

Mother's Income and Her Children's Education

Abstract

This study proposes to investigate effects of mother's income on her children's educational attainment. Using data from the Wisconsin Longitudinal Study, I will analyze mother's income as an absolute measure, her contribution to the total household income, and as a relative measure in proportion to the father's income. One theory suggests that mother's income simply increases the economic ability of the household to pay for a college education. Another proposes that parental role modeling of gender, through income, will add to the total income effect, especially for daughters.

Background

Throughout the 20th century, women have challenged traditional roles and expectations. Women won the right to vote, made large gains in the struggle for reproductive rights, and made considerable progress in attaining education and work opportunities equal to men's. All of these advances have created significant changes not only for the role of women in the nuclear family but also for raising children. In particular, mother's employment and income provide new models and new resources for children's achievements. This study will use data from the Wisconsin Longitudinal Study (WLS) to investigate how mother's income, both absolute and in relation to father's income, influence the education of sons and daughters.

An inability to afford tuition is one of the most significant factors that prevents individuals from attending higher education. With in-state tuition at the University of Wisconsin-Madison for the Fall 2006 semester at \$3365, it is clear that parental economic support greatly increases the ability of their children to attend this university and all equally, if not more, costly schools. The gender-neutral theory proposes that mother's income affects her children's educational attainment by increasing the family's financial ability to help pay college expenses. This theory asserts that the source of income is irrelevant to children's education.

In contrast, the changing-gendered norms model, developed by Springer (2006), posits that when mothers make an increasingly larger proportion of the household income, they challenge the traditional gender expectations of the father as the main or sole provider, and therefore affect their children's conception of gender expectations. In families where the parents display less traditional gender roles, girls may have a greater sense of the possibilities available to them through education. Boys, in contrast, may feel less pressure to be the sole provider and feel comfortable pursuing an interest that may not require as much education or be as financially rewarding.

The impact of parental gender role modeling has been demonstrated in other aspects of gender socialization. For example, Cunningham (2001) found that the more the fathers participated in housework, the more children supported men taking part in housework, traditionally a female responsibility.

Another theory suggests that the size of mother's income, relative to the father's, should have a more significant impact on the educational attainment of her children because women contribute more of their earnings to the well being of their children than do men. This trend is particularly notable in low-income families and third world countries. Thomas (1990) confirms that in Brazil, the mother's income has an effect four to seven times greater than the fathers on the family's food resources. From this general idea, one can hypothesize that the greater the mother's income, regardless of the father's, the more resources will be spent on her children, including their educational attainment.

In a recent related analysis, Graf (2006) found that mother's occupational status, whether she works in an upper-white-collar, lower-white-collar, or blue-collar position, does not effect her children's educational attainment. However, she finds that son's educational attainment is significantly affected by father's occupational status and daughters are significantly affected by parent's combined economic resources.

I intend to explore this relationship using solely the variable of income, rather than occupational and socioeconomic status, in order to further explore this relationship and to

contrast the effects of total household income to mother's relative income. Using income allows me to look at the relationship of mother's income and her children's educational attainment according to competing theories about the nature of this influence. A more specific question and a different theoretical outlook will allow for greater ability to draw conclusions about the origin of mother's impact on her children's educational attainment.

Methods

I will use the Wisconsin Longitudinal Study (WLS) data, a longitudinal study which began in 1957 with 10,317 graduates of Wisconsin high schools. These graduates have been interviewed five times over the course of their lives, in 1957, 1964, 1975, 1992, and 2004. Beginning in 1977, data were also collected on a randomly selected sibling of the graduates, and, beginning in 2004, data were collected from the spouse of the graduate and the sibling. The data are collected through phone interviews and mail-in questionnaires. WLS is ideally suited for my research question because the daughters of the women in the study were the first generation of women to grow up after the women's movement, and therefore the first generation to have higher education and careers available to them on a mass scale. All of the graduates were born in either 1939 or 1940, with the large majority of their children born between 1960 and 1970.

My dependent variable, the child's educational attainment, will be measured using data from the 1992 interviews with the graduates, during which the graduates were approximately 53 years old. The sample will consist of families with at least one working parent and at least one child. In cases that the family has more than one child, WLS has already randomly selected one to further study. I will use only children who are 25 and older at the time of the 1992 interview in order to avoid the problem of not being able to fully document the educational career of younger children. After limiting my sample, child's educational attainment will be coded into the following categories: some high school education, graduated high school, some college education, and graduated college.

My independent variable, income, will be measured using data from the 1975 interviews. At the time, the graduates were approximately 35 and children included in the sample were at least eight years old. Income data will be based on the respondent's and spouse's earnings, including income from wages, salaries, commissions, and tips before taxes and other deductions in the last 12 months plus income from self-employment. Earnings will be measured on a continuous scale. Because income does not follow a normal distribution, I will take the natural log of each individual's earnings, first adding \$100.00 to each observed amount so that respondents or spouses with zero earnings are included. Next, a household income measure will be created by adding the partners' earnings. Mother's relative income will be determined using a measure developed by Sorensen and McLanahan (1987) to calculate the economic dependency of wives on their husbands.

$$\text{Dependency Ratio} = \frac{(\text{Husband's Earnings} - \text{Wife's Earnings})}{(\text{Husband's Earnings} + \text{Wife's Earnings})}$$

The dependency ratio is measured using a scale of -1 to 1, -1 meaning the wife contributes the entirety of the earnings, 0 meaning husband and wife contribute equally, and 1 meaning the husband is the sole contributor.

Multinomial logistic regression will estimate the association between the child's educational attainment and both absolute earnings and relative earnings. I will control for the number of children in the household, the gender of the child, parental marital status, self-rated health of the parents, and both parents' educational attainment, all of which could produce a spurious association between income or relative income and the child's educational attainment.

References

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