

Fade-Out in Human Capital Intervention: Death, Miracles and Resurrection

Greg Duncan

A discouraging feature of many human capital interventions is the decline of impacts over time on the outcomes targeted in the program design. This is clearly the case for the Perry Preschool intervention, where a 0.87 standard deviation impact on IQ at age 5 decreased by 93% (to 0.06 sd) by age 8. The benefits generated by Perry's assortment of other impacts tracked through adolescence were not large enough to exceed program costs. Substantial effects on earnings and crime, among other outcomes, emerged in adulthood, generating time-discounted benefits that greatly exceeded Perry's costs.

Perry's storyline provides a framework to address a number of questions concerning the persistence of human capital program impacts. Although some of the answers may apply to other stages of childhood, the focus of the Opening Address will be primarily on early childhood interventions.

Q1: What features of the interventions themselves, or the characteristics and environments of their child subjects, may be hypothesized to produce fade-out?

Q2: What conditions may be hypothesized to sustain program impacts?

Q3: What may account for the puzzling pattern of early fade-out followed by the emergence of impacts in adulthood?