

What Has Been Learned From RCTs in Employment/Training & Other Fields?

Some General Observations

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Coalition for Evidence-Based Policy

- ◆ A nonprofit, nonpartisan organization.
- ◆ Mission: To increase government effectiveness through rigorous evidence about “what works.”
- ◆ Independent assessment found: Coalition has been “instrumental” in advancing evidence-based reforms.
- ◆ Coalition has no affiliation with any programs or program models – thus serves as an objective, independent resource on evidence-based programs.
- ◆ Funded independently, by MacArthur, WT Grant, and Clark Foundations.

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1. RCTs have identified a few highly-effective interventions:

- ◆ **Career Academies** in high-poverty schools, provide smaller learning environment with a career theme and partnership with local employers
 - At 11-12 year follow-up, produced a sustained increase in earnings of \$2200 per year.
- ◆ **Riverside GAIN Program** (to move welfare recipients quickly into workforce through short-term job search & training)
 - At 5-year follow-up, increased single-parent employment & earnings by ~40%.

2. RCTs have found that much of conventional wisdom about “what works” is wrong

Specifically:

- ◆ Much of what is thought to work probably does not, or has weak effects.
- ◆ Findings of true effectiveness exist, but tend to be the exception.

This pattern occurs in many different fields (e.g., medicine, psychology, social policy).

Examples of medical wisdom overturned by well-conducted randomized controlled trials

- ◆ Intensive efforts to lower blood sugar of type II diabetics (no effect or adverse effect on risk of death)
- ◆ Hormone replacement therapy for post-menopausal women (increases stroke & heart disease)
- ◆ Dietary fiber to prevent colon cancer (shown ineffective)
- ◆ Stents to open clogged arteries (shown no better than drugs for most heart patients).
- ◆ Beta-blockers administered shortly after a heart attack (does not save lives).

Examples from medicine, continued

- ◆ Having babies sleep on their stomachs (increases risk of SIDS)
- ◆ Beta-carotene and vitamin E supplements (“anti-oxidants”) to prevent cancer (ineffective or harmful)
- ◆ Oxygen-rich environment for premature infants (increases risk of blindness)
- ◆ Recent promising AIDS vaccines (found to double risk of AIDS infection)
- ◆ Bone marrow transplants for women with advanced breast cancer (ineffective)

Examples from medicine, continued

- ◆ Head of AIDS Vaccine Advocacy Coalition, commenting on AIDS vaccine failure:

"This is ... an important milestone in many respects. This is the way products get developed. Lots of things don't work, and we're on the road to finding something that does."

-- Mitchell Warren, July 2008

Same pattern occurs in social policy –
Examples or randomized trials showing weak or
no effects (or adverse effects):

- ◆ **DOL's "New Chance" Demonstration Program**, for teenage welfare mothers and their children.
- ◆ **Even Start family literacy program** for low-income families.
- ◆ **Many home visitation programs** (e.g., HHS Comprehensive Child Development Program).
- ◆ **21st Century Community Learning Centers** -- after-school activities in high-poverty schools.
- ◆ **NYC Vouchers for disadvantaged youth** (K-4) for private school.

Illustrative examples, continued:

- ◆ **15 leading educational software products** -- for teaching K-12 reading and math
- ◆ **4 HHS-funded abstinence education programs,** in grades 3-8
- ◆ **Drug Abuse Resistance Education (DARE)** – School-based substance-abuse prevention
- ◆ **Many other Substance-Abuse Prevention programs** (e.g., Project Alert)
- ◆ **Job Corps** (academic & vocational training for disadvantaged youth age 16-24).

Illustrative examples, continued:

- ◆ **Summer Training & Employment Program** (summer jobs & academic classes to 14-15 yr olds).
- ◆ **Job Training Partnership Act** (workforce training for adults and youth). Randomized evaluation of 16 sites that volunteered for the study.
- ◆ **Upward Bound** (provides instruction, tutoring, counseling starting 9-10 grade).
- ◆ **ED's dropout prevention programs** (middle and high school).
- ◆ **A Widely-Used Teacher Professional Development Program ("LETRS")**, incorporating key elements of scientifically-based reading research.

Illustrative examples, continued:

- ◆ **Two Widely-Used Teacher Induction Programs** (providing new teachers in grades 2-6 with intensive mentoring by experienced, exemplary teachers)
- ◆ **DOL Quantum Opportunity Program** (intensive youth development incl mentoring, tutoring)
- ◆ **Center for Employment Training replication** (training in work-like setting for out-of-school youth)
- ◆ **Scared Straight** (brings delinquent youth into prison for rap sessions with prisoners)

Suggestions on Strategy for Using RCTs

1. Focus RCTs on most promising interventions (as opposed to evaluating everything).
2. Make sure the type of evaluation is appropriate for the stage of an intervention's development (e.g., early-stage development vs. scale-up of mature intervention).
3. Recognize that well-conducted RCTs can sometimes be done at modest cost (e.g., \$50,000).

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