

College Student Employment and Persistence In Postsecondary Education: Evidence Of Effect Heterogeneity Of Student Employment On College Dropout Rates

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Abstract

Much positive evidence about improvements in education in the United States during the last several decades suggests the optimistic expectation of reducing inequality in educational opportunity and social stratification in the country. College enrollment rates among high school graduates have continuously increased and reached about 70 percent in 2009 (Sources: National Center for Education Statistics 2010), and fulfilling campus diversity has become the norm throughout most of the United States (New York Times September 15, 2009). The opportunity to attend college has greatly increased compared to several decades ago in terms of gender, race and class. However, this positive news is tempered by an unfavorable but important educational trend: the dropout rate. Among many indexes of educational trends, the dropout rate has not changed and has even increased. Tinto (Tinto 1993:1) pointed out that, “In 1993, 2.4 million students entered college ... of those, some 1.1 million will leave without a degree.” This is not an old trend. The percentage of four-year college students who earn a degree within five years of entry was 54.3 percent in 1993 and 52.3 percent in 2010. The percentage of first-year students at four-year colleges who returned for their second year was 74.8 percent in 1993 and 72.9 percent in 2010 (Sources: American College Testing Program (ACT) institutional dataset). According to the OECD directorate for

Education, the United States now has the highest college dropout rate in the industrialized world (Symonds, Schwartz and Ferguson 2011).

It is widely acknowledged that completing college matters much more now than it once did (Hebel 2000). A highly industrialized and globalized economy demands skilled workers. A college degree is considered only a minimum requirement for getting decent jobs in the current labor market. Thus, if individuals fail to complete a post-secondary credential, “it is increasingly difficult for them to find alternative pathways to success through the labor market.” (New York Times May 24, 2005; Symonds, Schwartz and Ferguson 2011:4). As much of the prior research has pointed out, however, the key stratification aspect of college dropout is that most dropouts are from social and economic minorities (Bean 1985; Braxton 1988; Braxton 2000; Pascarella and Chapman 1983; Spady 1970; Stage 1988; Stage and Hossler 1989). Even though the opportunity to attend college has been expanded and the importance of a college degree has increased, college completion has remained a very challenging goal for disadvantaged students. Thus, a better understanding of the mechanism of college dropout is crucial to any thorough analysis of inequality in the postsecondary education.

Among many factors influencing an individual’s dropout decision, I focus on the effect of student employment on dropout for several reasons. First of all, student employment is not an academic activity, but in many ways it is one of the most important extra-school activities that affect students’ academic performance and decisions while in college (Bozick 2007; Iwai and Churchill 1982; Metzner and Bean 1987; Perna 2010; Riggert et al. 2006; Roksa and Velez 2010; Tinto 1975; Tinto 1993). Second, with increasing educational costs and an unfavorable financial aid system, student employment has become a common option and sometimes the only option available to many less affluent students to meet educational

costs. Even for the affluent students, job experience during postsecondary education is considered one of the important factors in their successful future transition to the labor market after graduation. As Riggert et al. (2006:64) put it, “Student employment... is an educational fact of life.” Third, the increasing rate of college student employment has been an issue in the U.S and gained quite a bit of media attention in recent years. (New York Times May 19, 2011) However, compared to studies on high school student employment, the effects of college student employment on dropout have received far less scholarly attention (Riggert et al. 2006; Bozick 2007). Postsecondary student employment is different from that of high school students in a few important ways. First, college students have much more flexibility in managing their time for work and study. They need to spend less time in the classroom and also have a variety of options to adjust their academic schedule. That is, unlike high school students, students in college have more agency due to its organizational structure. Second, college students are already *selected* individuals in terms of academic motivation and aspiration compared to high school students. Third, organizational and life-course conditions such as school tuition and living arrangements differ greatly from those of high school. Therefore, we can expect that the effects of student employment during postsecondary education to show somewhat different patterns from those of high school student employment. For example, it is possible that the effect of employment is less deleterious at the post-secondary level than during high school. Fourth, there have been very few studies that address the causal relationship between college student employment and dropout using propensity score matching methods for dealing with pre-existing heterogeneity bias, or examine evidence of the treatment effect heterogeneity of college student employment.

Therefore, in this chapter, I want to delve into how college students' employment affects their dropout decision, with a particular focus on first-year persistence, which is the most critical period according to Tinto's (Tinto 1993). Given the importance of student employment, many prior studies examined the effect of student employment on school dropout in high school and college (Bozick 2007; Horn and Malizio 1998; Lee and Staff 2007; Warren, LePore and Mare 2000). I build on these studies and expand them by addressing several theoretical and methodological issues. First, by considering pre-existing heterogeneity, I propose to examine the relationship between college student employment and dropout using propensity score matching. Second, by utilizing complex counterfactuals (intense work (20 hours or more) vs. moderate work (less than 20 hours) vs. no work), I aim to explore how the effect of work intensity on dropout varies. Third, by using the Stratification multilevel and Smoothing-differencing models (Brand, Pfeffer and Goldrick-Rab 2012; Brand and Simon-Thomas [forthcoming]; Xie, Brand, and Jann [forthcoming]), I seek to examine evidence of treatment effect heterogeneity of student employment on college dropout rates. To examine these questions, I propose to use data from the National Longitudinal Survey of Youth 1997.