

# Changing Tracks: Human Capital Investment After Loss of Ability

Based on BFI Working Paper 2023-30, *“Changing Tracks: Human Capital Investment After Loss of Ability,”*  
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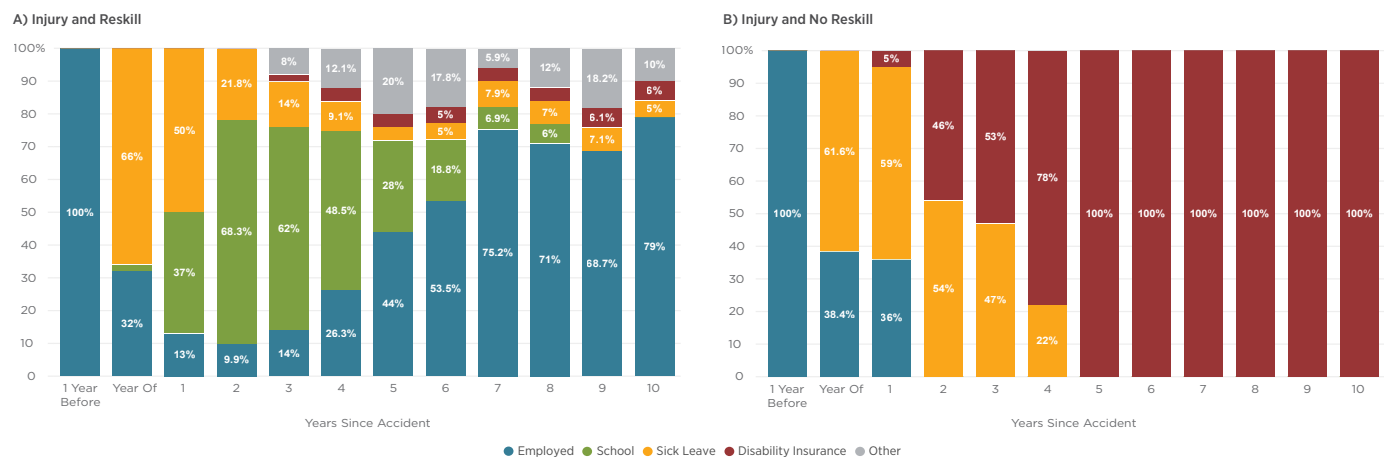
*Injured workers who reskill through bachelor’s programs earn 25% more than before their injuries and avoid being prescribed antidepressants or receiving disability insurance.*

Human capital was first popularized by Gary Becker, who compared individuals’ investments in education and training to those of businesses in machinery and equipment. Today, scholars studying human capital often aim to identify ways to bolster peoples’ life trajectories, such as through improvements in education or health. In this paper, the authors use data on workplace

injuries to study how workers invest in human capital after losing ability, and to assess the effectiveness of human capital programs that aid those workers.

They begin by linking Danish injury claims data to information on workers’ health, education, receipt of government transfers, and

**Figure 1 • Labor Supply Scenarios for Injured Workers**



Note: This figure compares the potential outcomes of injured workers with and without reskilling through higher education. Each vertical bar corresponds to a year before or after their workplace accident, and the bar labeled “Year Of” corresponds to the year that the accident took place. The bars are shaded to indicate the share of workers who exhibit a given outcome in each year. Note that the likelihood of finding employment is far greater for injured workers who reskill, while injured workers who do not reskill uniformly receive disability benefits.

employment. The authors restrict their sample to the subset of people who worked steadily until an accident limited their earnings. Their data reveal the following patterns:

- Most workers do not invest in human capital following an accident, with only 13% enrolling in a degree program at any level in the ten years following their injury.
- Among those who do invest, four-year bachelor's programs are most common. Injured workers tend to pursue fields that are less physically demanding and more cognitively intense than their previous positions, often targeting degrees that build on their experience. For example, many carpenters obtain bachelor's degrees in construction architecture.

The authors next turn to measuring the impacts of these investments. By comparing the outcomes of otherwise-similar workers who differ only in their eligibility for Danish degree programs, they find the following:

- Reskilling through higher education improves injured workers' labor market outcomes considerably. Roughly 80% of injured workers who reskill find employment within seven years of their accidents, on average earning 25% more than before their injuries.
- Higher education appears to mitigate other hardships associated with workplace injuries as well. While workers who do not reskill receive disability benefits from the government and are often prescribed antidepressants, those who reskill do not experience an uptick in either.

- These increased tax revenues and decreased social expenditures mean that reskilling subsidies for injured workers pay for themselves four times over.

Given these benefits, should policies to increase the share of injured workers who reskill through higher education be implemented? To answer this question, the authors assess whether the returns documented above hold as more workers reskill. They find that the share of injured workers who reskill through higher education could be expanded considerably, from 11% to 33%, to maximize returns to workers and taxpayers. The case is even stronger for middle-aged workers, who tend to reskill at lower rates despite the benefits.

The upshot is that higher education is effective at helping manual workers reskill and shift occupations. Policies that expand access to higher education could help alleviate displacement shocks to manual occupations, such as automation or globalization.

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