

# **A Dynamic Study of School Interruptions**

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## **Abstract**

In this paper, I develop and estimate a dynamic model of education and labor supply in order to investigate the impact of school interruptions on subsequent wages and employment outcomes using data from the 1979 cohort of the National Longitudinal Survey of Youth (NLSY79). School interruptions - often occurring before college or university enrollment - are common in North America, and it has recently attracted attention by economists (see for example Johnson, 2013). The model proposed in this paper shares many similarities with Johnson (2013) but also offers some additional insights. As in Johnson, I use a finite horizon model that is solved by each agent using backward recursions of a Bellman equation. Unlike Johnson, I focus less on budget constraints and college enrollment and more on the effect of delaying college or university attendance. In my model, school interruptions, as well as education and work experience, evolve endogenously, and I approximate the expected value function using an approach suggested by Geweke and Keane (1996) that significantly reduces computation time. The results suggest that a temporary interruption of schooling attainment has an adverse effect on wages post-graduation relative to continuous investment in education and consequently on life-cycle income. However, even with an interruption, there are still significant wage gains from college and university relative to high school. Finally, the costs of interruptions and the wage gains are heterogeneous and vary significantly across different types of agents.