

DOES FAMILY STRUCTURE MATTER IN THE EDUCATIONAL ATTAINMENT PROCESS?

In recent years there has been renewed interest in the effects of childhood experiences on outcomes later in life. This has been reinforced and enriched by the emerging life course perspective in demographic studies that focuses on developmental trajectories and articulates the ways in which early life events and experiences shape individual differences in outcomes measured in adulthood. While few would disagree that stimulating and nurturant environments are essential to optimal child development, there is no consensus about the resilience of children to adversity and the long-term consequences of certain childhood experiences. On the one hand, some have argued that early experiences in the family *do not* inexorably shape people's lives; rather, humans have a lifelong capacity for change and early childhood experiences are continually transformed by later events and experiences or mediated by experiences outside the family. On the other hand, a vast array of recent research has argued that a number of early life experiences are critical for future life chances, and that the consequences of certain individual differences in childhood experiences reach well into adulthood. Specifically, a wide-ranging literature appears to demonstrate the far-reaching consequences of early socioeconomic disadvantages, the experience of marital dissolution or divorce, the experience of father absence, the experience of maternal employment, the differential effects of family size and birth order, the nature of the transition to first grade, and individual differences in childhood health.

In keeping with the underlying theme that early childhood experiences matter for adult outcomes, this paper focuses on the linkage between the nature of family structure in childhood and key elements in the educational attainment process. We analyze data from the Wisconsin Longitudinal Study (WLS), which followed a sample of 1957 high school graduates from the

state of Wisconsin from youth to adulthood. The WLS data contain several measures of childhood family experiences—family socioeconomic status, maternal employment, number of siblings and family intactness—that are relevant to the educational attainment process. We examine the effects of family intactness, net of these other factors on high school test scores, rank in high school class, curriculum placement, and years of schooling completed, focusing specifically on how family structure influences the educational attainment process. We address these issues using structural equation methods that correct for unreliability of measurement and that employ multiple-group modeling strategies, which lend themselves to detecting the additive and non-additive effects of family intactness on these outcomes.

We base our expectations about the importance of family structure on several different theoretical traditions. The economic theory of human capital proposed by Becker states that household production is maximized in a two-parent family, where family members produce commodities using non-market time inputs and purchased goods and services. When two parents are present, one may maximize economic resources in the labor market, while the other may apply their time and effort toward household production (i.e., raising children). A related theory offered by James Coleman suggests that the human capital of children, or their skills, knowledge, and ability, is driven by the amount of social capital inherent in their family connections. Thus, two parents can provide more supervision, attention, and assistance than one, especially where schoolwork is concerned. Bronfenbrenner argued from a developmental theory perspective that two adults/parents are better than one because it fosters optimal child development through the establishment and maintenance of patterns of progressively more complex interaction and emotional attachment between caregiver and the child if there is a third party present to assist, encourage, spell off, give status to, and express admiration and affection for the person caring for

and engaging in joint activity with the child. Socialization and learning theories suggest that single parents are less able to instill parental values about the importance of education, because the child has fewer role models. And finally, control theory predicts that children from homes with one parent have fewer social and cultural resources that promote success in school.

Despite these strong theoretical reasons for expecting an effect of family structure on elements of the educational attainment process, the research literature has produced mixed results. Some researchers produce evidence suggesting a disadvantaging effect of nonintact family origins, whereas others find little or no effect. Generally speaking, researchers are less likely to observe independent contributions of family structure to educational outcomes to the extent they have introduced controls for differences in family socioeconomic experiences. Our paper has several unique features that underscore its value as a contribution to this literature. First, following the lead of some of the best research in this area, we introduce measures of several aspects of family experiences, including socioeconomic variables, but also maternal employment and sibship size. Second, where possible we introduce adjustments for unreliability of measurement in model covariates, in order to increase their effectiveness as statistical controls. Third, we not only examine the effects of family intactness on the amount of schooling attained, we also examine its effects on the precursors of schooling attainments, specifically test scores and measures of success in school (high school rank and curriculum placement. In this way we can examine whether the effects of family intactness on schooling are direct, indirect, or both. And fourth, prior to assessing the effects of family structure, we systematically examine tests for non-additivity, specifically the interaction of family intactness with all other predictor variables. The multivariate modeling strategy we employ permits the examination of these issues within the same general framework. We examine these models separately by sex, and

systematically examine the interactions of model estimates between the sexes.

Our initial results on the association of family structure and schooling outcomes were strongly suggestive of significant differences in the processes linked to educational attainment. Men and women from non-intact families are shown to be significantly disadvantaged with respect to the WLS measures reflecting educational success, particularly measured ability, rank in high school class and years of schooling completed. The main exception to this overall finding involves the measure of school program, where there are no differences among men from intact and non-intact families and only weak differences among women. Our final analyses, which introduced the controls and adjustments described above, however, indicate that it is important to control for socioeconomic background and other predetermined factors in assessing the effects of family intactness. We find that the effects of these variables do not differ in their effects across family intactness categories, permitting the examination of the main effects of family intactness. Results from our analyses of the WLS data show that being from a non-intact family has significant detrimental (total) effects on test scores and high school rank for both males and females, but similar (total) effects on high school curriculum placement and years of schooling completed are remarkably absent, once socioeconomic background factors are taken into account. Moreover, the examination of sex differences in the role of family intactness in the schooling process results in support for the null hypothesis, suggesting that whatever are the effects of family intactness on the processes of educational attainment they operate in roughly the same way for men and women.