Household Production and Health*

MICHAEL GROSSMAN
City University of New York Graduate Center and National Bureau of Economic Research,
365 Fifth Avenue, 5th Floor, New York, NY 10016-4309, USA; Tel.: 212-817-7959

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Abstract. This paper highlights the influence of the new home economics in general and Jacob Mincer’s work in particular on the field of health economics. I begin by considering the value of time as a determinant of adult health and medical care utilization. I then turn to a similar treatment in the case of children’s health and medical care utilization. I conclude with alternative explanations of the positive relationship between years of formal schooling completed and health, a topic that deals with complementary relationships between the two most important components of the stock of human capital.

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I took Jacob Mincer’s two-semester labor economics course at Columbia University during the academic year 1965–66. Two of the first items that I read for the course during the first semester were his papers entitled “Labor Force Participation of Married Women: A Study of Labor Supply” (Jacob Mincer, 1962) and “Market Prices, Opportunity Costs, and Income Effects” (Jacob Mincer, 1963). Jacob devoted much of the second semester of the course to material that he eventually would publish in a book entitled Schooling, Experience, and Earnings (Jacob Mincer, 1974). The two papers and the book are in my view three of the most important contributions to labor economics in the last half of the 20th century.

Given the identity of the author, it is not surprising that I learned a striking empirical fact from each of the three items that I have just mentioned. From the first, I learned that an increase in the wage rate of married women leads to an increase in their labor-force participation rate, if their husband’s income is held constant. From the second, I learned that an increase in the wage rate of married women leads to a reduction in the number of children to which they will give birth, again if their husband’s income is held constant. From the third, I learned that higher levels of schooling and on-the-job training are the major cause of higher wage rates.

As opposed to their distinct empirical contributions, the three items share a common theoretical theme: namely, the dichotomy between work and leisure is

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much too simple. This theme highlights that the labor/leisure decision is complicated by the presence of other uses of time. Individuals allocate time to many activities including food preparation, child care, other types of production of goods and services for the home and the family, and the acquisition of knowledge and skills or human capital via formal schooling and on-the-job training. Since “time is money,” women with higher wage rates simultaneously allocate more time to work in the market and less time to child care by having fewer children. But since time sacrificed from the market now can raise market productivity in the future, there are powerful incentives to forego current earnings in favor of investments in human capital. Thus, these three papers have a dual message. On the one hand, an increase in the value of time elicits a variety of responses by consumers. On the other hand, increases in the value of time result from human capital investment decisions made by consumers.

In addition to taking Jacob’s courses in labor economics, I witnessed much of his collaboration with Gary S. Becker at the now famous Columbia University labor economics workshop during the decade of the 1960s. Although they never published research together, their interaction with each other and with students at the workshop and the publications that emerged from those interactions (especially the three by Jacob mentioned above and Gary S. Becker, 1964, 1965, 1981) resulted in the new home economics.

For three reasons, the new home economics has had profound impacts on the field of health economics. First, time is required to produce health and to obtain medical care. Second, health, like knowledge, is a durable capital stock; and both may be viewed as components of the stock of human capital. With one modification, insights from human capital theory developed by Jacob and others can be applied to this stock. The modification pertains to the nature of the returns. Investments in knowledge raise productivity in the market sector, where money earnings are produced, and may also raise productivity in the nonmarket or household sector, where commodities that enter the utility function are produced (Robert T. Michael, 1973). By contrast, investments in health by reducing morbidity and prolonging life increase the amount of time available to produce money earnings and commodities (Michael Grossman, 1972a,b).

The third impact of the new home economics on health economics is a direct offshoot of Jacob’s work on fertility. The finding that women with higher wage rates have fewer children suggests that they may have a smaller number of higher quality children, especially if part of the wage differential is due to schooling (Robert J. Willis, 1973; Becker, 1981). Since children’s health is one aspect of their quality, theoretical and empirical work in this area owes much to Jacob’s insights on the determinants of optimal family size.

In the remainder of this paper, I highlight the influence of the new home economics in general and Jacob’s work in particular on the field of health economics. I begin by considering the value of time as a determinant of adult health and medical care utilization. I then turn to a similar treatment in the case of children’s health and medical care utilization. I conclude with a discussion of alternative explanations of the positive relationship between years of formal schooling completed and health.