55, and BCS70 cohort members have provided data on eight occasions, most recently at age 42.

Infant adoption was relatively common in the post-war years, reflecting the social, financial and accommodation pressures facing some (predominantly unmarried) expectant mothers. As a result, both NCDS and BCS70 include small sub-samples of individuals adopted as infants by non-relatives (n=180 in NCDS and n=170 in BCS70), along with two comparison groups of interest: other infants born to unmarried mothers who remained with their biological parent(s) (referred to as the birth comparison group [n=363 in NCDS and n=901 in BCS70]), and the majority of the cohort who grew up with married biological parents (referred to as the general population). Despite some policy-related and service-access changes for single parents in the period between the two studies (along with gradually changing social attitudes), it seems likely that the samples were broadly comparable in the two cohorts. Adopted children in both cohorts were predominantly white and healthy, with a slightly larger proportion of boys than girls in each case. The development of the adopted and birth comparison samples in NCDS has been reported on a number of previous studies, beginning in childhood; so far as we are aware, no prior studies of comparable groups have been undertaken in BCS70.

**Pre-natal vulnerabilities**

We examined a range of maternal characteristics and pregnancy indicators in both cohorts (where available) that might point to evidence of pre-natal vulnerabilities. Like infants in the birth comparison group, adopted children were more likely to have been born to younger mothers, who were more likely to have smoked during pregnancy, and received limited antenatal care; they were also of lower birthweight than those in the general population.

**Parental and family characteristics in childhood**

Unlike children in the birth comparison group, adopted children grew up in relatively advantageous social and economic circumstances in childhood. Adoptive parents were predominantly married couples, without biological children of their own. As a group they had higher than average education and social class levels, and were more likely to own a property; they were also reported to be especially interested in their children’s education.

**Development in childhood and adolescence**

Early cognitive and educational development among adopted children was generally equivalent or superior to that in the general population samples in both cohorts. Adopted children showed little evidence of emotional problems in childhood or adolescence, but a somewhat varying picture emerged on indicators of externalizing problems: adopted boys had somewhat high rates of childhood behaviour problems in NCDS, but this pattern was not replicated in BCS70.

**Mid-life outcomes**

We examined a wide range of outcomes in mid-life including educational attainments and socioeconomic circumstances; intimate relationships and social support; health-related behaviours, physical health and cognition; mental health and well-being; and alcohol problems and crime. Between 50% and 70% of the study sub-samples provided data at mid-life; we used inverse probability weights to take some account of any biases associated with attrition.

We used a range of approaches to examine mid-life outcomes, including both within- and between-cohort analyses. In the main, outcomes for individuals adopted in infancy were commensurate with those in the general population, and consistent across cohorts, though patterns of between-group differences varied for specific outcomes. We are continuing to synthesize the large volume of study findings. To illustrate, we highlight results from two main outcome areas here: education and cognition, and mental health and well-being.

Consistent with findings in childhood, adult educational attainments for adopted individuals were comparable with those in the general population (and more positive than those in the birth comparison group) in both cohorts; cognitive tests at mid-life also showed high verbal fluency scores in NCDS. Mediation analyses suggested that the advantageous childhood circumstances in the adopted samples could fully explain these group differences.

Where measures could be harmonized effectively we combined data across the cohorts to increase statistical power. We used this approach to explore mental health at mid-life – suggested in prior studies of international and later-placed adoptions to be an area of potential vulnerability for adopted individuals. Findings did not support this pattern in the current samples: there were no indications of elevated levels of mid-life mental health problems or help-seeking among individuals placed for adoption in infancy, and their reported levels of wellbeing were also comparable to those of other members of their respective cohorts.

**Conclusions**

The use of two longitudinal birth cohorts provides an unusual opportunity to examine long-term outcomes of infant domestic adoption, and improves the generalisability of findings; the few instances where outcomes differed between cohorts may point to unique sample/cohort effects, which require further exploration. The context for adoption has changed markedly in recent years, and it is important to note that although NCDS and BCS70 provide a rich array of outcome indicators, they were not specifically designed to explore adoption-related issues. Once synthesized, our findings should provide valuable pointers to the long-term sequelae of domestic adoption for children who have not faced marked post-natal adversities, and increase the security of advice that can be offered to policy makers and to all parties to infant adoption in relation to likely long term outcomes.

**About the Nuffield Foundation**

The Nuffield Foundation is an endowed charitable trust that aims to improve social wellbeing in the widest sense. It funds research and innovation in education and social policy and also works to build capacity in education, science and social science research. The Nuffield Foundation has funded this project, but the views expressed are those of the authors and not necessarily those of the Foundation. More information is available at [www.nuffieldfoundation.org](http://www.nuffieldfoundation.org).

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