“RISK PREFERENCE FORMATION AND HEALTH BEHAVIORS IN ADOLESCENCE AND ADULTHOOD: THE IMPORTANCE OF NEIGHBORHOOD AND FAMILY BACKGROUND”

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ABSTRACT

Almost 50% of deaths in the U.S. are preventable and directly attributable to behavioral causes. Despite the dramatic increase in the public’s awareness of the health hazards of smoking that has occurred over the past two decades, cigarette smoking and consumption of alcohol cost upward of 100 billion dollars annually in health care costs and lost productivity (Manning et al. 1991). One of the strongest predictors of adult substance use problems is early onset of substance use. Previous research on early cigarette use has focused on individual- and family-level factors, documenting a significant relationship between family socioeconomic status and young people’s likelihood of smoking. There are differing views regarding whether these health behavioral patterns reflect a health lifestyle orientation or are responses to behavioral incentives resulting from neighborhood contextual-level pressures.

Neighborhood conditions, such as the availability of nearby facilities or fear of crime/violence, may make it more or less costly to undertake health-promoting behavior, such as exercising regularly and eating nutritious foods. These health-behavior habits are formed to a large degree in childhood/adolescence. Poorly maintained neighborhood environments may manifest themselves in crumbling sidewalks and dangerous playgrounds, and act to undermine health-promoting efforts in youth. Previous studies have shown that African-American neighborhoods are more likely to suffer from institutional risk factors such as the proliferation of liquor stores, insufficient supplies of nutritious foods in local grocery stores, and insufficient supplies of prescription drugs at local pharmacies.

This paper uses data from the Panel Study of Income Dynamics (PSID), spanning 1968-2001, to analyze three dimensions of health over the life-course: 1) health-related behaviors—age of onset of cigarette smoking initiation in adolescence, and smoking behavior in adulthood; 2) obesity in early-mid adulthood; and 3) risk preferences (risk tolerance/aversion)—parameters that are determinants of individual health behavioral decisions/choices (that may be shaped by childhood neighborhood conditions).

This analysis is the first to investigate both the effects of neighborhood context on the age of onset of cigarette smoking initiation in adolescence, and the effects of the neighborhood of upbringing on the subsequent smoking behavior of these same individuals in adulthood. After investigating contextual-level effects on the age of onset of cigarette smoking initiation in adolescence, I then estimate sibling and childhood neighbor correlations in subsequent smoking behavior in adulthood. These results have implications for the importance of neighborhood context in shaping the early formation of addictive health behaviors that persist throughout adulthood.
In this paper, I also use weight and height information measured in adulthood of PSID respondents to create an adult body mass index (BMI) measure for each individual in our sample. In the analyses, sibling correlations and childhood neighbor correlations in adulthood obesity are estimated to assess the relative importance of neighborhood and family background.

Risk preferences are of interest in their own right, but we motivate the importance of analyzing the effects of neighborhood of upbringing on the formation of these parameters in this context because they are determinants of health behaviors such as smoking. More generally, risk preference parameters shape a wide array of behavioral choices of individuals, and thus analysis of them and how they are shaped by childhood neighborhood influences has far-reaching implications and can contribute to our understanding of many different outcomes/phenomena. I use new, experimental data from a 1996 supplement to the PSID to explore the extent to which an index of risk tolerance measured in adulthood is correlated between siblings and correlated between childhood neighbors.