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Leaving school in an economic downturn and self-esteem across early and middle adulthood☆,☆☆

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HIGHLIGHTS

- We examine the persistent self-esteem effects of leaving school in a bad economy.
- We exploit macroeconomic fluctuations from 1976–1987 to identify effects.
- Individuals who leave school in a bad economy have lower self-esteem.
- Effects to not emerge immediately.
- Instead, effects develop with potential labor market experience.

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ABSTRACT

In this study, we test whether leaving school in an economic downturn impacts self-esteem across early and middle adulthood. Self-esteem is of interest to economists because it is an established determinant of important socioeconomic outcomes such as wages, crime, marriage, health, and civic engagement. Previous research suggests that leaving school in a downturn can depress career trajectories, and social psychological theory predicts that career success is an important determinant of self-esteem. We model responses to a standard measure of self-esteem (the Rosenberg Self-esteem Scale) as a function of the state unemployment rate at school-leaving. We address the potential endogeneity of time and location of school-leaving with instrumental variables. Our results suggest that leaving school in an economic downturn can undermine self-esteem over time.

1. Introduction

In this study we examine whether, and to what extent, leaving school in an economic downturn influences self-esteem through early and middle adulthood. Self-esteem refers to the positive or negative evaluation of the self as an object (Rosenberg, 1965, 1981; Owens and King, 2001; Mruk, 2006). It is indicated by individual perceptions of worthiness and competence. A series of studies show that leaving school in an economic downturn can contribute to adverse labor market (Oyer, 2006, 2008; Kondo, 2007; Genda et al., 2010; Kahn, 2010; Hershbein, 2012; Oreopoulos et al., 2012; Altonji et al., 2014; Maclean, 2014) and marital (Hershbein, 2012; Maclean et al., 2015) trajectories. Moreover, there is evidence to suggest that the effects of leaving school in an economic downturn may reach beyond labor and marriage market outcomes to health and health-related behaviors. These studies show that individuals who leave school in an economic downturn tend to exhibit worse health (in particular, mental health) and health behaviors such as drinking practices (Maclean, 2013, 2015; Cutler et al., 2015).

Social psychological research demonstrates that self-esteem is supported by labor market success, strong marital relationships, and better

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health (Rosenberg and Pearlin, 1978; Haney, 2007; Waite et al., 2009). Thus, leaving school in an economic downturn could conceivably erode an individual's self-esteem by increasing the probability of unfavorable outcomes in labor and marriage markets, and poor health outcomes and behaviors.

Interestingly, the literature offers little insight on this possible relationship. In an extension to the main analysis of risky drinking practices, Maclean (2015) provides suggestive evidence that self-esteem is influenced by leaving school in an economic downturn. Although Maclean's work is interesting it leaves many questions unanswered. We attempt to address some of these open questions in this study. First, we study dynamics of the relationship. Maclean focuses on self-esteem at a single point in time and thus cannot speak to the evolution of self-esteem effects. Second, we combine social psychology and economic theory and empirical evidence to motivate why we might expect economic conditions experienced at school-leaving to influence self-esteem. Third, we study heterogeneity in self-esteem effects across worker type (i.e., skill, race/ethnicity), as suggested by previous literature on the career effects of leaving school in an economic downturn. Fourth, we attempt to shed light on whether self-esteem may be a consequence of poor outcomes attributable to leaving school in an economic downturn or if, instead, it exacerbates these poor outcomes. Fifth, we show that findings are highly robust to multiple sensitivity tests and, as a result, are better able to interpret the relationship as a causal effect rather than a simple correlation.

Understanding determinants of self-esteem is of interest to economists because self-esteem is an established predictor of labor market outcomes (earnings, wages, unemployment spells), financial stability, health and health behaviors, human capital accumulation, crime, marriage, and civic engagement (Rosenberg, 1981; Goldsmith et al., 1996, 1997a,b; Bowles et al., 2001; Markowitz, 2001; Murnane et al., 2001; Graham et al., 2004; Mruk, 2006; Trzesniewski et al., 2006; Waddell, 2006; Yang, 2006; Corneo and Jeanne, 2010; Neymotin, 2010; Drago, 2011; Oreopoulos and Salvanes, 2011; de Araujo and Lagos, 2013; Mendolia and Walker, 2014). Broadly, the economic literature suggests that individuals who possess higher levels of self-esteem have better outcomes across these domains than individuals with lower self-esteem.

In this study, we use data from the National Longitudinal Survey of Youth 1979 Cohort (NLSY79) to model self-esteem, as measured by the Rosenberg Self-esteem Score (Rosenberg, 1965), at various points across the adult life course as a function of the state unemployment rate at school-leaving. The Rosenberg Self-esteem Score is a standard measure of self-esteem within the economics literature (Heckman et al., 2006; Webber, 2014). To this end, we exploit variation generated by volatility in the United States economy between 1976 and 1987 to identify persistent self-esteem effects. We address the potential endogeneity of both the time and location of school-leaving with instrumental variables. Specifically, we follow the literature on the persistent effects of leaving school in an economic downturn and utilize instruments based on birth year and state of residence early in life (Oyer, 2006; Kondo, 2007; Kahn, 2010; Oreopoulos et al., 2012; Maclean, 2013, 2014, 2015).

Our results suggest that economic conditions experienced at school-leaving do affect self-esteem. The effects do not emerge immediately at labor market entry; instead they emerge over time. Analysis of heterogeneity in treatment effects reveals that the effects are particularly strong for high skill individuals. As such, our core findings contribute to the broader literature on the persistent effects of leaving school in an economic downturn.

2. Conceptual framework

We first review social psychological theories of self-esteem. We then discuss how the economic literature on the effects of leaving school in a downturn can augment these theories.

2.1. Social psychological theories of self-esteem

There are three general social psychological principles that can govern the formation and development of self-esteem. These principles include reflected appraisals, social comparisons, and self-attributions.

The principle of reflected appraisals suggests that self-esteem is determined by our perceptions of how we think others view us (Cooley, 1902; Mead, 1934; Rosenberg and Pearlin, 1978; Rosenberg, 1981). When people perceive that they are valued and respected, self-esteem will tend to be high. When people perceive that they are devalued and disrespected, self-esteem will tend to be low. Our perceptions of how we think others see us are largely dependent upon socialization processes and our understanding of broader cultural values. Because one's socioeconomic status is imbued with social meaning, it represents an important criteria for self-judgment and the development of the self-concept. According to the principle of reflected appraisals, individuals who leave school during an economic downturn are likely to experience negative reflective appraisals due to limited opportunities for occupational and status attainment. This may be especially true when those conditions are experienced during the transition from school to work, when initial attachment to the labor market is generally formed.

The principle of social comparisons suggests that self-esteem is determined by what we learn about ourselves when we compare ourselves to others (Festinger, 1954; Rosenberg and Pearlin, 1978; Rosenberg, 1981). When we contrast ourselves to others, our self-evaluations are by definition relative to a selected reference group. Social comparisons are ubiquitous in life. They involve explicit evaluations (e.g., performance evaluations), salient comparisons (e.g., to co-workers), and countless informal comparisons (e.g., comparisons mediated by social interactions). According to the principle of social comparisons, individuals who leave school during an economic downturn are likely to exhibit lower levels of self-esteem because they tend to compare unfavorably with salient reference groups (e.g., individuals with similar academic credentials) who left school during more prosperous economic conditions.

The principle of self-attributions suggests that self-esteem is determined by perceptions of personal effectiveness and competence in achieving desired outcomes (Rosenberg and Pearlin, 1978; Rosenberg, 1981; Mruk, 2006). When people perceive that they are effective and competent, such perceptions are likely to promote self-esteem. When people perceive that they are ineffective and incompetent, such perceptions are likely to be internalized accordingly. Individuals aspire to achieve certain levels of social status and occupational standing. However, because occupations and income levels are achieved statuses, limited success in these areas may be interpreted as a reflection of personal failure. Self-esteem is likely to suffer as a result.

2.2. The impact of leaving school in an economic downturn

Workers who leave school in an economic downturn may be directed towards low wage and otherwise less desirable jobs in the short run because there are fewer open jobs and lower quality jobs (Reder, 1955; Okun, 1973; McLaughlin and Bils, 2001). Studies show that labor market frictions limit the ability of workers to shift into better jobs as the economy rebounds, leaving workers persistently stuck in low-wage and otherwise less desirable jobs (Oyer, 2006, 2008; Genda et al., 2010; Kahn, 2010; Kwon et al., 2010; Schoar and Zuo, 2011; Oreopoulos et al., 2012; Altonji et al., 2014; Maclean, 2014).

For example, workers who leave school in an economic downturn tend to earn lower wages, to hold less prestigious jobs, and are less likely to be promoted (Kahn, 2010; Kwon et al., 2010). Failure to succeed in the labor market may contribute to poor self-esteem among individuals who leave school in an economic downturn. Regardless of the effort school-leavers apply to their career, frictions in the labor market may prevent them from achieving the success experienced by their more fortunate counterparts who left school in a stronger economy.