Family Processes and Changing Educational Gradients in Smoking

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Smoking is the leading behavioral cause of death in the United States (McGinnis and Foege 1993). Although smoking was once a choice preferred by the well-educated, during the 1950s and 1960s dramatic declines in smoking rates by those with at least some college completed created a steep educational gradient in the behavior such that from the 1970s onward smoking and its ill effects on health became concentrated among those with less schooling (de Walque 2004). In earlier work, I show that the causal ordering of education and smoking is complicated, especially in more recent cohorts when differences in smoking are determined by differences in smoking initiation rather than smoking cessation. Smoking initiation occurs early in life, generally long before schooling is completed. Although characteristics of early school experiences predict smoking initiation, these factors do not account for much of the association between smoking and schooling (Maralani 2007).

These results highlight the importance of understanding family contexts and early life experiences and assessing whether educational attainment and smoking status are determined jointly—rather than assuming that education causes smoking status. Parents' educational attainment and smoking status play a key role in predicting these same statuses in children. Thus, a natural starting point is to ask how the distribution of families in terms of these statuses has changed over time. Are children becoming more likely to be born into a family that has both high education and never smoking parents, or alternatively, low education and currently smoking parents? As sorting on education and smoking status becomes more homogamous, then the families in which children are born become more unequal. The joint occurrence of high or low education and smoking status of parents concentrates disadvantage in certain types of families compared to when these traits are distributed more randomly.

This paper aims to understand how the families in which children are born differ by parents' education and smoking status and how this has changed across birth cohorts of Americans. Part one describes trends in assortative mating by education and smoking status for cohorts born between 1930 and 1970. Part two describes trends in parental education and smoking status at the time of first birth across cohorts. These two parts are the building blocks

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for developing a two-generation model of education and smoking status that describes the joint transmission of these two statuses across generations and how this process has changed across birth cohorts. The approach combines a demographic (macro-level) perspective with a micro-level perspective to extend our understanding of educational gradients in smoking. The research also extends our understanding of the transmission of behaviors or statuses across generations.

I use data from the Health and Retirement Survey (HRS) and Panel Study of Income Dynamics (PSID). HRS provides data on three cohorts: 1931-1941; 1942-1947; and 1948-1953. The PSID provides data on a cohort born approximately between 1950 and 1970. I combine marriage and smoking histories for each spouse to determine the smoking status (never, current, or former smoker) of each partner at the time of marriage and when their children are born. I assess trends in assortative mating and smoking status using log linear models, which account for the changing marginal distributions of education and smoking across these cohorts. I model the association between husband and wife smoking status at time of marriage (first and second marriages only) across birth cohorts. I also examine trends in parental smoking status at time of children's birth by education and cohort (for first marriages and first births only).

The results show that education and smoking status at the time of marriage are becoming more aligned. Across cohorts, men who smoke become more likely to marry women who smoke, especially among couples with less schooling. For example, in families in which both spouses have only 12 or fewer years of schooling, the odd ratio for smoking resemblance (the likelihood that a man who smokes marries a woman who smokes versus a woman who does not smoke) increases from 2.1 for the oldest cohort to 3.0 in the youngest cohort. For couples with more schooling, in contrast, the odds ratio of smoking resemblance remains constant across cohorts. These changes in smoking and educational resemblance across cohorts remain significant net of changes in population composition. This alignment of education and smoking status within processes of family formation continues between the time of first marriage and firth birth. When both spouses have at least 13 years of school completed, the likelihood that at least one of the spouses guits smoking by the time of the first birth (among those couples where at least one spouse smokes) increases substantially across cohorts. Couples with less schooling see much smaller gains in the likelihood of quitting smoking between the time of first marriage and first birth across cohorts. This alignment of education and smoking status within families of origin

supports the hypothesis that families are becoming more unequal across important predictors of social status and health.

References:

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