A Cost-Benefit Analysis of the National Guard Youth ChalleNGe Program

Citation

Perez-Arce, F., Constant, L., Loughran, D., & Karoly, L. (2012). A cost-benefit analysis of the National Guard Youth ChalleNGe Program. Technical report. Santa Monica, CA: RAND.

Highlights

- This report estimates the social return on investment of the National Guard Youth ChalleNGe program, a disciplinary and educational intervention for unemployed youth ages 16 to 18 who are not in school. Related reports examined impacts of the program at 10 sites measured at 9, 21, and 36 months.
- The authors used several types of data to determine the program's costs and benefits. For costs, the data included program budgets and the March 2010 Current Population Survey. For benefits, the main data source was the impact estimates from the 36-month follow-up and data from the National Longitudinal Survey of Youth, 1979 cohort (NLSY79).
- The authors calculated the operating and opportunity costs of the program per admitted cadet and compared this to the lifetime benefits of being admitted to the program, including increased earnings, decreased dependence on social welfare, and decreased criminal activity.
- The study found that net benefits of the program, from the perspective of society as a whole, were \$25,549 per admittee, a return on investment of 166 percent. The government incurred negative net benefits, largely due to covering the bulk of the operating costs, and the participants had substantial, positive net benefits.

Features of the National Guard Youth ChalleNGe Program

The National Guard Youth ChalleNGe program began in the early 1990s with a mission to target at-risk youth and equip them with the skills and training to have successful adult lives. To be eligible, youth had to be 16 to 18 years of age, have dropped out of or been expelled from school, be unemployed, not be drug users, and not be heavily involved in the criminal justice system.

The 17-month program consists of a two-week Pre-Challenge phase, a 20-week Residential phase, and a one-year Post-Residential phase. Participants live in barracks-style housing (sometimes on a military base) in a very disciplined environment during the first two phases. They wear their hair short, are referred to as cadets, and wear military uniforms. In the Pre-Challenge phase, participants are oriented to the program's rules and begin physical training. During the Residential phase, they participate in a number of different activities addressing eight core pillars: leadership/followership, responsible citizenship, service to community, life-coping skills, physical fitness, health and hygiene, job skills, and academic excellence. Cadets spend most of their time in an educational component that is usually geared toward passing the General Educational Development (GED) test. During the Post-Residential phase of the program, after participants are placed in employment, education, or military service, they receive structured mentoring. The federal government covers 75 percent of program costs and state governments fund the other 25 percent.

Features of the Study

This study included the same set of 10 program sites in California, Florida, Georgia, Illinois, Michigan, Mississippi, New Mexico, North Carolina, Texas, and Wisconsin that had been included in the random assignment evaluation (see CLEAR profile of Millenky et al. 2011¹). The authors collected information on program budgets from each site to determine the average operating costs per Challenge admittee. In addition to the operating cost, the authors computed the opportunity cost of applying to the program and serving as a volunteer mentor or mentee during the Post-Residential phase of the program using data from the March 2010 Current Population Survey.

On the benefit side, the authors used data from the NLSY79 to estimate a model of the returns to various levels of education over the lifetime. They then multiplied these values by the impact estimates to arrive at a present value of the benefit ChalleNGe admittees could expect as a result of the program. They performed similar exercises to calculate the average value of reduced social welfare dependence and criminal activity.

Findings

- The operating cost per ChalleNGe admittee was \$11,633 (in 2010 dollars) on average across participating sites.
- On the cost side, there were additional opportunity costs and deadweight losses of taxation
 resulting in a total cost to society per admittee of \$15,436. On the benefits side, factoring in the
 increased lifetime earnings, decreased social welfare dependency and criminal activity, increased
 service to the community, and efficiency losses attributable to taxation, the total benefits to society
 were \$40,985 per admittee.
- Thus, the net benefits to society were \$25,549 per admittee, a return on investment of 166 percent. When the net benefits to society were broken into net benefits to the government and to the participants, the analysis found that the government incurred negative net benefits, largely due to covering the bulk of the operating costs, and the participants had substantial, positive net benefits.

Considerations for Interpreting the Findings

As noted by the study authors, the calculations of costs and benefits are sensitive to several assumptions, including those around the discount rate and those used to develop the model of returns from education. The authors performed numerous sensitivity analyses to test how variations in the assumptions affected the findings and found that, in general, the net benefits to society were still positive.

The authors also noted that the analysis focused on labor market outcomes and not other nonpecuniary factors such as benefits to health, thus potentially understating the benefits to those outcomes. In addition, they estimated the cost per admittee, rather than attendee, because the impact estimates were based on an analysis of all admittees, not only those who attended the program. This likely understates the impacts of the program on those who actually attended it and, consequently, the net benefits they realized.

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¹ Millenky, M., Bloom, D., Muller-Ravett, S., & Broadus, J. (2011). Staying on course: Three-year results of the National Guard Youth ChalleNGe Evaluation. New York: MDRC.