

2009

Evaluating WIA Using Administrative Data

Kevin Hollenbeck

W.E. Upjohn Institute, hollenbeck@upjohn.org

Citation

Hollenbeck, Kevin. 2009. "Evaluating WIA Using Administrative Data ." Presented at the Recovery and Reemployment Research Conference, Washington, DC, September 15-16.

<http://research.upjohn.org/confpapers/23>

This title is brought to you by the Upjohn Institute. For more information, please contact ir@upjohn.org.

Evaluating WIA Using Administrative Data

Kevin M. Hollenbeck

Recovery and Reemployment Research Conference
Washington, DC

September 16, 2009

Purpose

- Summarize and compare results from:
 - (1) Hollenbeck, Schroeder, King, and Huang, *Net Impact Estimates for Services Provided through the Workforce Investment Act, 2005* (Multi-state study)
 - (2) Hollenbeck & Huang, *Net Impact and Benefit-Cost Estimates of the Workforce Development System in Washington State, 2003*
 - (3) Hollenbeck & Huang, *Net Impact and Benefit-Cost Estimates of the Workforce Development System in Washington State, 2006*
 - (4) Hollenbeck & Huang, *Workforce Program Performance Indicators for The Commonwealth of Virginia, 2008*
- Present some evidence on rates of return to workforce programs

Background

- All four studies are net impact evaluations
 - An individual encounters a workforce program and is offered services (*treatment*).
 - Outcomes ensue (we're mainly interested in *employment and earnings*)
 - Net impact is the difference between outcomes and what would have happened if the individual did not receive the treatment (*counterfactual*)
- Null hypothesis is that net impact is zero.
- The two Washington State studies go beyond net impact and examine **cost effectiveness**.

Approach (Methodology)

- Quasi-experimental
 - “Treatment group” from administrative data; “comparison group” from Employment Service data (usually)
 - “Treatment” in studies (1) to (4) defined as “encountered the workforce program,” i.e. in WIASRD for WIA clients
 - Additional “treatment” in (1), which is “entered training” and “comparison group” includes WIA clients who did not receive training as well as Employment Service data
- Statistical matching used to construct comparison group
 - Matching variables – mainly pre-program labor force, and also demographics and education at program entry

Approach

(Data and time periods)

- In multi-state study
 - Data are WIASRD and ES files linked to UI wage and TANF records for 7 or the 9 ADARE states: FL, GA, IL, MD, MO, TX, and WA. Exiters from programs in PY 2000 and 2001.
- In Washington
 - Data are program administrative files linked to UI wage, UI benefit, and TANF/Food Stamps/Medicaid records. Exiters from programs in PY 1997 and 1999 (study 2) and PY 2001 and 2003 (study 3).
- In Virginia
 - Data are program administrative files linked to UI wage records. Exiters in PY 2005.

Results: Net impact comparisons

Selected Net Impact Estimates for Any WIA/JTPA Services

| Program | Study | Outcome | | | |
|------------------------|-------|---------------------|-----------------|--------------------------|--------------------------------------|
| | | Employment Rate (%) | Quarterly Hours | Quarterly Wage Rate (\$) | Quarterly Earnings ^a (\$) |
| WIA-Adults | (1) | 8.7*** | -- | -- | 856*** |
| JTPA II-A | (2) | 7.4*** | 23.9*** | 0.68 | 645*** |
| WIA-Adults | (3) | 6.6*** | 35.9*** | 0.67 | 455*** |
| WIA-Dislocated Workers | (1) | 13.5*** | -- | -- | 1,097*** |
| JTPA III | (2) | 7.3*** | 26.6*** | -0.10 | 554*** |
| WIA-Dislocated Workers | (3) | 6.4*** | 48.8*** | 0.97*** | 771*** |
| WIA-Adults & DW | (4) | 3.4*** | -- | -- | 1,146** |
| JTPA II-C | (2) | 5.3*** | 2.3 | -0.71 | -85 |
| WIA Youth | (3) | 10.3*** | 31.1*** | 0.77*** | 325*** |
| WIA Youth | (4) | -3.9** | -- | -- | 76** |

Notes: *** represents statistical significance at the 0.01 level; ** represents statistical significance at the 0.05 level; * represents statistical significance at the 0.10 level. ^a In \$2005/2006.

Net Impacts of Receiving Any Training vs. Other Services (from multi-state study)

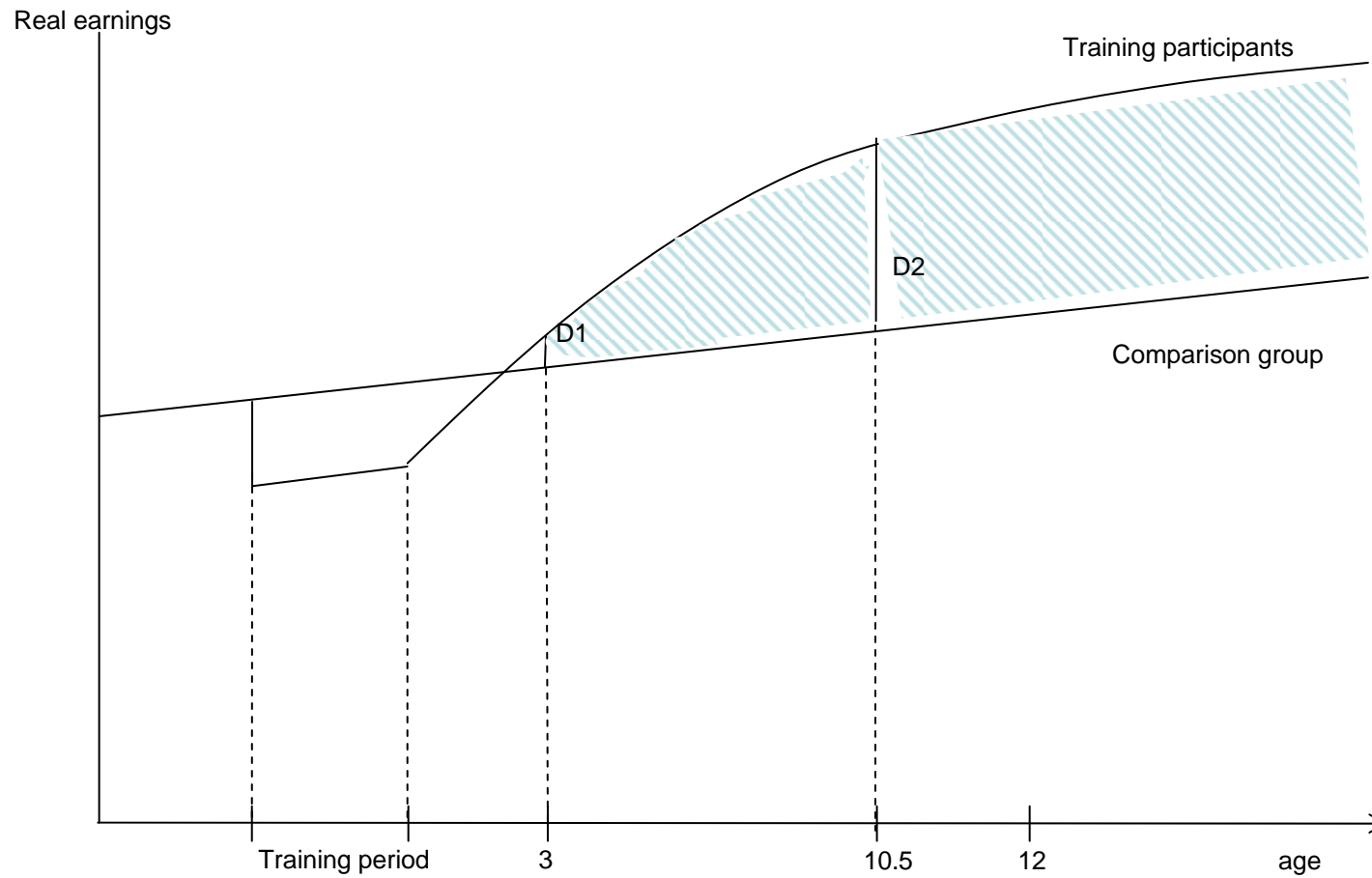
| EMPLOYMENT | | |
|-------------------------|-----------------------|-----------------------|
| | Adults | Dislocated Workers |
| Overall impact | 4.4%** | 5.9%** |
| Impact range | -1.3% -- 11.0% ** | -1.3% -- 11.0% ** |
| Impact for men | 2.1% ** | 5.0% ** |
| Impact for women | 6.5%** | 7.1%** |
| EARNINGS (\$2005/2006) | | |
| Overall impact | \$771** | \$445** |
| Impact range | -\$300** -- \$1,362** | -\$286** -- \$1,435** |
| Impact for men | \$636** | \$412** |
| Impact for women | \$893** | \$486** |

**Any training = WIA training (or referral to training services by ES in 2 states)
in addition to core/intensive services**

**Other Services = If WIA client, then core or intensive services only; if ES, then
no referral to training (in two states)**

Note: significance ** = p < 0.01,
* = p < 0.05, not shown for range

Typical Earnings Profiles of a Training Participant and Comparison Group Member



Discounted Benefits and Costs and Rates of Return for Washington's Education and Training System over Working Lifetime, by Program (r.o.i. are quarterly interest rates)

| Program | Study | Private | | | Public | | | Social | | |
|--------------------------------|-------|----------|---------|----------------|----------|---------|----------------|----------|---------|----------------|
| | | Benefits | Costs | r.o.i. | Benefits | Costs | r.o.i. | Benefits | Costs | r.o.i. |
| Federal Job Training (Adults) | | | | | | | | | | |
| JTPA II-A | (2) | \$62,744 | \$ 403 | 20.52% | \$25,092 | \$3,791 | 9.26% | \$87,836 | \$4,194 | 13.23% |
| WIA I-B | (3) | 38,928 | -1,111 | — | 6,241 | 5,744 | 0.21% | 45,170 | 4,633 | 15.14% |
| Federal Job Training (Youth) | | | | | | | | | | |
| JTPA II-C | (2) | 30,235 | 384 | 3.08% | 6,770 | 2,605 | 6.08% | 37,005 | 2,989 | 3.61% |
| WIA I-B Youth | (3) | 29,002 | 0 | — | 8,282 | 6,617 | 0.07% | 37,284 | 6,617 | 4.55% |
| Dislocated Workers | | | | | | | | | | |
| JTPA III | (2) | 81,327 | 13,640 | 5.19% | 25,719 | 2,885 | 6.81% | 107,046 | 16,525 | 5.53% |
| WIA I-B | (3) | 49,201 | 10,746 | 5.00% | 18,440 | 7,081 | 5.15% | 67,641 | 17,827 | 5.04% |
| Worker Retraining ^a | (2) | 70,012 | 18,631 | 2.86% | 22,803 | 5,256 | 3.93% | 92,815 | 23,887 | 3.08% |
| Worker Retraining ^a | (3) | 23,938 | 8,952 | 2.82% | 7,049 | 5,421 | 0.60% | 30,987 | 14,373 | 2.14% |
| Education | | | | | | | | | | |
| Secondary CTE | (2) | 70,505 | 432 | 37.05% | 13,389 | 974 | 10.39% | 83,894 | 1,406 | 23.04% |
| Secondary CTE | (3) | 43,491 | -32 | — | 8,414 | 811 | 9.29% | 51,905 | 779 | 43.97% |
| Comm. College Job Prep | (2) | 103,926 | 5,034 | 10.44% | 31,235 | 7,748 | 3.55% | 135,161 | 12,783 | 7.08% |
| Comm. College Job Prep | (3) | 95,228 | 6,474 | 15.10% | 14,873 | 7,523 | 2.20% | 110,101 | 14,397 | 9.19% |
| Private Career Schools | (3) | 35,089 | 308 | — ^c | 1,279 | 0 | — ^c | 36,368 | 308 | — ^c |
| Adult Basic Ed. ^b | (2) | 4,944 | 311 | ++ | 3,020 | 1,101 | 1.34% | 7,964 | 1,412 | 5.75% |
| Adult Basic Ed. ^b | (3) | 5,558 | -146 | — | -5,558 | 2,570 | — | 0 | 2,424 | — |
| Apprenticeships | (3) | 197,896 | -24,465 | — | 49,288 | 2,668 | 24.25% | 247,184 | -21,797 | — |
| Disability Services | | | | | | | | | | |
| Vocational Rehabilitation | (3) | 56,560 | -643 | — | 11,302 | 8,504 | 0.75% | 67,862 | 7,861 | 11.99% |
| Blind and Visually Impaired | (3) | 100,799 | 1,059 | ++ | 20,094 | 24,358 | -0.55% | 120,893 | 25,417 | 7.39% |

Notes to Previous Table

Study (2) is Hollenbeck and Huang 2003 (Washington State); Study (3) is Hollenbeck and Huang 2006 (Washington State). Table entries are for average participant. Benefits include earnings, fringe benefits, and income-related transfers payments. Costs include tuition and fees (if any), foregone earnings, and public program costs per participant. \$ figures are in real \$2005/2006. – means that r.o.i. could not be calculated because of 0 or negative benefits or costs. ++ means r.o.i. is implausibly high.

^a A state-funded program for dislocated worker training.

^b As administered by the Community and Technical College system.

^cNo data collected on tuition or fees, so costs are partial. We therefore did not calculate r.o.i.

Comparisons to National JTPA Study (NJS)

- Net Impacts of JTPA II-A

NJS (U.S. GAO study using wage record data; inflated to \$2005/2006))

| Year after assignment | Males | | Females | |
|-----------------------|-------------------|--------------------|-------------------|--------------------|
| | Annual employment | Quarterly earnings | Annual employment | Quarterly earnings |
| +2 | 0.6 | 200* | 2.6* | 270* |
| +3 | 2.4 | 206* | 3.1* | 210* |
| +4 | 3.7* | 196 | 2.0 | 196* |
| +5 | 1.2 | 110 | 1.3 | 137 |

*Significant at 0.05 level.

Washington State JTPA II-A (from above)

Quarters after exit
8-11

Employment
7.4***

Earnings
645***

- Benefit-Cost of JTPA II-A

| | | | |
|----------|------------------------------|------------|-------------------|
| NJS | 30 months after registration | Social b-c | 1.50 (Abt report) |
| WA state | 30 months after exit | Social b-c | 1.21 |

Policy Implications

- Can use administrative data to estimate net impacts of education and training programs
- Decomposing earnings impacts into employment, hours, and wage rates adds insight
- Public and society reap substantial returns on virtually all education and training programs

Comments or questions are welcome.

The author can be reached at (269) 385-0431;
or hollenbeck@upjohn.org

W.E. Upjohn Institute for Employment Research,
300 S. Westnedge Ave., Kalamazoo, MI 49007-
4686

The views expressed do not necessarily
represent those of the Institute or its Board of
Trustees.