Reviewing the Evidence: What Works in Disability Employment Services

Presenters

Priyanka Anand, Heinrich Hock, Gina Livermore
Mathematica Policy Research

Discussant

David Stapleton
Mathematica Policy Research

Webinar
June 22, 2017
Welcome

Moderator
Craig Thornton
Mathematica
About the Center for Studying Disability Policy (CSDP)

CSDP was established by Mathematica in 2007 to provide the nation’s leaders with the data necessary to shape disability policy and programs to fully meet the needs of all Americans with disabilities.
Today’s Speakers

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David Stapleton
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Long-Term Outcomes for Transition-Age Youth with Mental Health Conditions Who Receive Postsecondary Education Support

Priyanka Anand and Todd Honeycutt

Presented at the Center for Studying Disability Policy forum on Reviewing the Evidence: What Works in Disability Employment Services

June 22, 2017
The research reported herein was pursuant to a grant from the U.S. Social Security Administration (SSA) and was funded as part of the Disability Research Consortium. The findings and conclusions expressed are solely those of the authors and do not represent the views of SSA or any agency of the federal government.
State vocational rehabilitation (VR) agencies help people with disabilities achieve their employment goals

Support for postsecondary education may improve employment outcomes

Youth with mental health conditions (MHCs) are less likely to receive any VR services or college support than youth with other disabilities (Honeycutt et al. 2017)
Objective

- Examine the relationship between receiving VR support for postsecondary education and long-term outcomes for youth with MHCs
Research Questions

- How do long-term employment and earnings outcomes vary by receipt of postsecondary education support for transition-age youth with MHCs?
- How do federal disability benefits vary by receipt of postsecondary education support for transition-age youth with MHCs?
Past Literature

- Literature on how VR supports for postsecondary education affect the outcomes of people with disabilities: results are mixed
  - Gilmore et al. (2001), Rogers et al. (2005), Berry and Caplan (2010)
- Dean et al. (2014) found that people with MHCs in a single state (VA) who received postsecondary education support were less likely to be employed two years after the start of VR service provision.
Our Contribution

- Focus on youth with MHCs
- Examine outcomes nine years after VR application
- Have three types of outcome measures: employment, earnings, and receipt of SSA disability benefits
- Control for national, state, and local factors in the analysis
Data Sources

- Rehabilitation Services Administration case service reports (RSA-911) for VR services information from 2002 to 2013
- 2013 Disability Analysis File for information on SSA disability benefits
- Master Earnings File for earnings information
Analysis Sample

- Sample size is 436,883 VR applicants
  - First-time VR applicants from 2002 through 2004
  - Ages 16 to 24
  - Eligible for VR support
Employment Rates for MHC Youth Receiving Non-Postsecondary Education Services

VR clients with MHCs who received non-postsecondary education services
Employment Rates for MHC Youth Receiving VR Services, by Service Type

- VR clients with MHCs who received non-postsecondary education services
- VR clients with MHCs who received college supports
- VR clients with MHCs who received vocational training
Average Earnings of MHC Youth Receiving Non-Postsecondary Education Services

- VR clients with MHCs who received non-postsecondary education services
Average Earnings of MHC Youth Receiving VR Services, by Service Type

- VR clients with MHCs who received non-postsecondary education services
- VR clients with MHCs who received college supports
- VR clients with MHCs who received vocational training
Adjusted Estimates of Employment and Earnings Differences by Service Type for MHC Youth

MHC youth who receive college (vocational training) support are 12 (6) percentage points more likely to be employed in the ninth year after VR application than MHC youth who receive other supports.

MHC youth who receive college (vocational training) support and are subsequently employed have earnings that are 27 (10) percentage points higher in the ninth year after VR application than MHC youth who receive other supports.

** Coefficients are statistically significant at the 1% level.
SSA Benefit Receipt for MHC Youth Without Benefits at VR Application

<table>
<thead>
<tr>
<th></th>
<th>Received services (not postsecondary education support)</th>
<th>Received college support</th>
<th>Received vocational training support</th>
</tr>
</thead>
<tbody>
<tr>
<td>% received benefits in the nine years after VR application</td>
<td>18.9%</td>
<td>12.3%</td>
<td>13.5%</td>
</tr>
<tr>
<td>Average number of years received benefits in the nine years after VR application (conditional on receiving benefits)</td>
<td>6.4</td>
<td>6.4</td>
<td>6.2</td>
</tr>
</tbody>
</table>
Adjusted Estimates of Benefit Receipt Differences by Service Type for Youth Without Initial Benefits

- Difference in probability of receiving SSA benefits in nine years after VR application
- Difference in number of years of benefit receipt (conditional on receiving benefits)

**/* coefficients are statistically significant at the 5%/1% level.

- Received college vs. other types of support
- Received vocational training vs. other types of support
SSA Benefit Receipt for MHC Youth with Benefits at Application

<table>
<thead>
<tr>
<th></th>
<th>Received services (not postsecondary education support)</th>
<th>Received college support</th>
<th>Received vocational training support</th>
</tr>
</thead>
<tbody>
<tr>
<td>% with BFW in the nine years</td>
<td>61.6%</td>
<td>61.2%</td>
<td>62.2%</td>
</tr>
<tr>
<td>after VR application</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average BFW in the nine years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>after VR application (conditional on having BFW)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$8,666</td>
<td>$15,938</td>
<td>$11,699</td>
</tr>
</tbody>
</table>

BFW = benefits forgone for work.
Adjusted Estimates of Benefit Receipt Differences by Service Type for Youth with Initial Benefits

** coefficients are statistically significant at the 1% level.

- **Received college vs. other types of support**
- **Received vocational training vs. other types of support**
For youth with MHCs, receiving postsecondary education support was associated with:

- Higher likelihood of being employed in the ninth year after VR application
- Higher earnings in the ninth year after VR application
- Lower likelihood of receiving benefits for those not receiving benefits at VR application
- Larger BFW for those who were receiving benefits at VR application
Implications and Next Steps

- Relationships are not causal but suggest a positive relationship between postsecondary education support and outcomes
  - A rigorous evaluation is needed for causal estimates
- Should also consider cost and benefits when deciding whether to expand support
  - Cost is estimated to be $2,600 to $7,000 higher for VR clients with MHC who receive postsecondary education support versus other support, and BFW is $2,100 to $5,000 higher
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Improving the Outcomes of Youth with Medical Limitations Through Comprehensive Training and Employment Services: Evidence from the National Job Corps Study

Heinrich Hock, Dara Lee Luca, Tim Kautz, and David Stapleton

Presented at the Center for Studying Disability Policy forum on Reviewing the Evidence: What Works in Disability Employment Services

June 22, 2017
Acknowledgment / Disclaimer

- This project was funded by the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR)—a part of the U.S. Department of Health and Human Services (HHS)—through the Rehabilitation Research and Training Center on Individual Characteristics, under cooperative agreement 90RT5017-01-01

- The findings and conclusions are those of the authors and do not represent the policy of HHS or NIDILRR

- The authors retain sole responsibility for any errors or omissions
Overview

- Prompted by ongoing assessment of how to improve labor market outcomes for youth with disabilities
- Re-analyzed data from the National Job Corps Study (NJCS), a randomized experiment conducted for the U.S. Department of Labor
- Focused on youth who identified a medical limitation at enrollment
Job Corps: A Promising Option?

- Focuses on economically disadvantaged youth
- Comprehensive, intensive, and integrated services
  - General education, vocational training, soft-skill development, and job placement
  - 80% residential
  - Average participation time is 8-9 months
- Services are all work-focused
- Wraparound supports include medical exams and treatment
Our Analysis

- Based on youth who were part of Job Corps lottery in 1990s and then tracked by survey for 48 months
- Focused on 472 youth with medical limitations (YMLs) identified in baseline survey
  - “Do you have any serious physical or emotional problem that limits the amount of work you can do or other regular daily activities?”
- Calculated per-participant impacts of Job Corps
- Main research questions
  - Did Job Corps have positive impacts on outcomes of YMLs?
  - Were those impacts bigger than they were for other youth?
Medical Conditions of Youth in the NJCS

<table>
<thead>
<tr>
<th>Condition</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma, allergies, respiratory</td>
<td>29%</td>
</tr>
<tr>
<td>Mental disorders</td>
<td>17%</td>
</tr>
<tr>
<td>Extremities, arthritis</td>
<td>15%</td>
</tr>
<tr>
<td>Back</td>
<td>14%</td>
</tr>
<tr>
<td>Heart, blood pressure</td>
<td>7%</td>
</tr>
<tr>
<td>Ulcers, diabetes, vital organs</td>
<td>5%</td>
</tr>
<tr>
<td>Epilepsy, cerebral palsy</td>
<td>3%</td>
</tr>
<tr>
<td>Hearing, visual</td>
<td>3%</td>
</tr>
<tr>
<td>Headaches, migraines</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
</tr>
</tbody>
</table>

- During the 1990s, program screened out conditions that
  - Represented a hazard
  - Made it unlikely that the participant would successfully finish the program
  - Required intensive or expensive treatment

- For those without Job Corps access, annual Supplemental Security Income (SSI) recipiency rate: 15% to 17%
Earnings of Youth Without Job Corps Access Grew After Lottery Date

- Mean w/o Job Corps (YMLs)
- Mean w/o Job Corps (other youth)
Job Corp Participation Led to Additional Earnings Gains for YMLs

*/ **/***: statistically significant at 10/5/1 percent level

**/ **/***: statistically significant at 10/5/1 percent level

<table>
<thead>
<tr>
<th>Earnings in Year 1</th>
<th>Earnings in Year 2</th>
<th>Earnings in Year 3</th>
<th>Earnings in Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean w/o Job Corps (YMLs)</td>
<td>Mean with Job Corps (YMLs)</td>
<td>Mean w/o Job Corps (YMLs)</td>
<td>Mean with Job Corps (YMLs)</td>
</tr>
</tbody>
</table>

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Impacts on Earnings for YMLs Were Larger Than for Other Youth

** Impacts on Earnings for YMLs Were Larger Than for Other Youth**

<table>
<thead>
<tr>
<th>Impact in Y1</th>
<th>Impact in Y2</th>
<th>Impact in Y3</th>
<th>Impact in Y4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage change (relative to mean without Job Corps access)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-12%</td>
<td>-38%</td>
<td>57%</td>
<td>-5%</td>
</tr>
</tbody>
</table>

*/ **/***: statistically significant at 10/5/1 percent level
Cumulative Impact Per YML Participant: Large for Both Earnings and SSI Receipt

![Bar graph showing four-year impact on earnings and SSI received.]

<table>
<thead>
<tr>
<th>Four-year impact on earnings</th>
<th>Four-year impact on SSI received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage change (relative to mean without Job Corps access)</td>
<td>29%</td>
</tr>
</tbody>
</table>

**/**/***: statistically significant at 10/5/1 percent level
New Answers, New Questions?

- Findings might suggest how to meet federal VR mandate and align with philosophy of inclusion
- Results also point toward differences in impacts across subgroups of YMLs
- More questions about the 1990s evaluation
  - How did such large impacts arise for YMLs?
  - How long were impacts sustained?
- Additional questions about Job Corps today
  - How does it serve youth with disabilities?
  - Is it particularly effective for some groups versus others?
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Year 3 SSI Receipt in Control Group by Medical Condition

- Asthma, allergies, respiratory: 6.4%
- Mental disorders: 32.6%
- Extremities, arthritis: 19.6%
- Back: 11.7%
- Heart, blood pressure: 19.7%
- Ulcers, diabetes, vital organs: 7.7%
- Epilepsy, cerebral palsy: 31.3%
- Hearing, visual: 40.1%
- Headaches, migraines: 0.0%
- Other: 5.5%
Job Corps Participation Decreased SSI Recipiency Among YMLs

Supplemental Slide

*/ **/***: statistically significant at 10/5/1 percent level
Increases in Earnings for YML Participants

$18,000 $16,000 $14,000 $12,000 $10,000 $8,000 $6,000 $4,000 $2,000 $0

Earnings in Year 1  Earnings in Year 2  Earnings in Year 3  Earnings in Year 4

Mean w/o Job Corps (YMLs)  Mean w/o Job Corps (other youth)  Mean with Job Corps (YMLs)
Large Impacts of Job Corps Participation on Additional Outcomes for YMLs

Percentage change (relative to mean without Job Corps access)

<table>
<thead>
<tr>
<th></th>
<th>Percentage change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrest rate in Year 1</td>
<td>-52%</td>
</tr>
<tr>
<td>High school degree by Year 4</td>
<td>34%</td>
</tr>
</tbody>
</table>

**/ ***: statistically significant at 10/5/1 percent level
Four-Year Earnings Impacts Varied Across Subgroups of YMLs

* / ** / ***: statistically significant at 10/5/1 percent level
Early Findings from the Substantial Gainful Activity (SGA) Project Demonstration

Gina Livermore

Presented at the Center for Studying Disability Policy forum on Reviewing the Evidence: What Works in Disability Employment Services

June 22, 2017
SGA Project Overview

- Rehabilitation Services Administration grant to the University of Massachusetts Institute for Community Inclusion

- Develop, implement, and evaluate a service model that would improve the chances that VR clients receiving Social Security Disability Insurance (SSDI) only (no SSI) would attain employment with earnings above the SGA level (currently $1,170/month)

- Why focus on SSDI-only clients and SGA-level employment?
  - Large growth in SSDI program
  - Most SSDI beneficiaries have work skills and experience
  - SGA is a significant milestone for SSDI eligibility and VR agency reimbursement by SSA
  - Higher earnings improve financial well-being
SGA Project Implementation

● Kentucky and Minnesota volunteered to conduct the SGA Project demonstration

● Innovations
  – Faster pace of services with a focus on client motivation and engagement
  – Effective financial education and benefits counseling with a focus on household self-sufficiency
  – Effective employer relations and job development services
  – Coordinated team approach

● Implemented innovations in spring/summer 2015
SGA Project Evaluation

● Office-level (clustered) random assignment
  – Offices were grouped into strata based on geographic location, urban v. rural, and past SSDI client outcomes
  – Offices from each stratum were randomly assigned to implement either
    ▪ SGA Project innovations (treatment)
    ▪ Services as usual (control)
  – Kentucky: 7 treatment and 8 control offices
  – Minnesota: 8 treatment and 9 control offices

● About 1,000 SSDI-only clients were enrolled in the demonstration in each state
  – Roughly half at treatment offices and half at control offices
Advantages of Office-Level Random Assignment

● Rigorous way to evaluate the impact of a service change
  – Randomization helps ensure that treatment and control group members are similar, and thus, comparable

● Easier to implement than individual-level random assignment
  – Randomize sites once
  – Easier to allocate innovation resources at the office level

● Offices serve only treatment (T) or control (C) cases so no need to track T/C status of individuals
  – Minimizes potential for control group contamination
  – Counselors are not faced with a perceived ethical dilemma
Early Impact Analysis: Sample and Caveats

- VR case file data reflecting client outcomes during the first 6 months after application
  - Sample of clients enrolled for at least 6 months
  - Samples represented about half of all SGA Project clients
- Treatment and control clients were comparable
- Findings are preliminary
  - The full sample had not yet received services for 6 months
  - Insufficient time had elapsed for outcomes to occur
  - Most cases had not yet closed
Impacts 6 Months After Application: Pace of Services

Percent of clients with IPE within 30 days of application

Note: IPE = individualized plan for employment.
* Treatment/control difference significant at the 0.10 level.
** Treatment/control difference significant at the 0.05 level.
Impacts 6 Months After Application: Competitive Employment

Percent of cases closed with competitive employment

Kentucky: 4.1* (SGA Project Innovations) vs. 1.8 (Control)
Minnesota: 4.7* (SGA Project Innovations) vs. 2.1 (Control)

* Treatment/control difference significant at the 0.10 level.
Impacts 6 Months After Application: SGA-Level Earnings

Percent of cases closed with SGA-level earnings

- Kentucky: 1.9 (SGA Project Innovations) vs. 0.7 (Control)
- Minnesota: 1.2 (SGA Project Innovations) vs. 0.6 (Control)

For SGA Project Innovations
Key Conclusions from Early Findings

- Both states substantially increased the pace of services over usual practice

- Both states showed early indications of meeting the SGA project goals
Other Conclusions

- Both states successfully implemented a clustered random assignment study design
  - Comparable treatment and control groups
  - Statistical power adequate to detect moderate impacts
  - No indication of control group contamination

- Approach has strong potential for rigorously testing other types of VR and other employment service innovations
For More Information

- Kentucky and Minnesota interim reports available

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David Stapleton

Mathematica
What is the potential for mainstream employment and training programs to help people with disabilities?
Rigorous impact evaluations are vital

- Outcome measurement is not enough
- Impact estimates are the difference between actual outcomes and unbiased estimates of "counterfactual" outcomes
Year 4 Outcomes from the NJCS

Mean Earnings in Year 4

- YML: $15,622
- Other Youth: $17,573
Year 4 Impacts from the NJCS

Mean Earnings in Year 4

- **38% impact**
  - YML: $11,318
  - Other Youth: $15,874

- **11% impact**
  - YML: $4,304
  - Other Youth: $1,699
More Rigorous Impact Evaluations Can Be Expected in the Future

- Increasing demand from policymakers and administrators
- Innovations are overcoming barriers to rigorous evaluations
Policymakers and Administrators Demand Rigorous Impact Evaluations

- What Works Clearinghouse
  - Department of Education
- Clearinghouse for Labor Evaluation and Research (CLEAR)
  - Department of Labor
Innovations Lower Barriers to Rigorous Impact Evaluations

- Major advances in:
  - Information technology
  - Evaluation methods

- These innovations:
  - Lower costs for implementation, data collection, and analysis
  - Reduce disruption to normal operations
  - Yield results more quickly
  - Address the practical and ethical limitations of randomized controlled trials
Three Ideas Illustrated by the Presentations

- The potential for mainstream employment and training programs to help people with disabilities is high but little explored.

- Rigorous impact evaluations of employment support innovations for people with disabilities are vital.

- More impact evaluations can be expected because barriers to conducting are lowered.
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