## Growing up in a blended family or a step family. What is the impact on schooling?

by

## Marianne Sundström\*

The aim of this paper is to add to our understanding of the role of family background in shaping educational outcomes. More specifically, using a large Swedish data set, I examine whether living in a blended family or step family during childhood affects educational attainment. Many previous studies have investigated the link between adult outcomes and childhood family structure. Less attention has been paid to the relationship between outcomes and family and sibling structure taken together, capturing the complexity of family relationships by measuring the biological relationship between the children in the household such as whether they are full siblings, half siblings, or biologically unrelated. Further, while inequality between households has been extensively studied, little attention has been paid to inequality within households. For example, when analyzing inequality in household income, the standard approach is to assume that all children in the household are treated alike, after appropriate adjustments have been made for age and sex; the "equivalence scale" approach embodies this assumption. Although this is a convenient assumption for the analysis of inequality across households, the assumption that joint children and step children are treated alike is not necessarily a correct description of reality and warrants empirical investigation.

Most previous studies of the relationship between child outcomes and childhood family and sibling structure have, however, used small and selective samples and relied on cross-section estimation which do not account for selectivity. Using methods which do that is vital since family structure is not randomly assigned. Unlike previous studies I use large

<sup>\*</sup>Swedish Institute for Social Research (SOFI), Stockholm University, SE 10691 Stockholm, Sweden. email: Marianne.Sundstrom@sofi.su.se Phone: 46(8)163136.

Swedish data on a random sample of children born in 1964-1965 matched with data on their full and half siblings, and adopt a siblings difference approach using a strict identification strategy to assess causality.

Using the sibling-difference approach, I find that children who live with stepparents and single parents do significantly worse than those who group up in traditional nuclear families or the joint children in blended families.

The motivation for my paper comes from Björklund, Ginther and Sundström (2007), which finds for Sweden and the United States that the association between a person's educational attainment and annual earnings and his/her number of siblings is more negative for the number of half siblings than for the number of full siblings. In particular, having lived with half siblings is negatively correlated with educational and earnings outcomes even when controlling for number of half and full siblings. That paper,, like most of the literature, defined family structure from the child's perspective. Thus, joint children in blended families were classified as living in an intact family—defined as living with both biological parents—whereas their half siblings were classified as living in a step family.

This paper makes five contributions to the literature. First, most previous papers on family structure lack sufficient sample size to draw definitive conclusions about the associations with educational outcomes. This study uses data from Swedish population registers which permits large enough sample sizes to estimate with some precision the parameters of interest. Second, as we have information on full siblings and half siblings and whether (and when) the siblings lived together, and in which family structure, we are able to use sibling-difference models to take account of selectivity and assess the causal impact of living in a certain family and sibling structure in childhood. Third, we are able to assess post-childhood outcomes since we have access to information on educational attainment. Fourth, it is interesting to examine Sweden in this context because it has generous welfare provisions

which may reduce economic disadvantage associated with living in a non-traditional family and growing up in such a family is likely may be associated with less social stigma than, for example, in the U.S so for these reasons any adverse effects of growing up in a non-traditional family may be smaller in Sweden. That said, Björklund, Ginther and Sundström (2007), finds very similar effects of family structure on children in the U.S. and Sweden.

This paper begins by defining family structure from the perspective of the household, taking account of sibling structure as measured by the incidence and number of co-resident and non-resident full and half siblings. Whereas Ginther and Pollak (2004) used a household based definition of family structure, distinguishing between traditional nuclear families, single parent families, and blended families, this study goes beyond the household to analyze the relationships of nonresident full and half-siblings with outcomes. I next investigate different approaches to defining family and sibling structure in order to find the specification that fits the data best and find that child-based measures of family structure combined with controls for resident full and half siblings and non-resident siblings provide an improved model. This model is used to estimate descriptive regressions of the association between family and sibling structure and children's educational outcomes. Finally, I exploit our large sample size and detailed information on sibling relationships to estimate a sibling-difference model of the effect of family and sibling structure on children's educational outcomes. My preliminary findings suggest that as time spent with stepparents and in single mother families increases, children obtain lower educational attainment but there seems to be no significant differences in the effect of having a stepfather compared to a stepmother. However, in blended families the joint children have significantly better educational outcomes than their half siblings. One possible explanation for this interesting finding is that the father in the blended family does not share his income equally between his 'own' children and his step children