

Increasing Government Effectiveness Through Rigorous Evidence About “What Works”

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Coalition for Evidence-Based Policy

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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. Rationale for Evidence-Based Policy



The Problem: Little progress in many key areas of policy

- ◆ U.S. has made very limited progress in raising K-12 achievement over past 30 years.
- ◆ U.S. poverty rate today is higher than in 1973.
- ◆ U.S. has made no significant progress versus drug/alcohol abuse since 1990.



Rigorous evaluations have identified interventions that are ineffective/harmful:

◆ Vouchers for disadvantaged workers, to subsidize their employment

Well-designed randomized trial found large negative effects on employment.

◆ Drug Abuse Resistance Education (DARE)

Ineffective in preventing substance use, according to randomized trials (is now being redesigned).

Rigorous evaluations have identified a few highly-effective social interventions:

◆ Nurse-Family Partnership

By age 15, results in 40-70% reductions in child abuse/neglect, and arrests of children and mothers.

◆ Triple P – Positive Parenting Program

At 2-yr follow-up, produced 25-35% decrease in county-wide child maltreatment reports, maltreatment injuries, & out-of-home placements.

Evidence-based policy seeks to incorporate two main reforms into social programs:

1. Increased funding for rigorous evaluations, to grow the number of research-proven interventions.
2. Strong incentives & assistance for program grantees to adopt the research-proven interventions.

New federal initiatives to expand evidence-based programs, for which we've provided key input:

- ◆ **President's FY10 budget** - \$124 million for new evidence-based home visitation program, \$114 million for new evidence-based teen pregnancy prevention program.
- ◆ **HHS evidence-based home visitation program** - enacted by Congress in 2008 (\$13.5 million). Directs HHS to:

"ensure that States use the funds to support models that have been shown, in well-designed randomized controlled trials, to produce sizeable, sustained effects on important child outcomes such as abuse and neglect . . . [and] not to incorporate any additional initiatives that have not met these high evidentiary standards."

New federal evaluation initiatives for which we've provided key input:

- ◆ Supplemental Appropriations Act (enacted June 09):

"The Secretary of the Treasury shall seek to ensure that multilateral development banks rigorously evaluate the development impact of selected bank projects ... and emphasize use of random assignment in conducting such evaluations, where appropriate and to the extent feasible."

- ◆ Second Chance Act (enacted April 08) to facilitate the re-entry of prisoners into the community:

Contains 2% set-aside for evaluations that – *"include, to the maximum extent feasible, random assignment . . . and generate evidence on which re-entry approaches and strategies are most effective."*

2. The evidence-based strategies we recommend to policymakers and other stakeholders are based on two observations.



1. There is strong evidence to support:

- ◆ Well-conducted randomized controlled trials as the highest quality evaluation to determine program impact.
- ◆ Observably-equivalent comparison-group studies as a second-best alternative. The groups should be:
 1. Highly similar in key characteristics (including their likely motivational level);
 2. Preferably, chosen prospectively (i.e., before the intervention is administered).

Less rigorous study designs:

◆ Less rigorous evaluation methods include:

- Comparison-group studies in which the groups are *not equivalent* in key characteristics;
- Pre-post studies;
- Outcome metrics (without reference to a control or comparison group).

◆ Such designs can be very useful in generating hypotheses about what works, but often produce erroneous conclusions.

National Academy of Sciences (2009 Report on Prevention Programs for Young People):

- ◆ “The highest level of confidence [in program efficacy or effectiveness] is provided by multiple, well-conducted randomized experimental trials ...
- ◆ “When evaluations with such experimental designs are not available, evidence for efficacy or effectiveness cannot be considered definitive, even if based on the next strongest designs ...
- ◆ “Programs that have widespread community support as meeting community needs should be subject to experimental evaluations before being considered evidence-based.”

Job Training Partnership Act: Impact on Earnings of Male Youth (Non-arrestees)

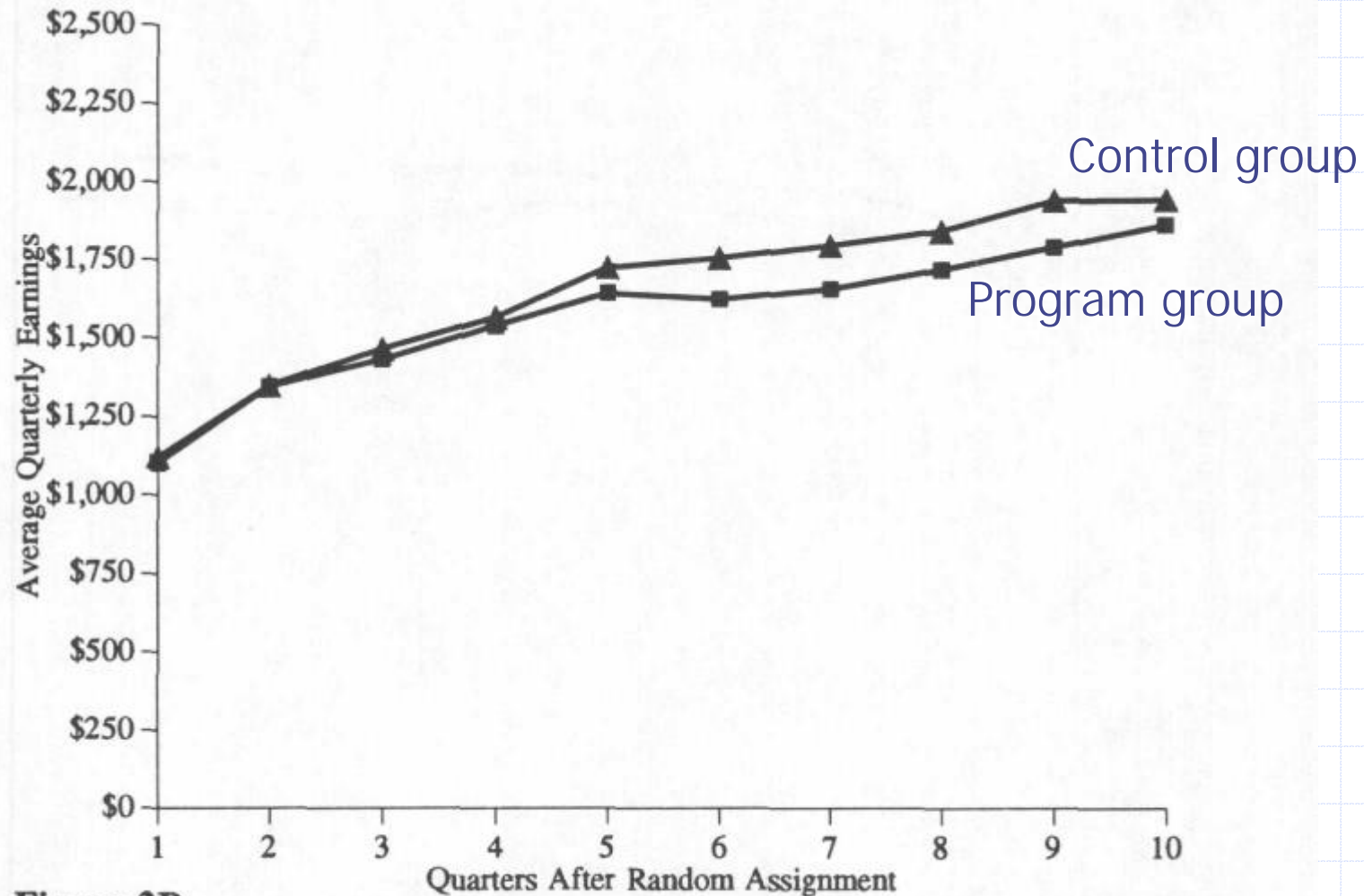


Figure 2B
Mean Earnings, by Quarter: Male Youth Non-arrestees

2. Much of the conventional wisdom about “what works” is probably 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)

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)

In fact, it's likely that the majority of promising interventions don't work:

- ◆ In medicine: 50-75% of interventions found promising in phase II (mostly nonrandomized studies) are shown ineffective in phase III (sizable RCTs).
- ◆ In social policy: 9 of the 10 whole federal programs evaluated in well-conducted RCTs over 1995-2009 produced weak or no positive effects.
- ◆ In K-12 education: 8 of the 9 large randomized evaluations of education strategies funded by IES over 2003-2009 found weak or no positive effects.

This means that the U.S. approach to social policy of the past 50 years is unlikely to succeed

- ◆ Most of what we're funding now probably does not work (80%?).
- ◆ Rigorous evaluations are uncommon, so in most areas there's no valid mechanism to identify the few interventions that are truly effective (20%?).
- ◆ For the few existing research-proven interventions, there's no effective funding system to scale them up (most funders don't prioritize rigorous evidence in funding decisions).

In our experience, the biggest challenge in advancing evidence-based policy reforms is:

◆ Finding individual policymakers who are –

1. In a senior/influential policymaking position, and
2. Will make evidence-based reform a top priority

...and therefore will become long-term partners with us in advancing evidence-based reforms in their policy area.

What we've found to be key ingredients in engaging policymakers in evidence-based reform:

- ◆ Make clear that we have no financial interest in the ideas we're advocating.
- ◆ Make a persuasive case for such reform, in plain language, with compelling examples.
- ◆ Know specifically what we are asking for.
- ◆ Do (almost) all the work for them -- e.g., draft the language to include in legislation, give them the specific interventions they should implement.

Key ingredients, continued:

- ◆ Start at the top . . . then follow up at staff level.
- ◆ Respond quickly to policymaker requests.
- ◆ Cite precedents for evidence-based reform in the policymaker's area.

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