

Long-term Follow-up of the Mental Health Treatment Study (MHTS)

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MATHEMATICA
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STUDYING DISABILITY POLICY

Study Motivation and Objective

- **People with psychiatric disabilities:**
 - Represent a significant portion of beneficiaries receiving Supplemental Security Income (SSI) (59 percent) and Social Security Disability Insurance (SSDI) (35 percent)
 - Often have poor employment outcomes and high rates of unemployment (Cook 2006)
- **Evidence-based supported employment (SE) improves employment outcomes for people with psychiatric disabilities**
- **Objective: assess the long-term impact of SE on earnings and benefit suspension/termination of SSI and SSDI**

Mental Health Treatment Study

- **Objective: test whether providing access to evidence-based treatments and employment supports would result in improved employment rates, health, and quality of life**
- **SSA demonstration launched in 2005**
 - 2,238 SSDI beneficiaries randomized to treatment or control group for a two year period
 - Treatment group received supported employment (SE) and systematic medication management (SMM)
 - Control group received services as usual

Original MHTS Documented Short Term Outcomes

- **Original study considered self-reported outcomes up to 2 years after services began**
- **Relative to control group, treatment group experienced**
 - Higher likelihood of employment
 - Increased earnings
- **No difference in percent of treatment and control group average earnings above substantial gainful activity (SGA) level**

Measures and Data

- **Outcomes of interest:**
 - Employment
 - Annual earnings (among the employed)
 - Benefit suspension or termination due to work (STW)
- **MHTS data linked to**
 - Master Earnings File (MEF)
 - SSA's Disability Analysis File (DAF)

Statistical Analyses

- **Chi-square and t-tests to detect differences in baseline predictors (e.g., demographic and clinical characteristics) between treatment and control groups**
- **Simple descriptive analyses looking at trends in the outcomes of interest over time from 2010-2014**
- **Generalized linear mixed-effects models to assess difference in the outcomes of interest over time between the intervention and control groups**

Baseline Characteristics

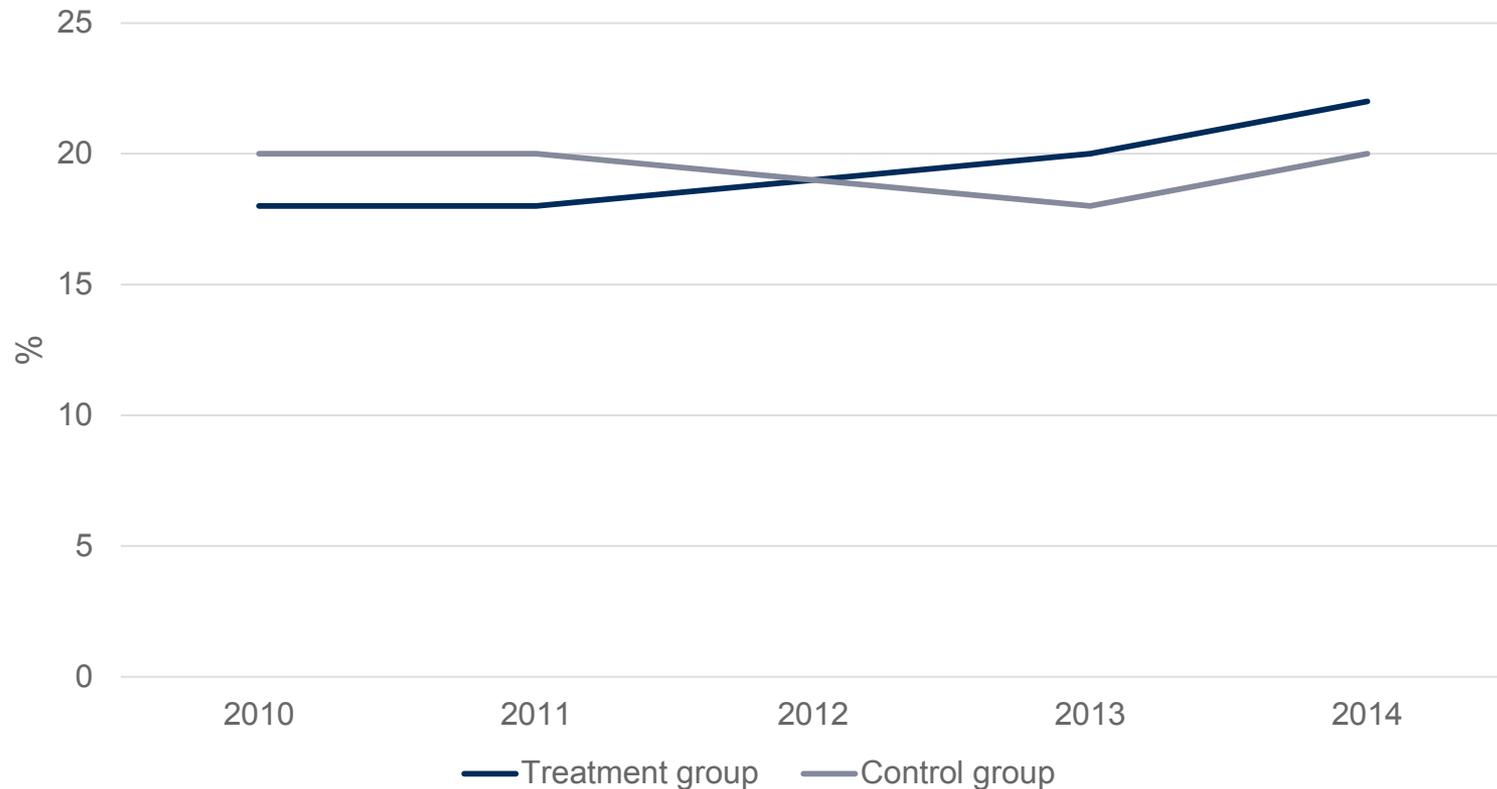
Characteristics	Total N=2,221 % or Mean	Treatment n=1,114 % or Mean	Control n=1,107 % or Mean	p-value
Sex				0.322
Male	47.2%	46.1%	48.2%	
Female	52.8%	53.9%	51.8%	
Race				0.118
White	61.1%	61.1%	61.1%	
Black	27.6%	28.8%	26.4%	
Other	11.3%	10.5%	12.6%	
Age at baseline in years	47.4 (7.8)	47.3 (7.9)	47.2 (8.0)	0.408
Psychiatric diagnosis				0.022
Schizophrenia	29.3%	31.5%	27.1%	
Affective Disorder	70.7%	68.5%	72.9%	

Treatment Group More Likely to Have Any Earnings During Follow-up

Summary outcomes	Total N=2,221 % or mean (s.d.)	Treatment n=1,114 % or mean (sd)	Control n=1,107 % or mean (sd)	Difference between treatment and control	p-value
Any earnings during follow-up	43.6%	48.0%	39.2%	8.8%	<.0001
Average total earnings during follow-up, earners only, \$	25,449 (43,185)	27,172 (45,539)	23,362 (40,043)	3,810	0.168
At least one month suspended/terminated for work (STW)	7.3%	8.3%	6.4%	1.9%	0.096

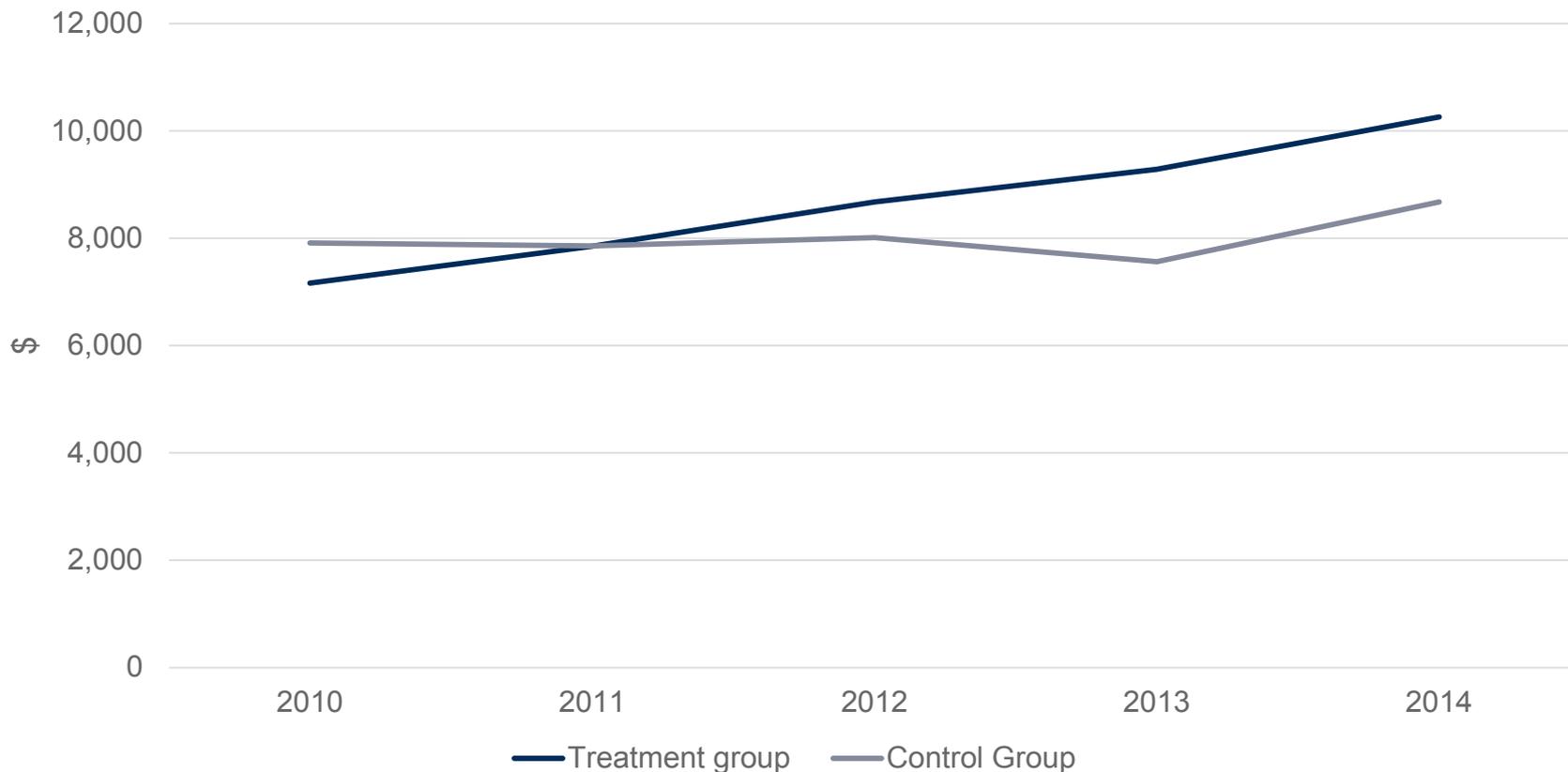
Authors calculated outcomes over the study period using MHTS data linked to the Master Earnings File and Disability Analytic File

Share of Participants with Any Earnings Increases Over Time for Treatment Group



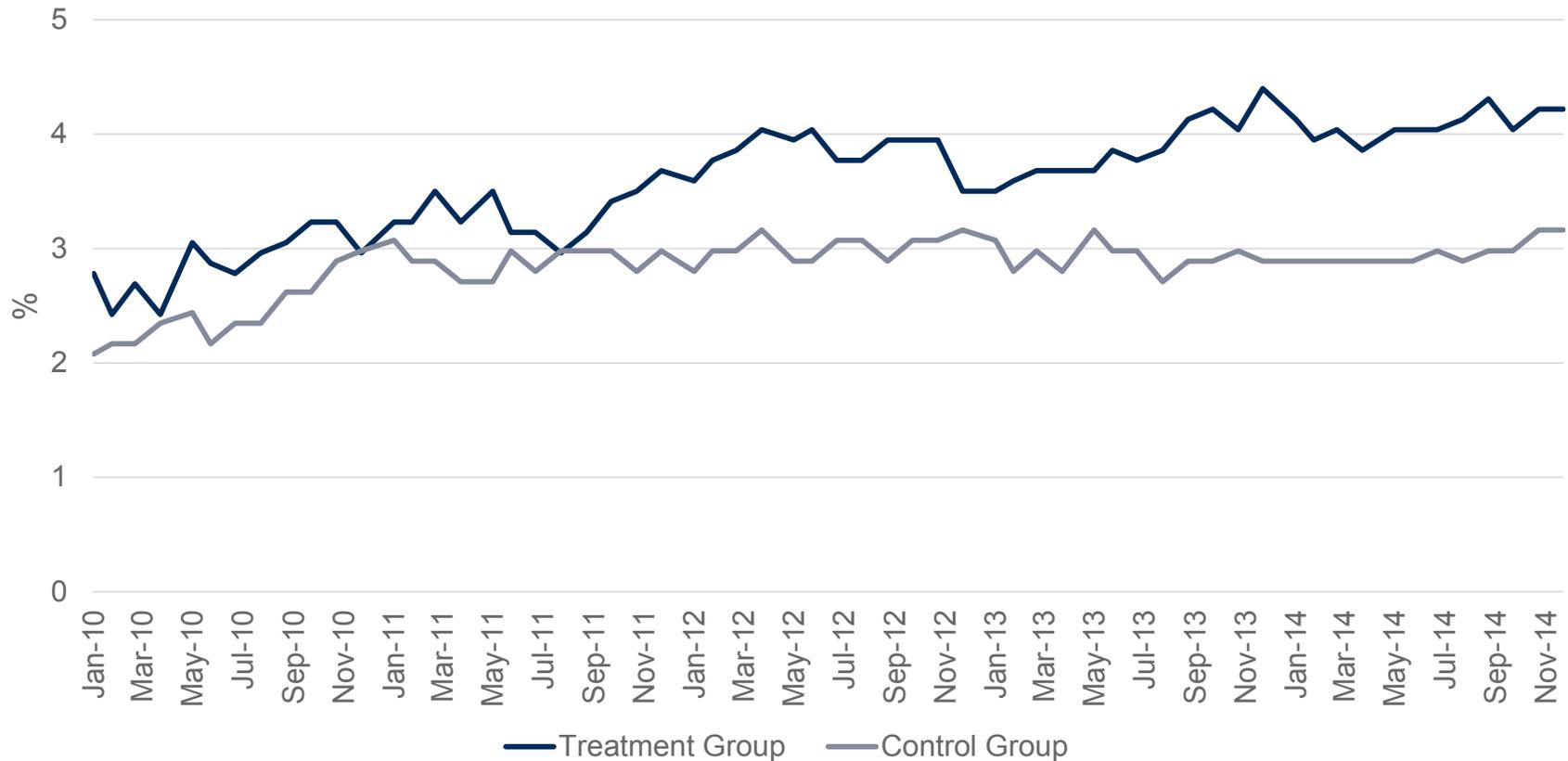
Unadjusted share of participants with any earnings calculated using the Master Earnings File

Annual Earnings per Earner in Treatment Group Increases Over Time



Unadjusted earnings (unadjusted for inflation) calculated using the Master Earnings File

Percent with Benefits Suspended/Terminated Due to Work Increases Over Time for Both Groups



Unadjusted share of participants with disability benefits suspended or terminated due to work calculated using the Disability Analytic File

Regression Results Match Unadjusted Rates

- **After controlling for time trends, race/ethnicity, and psychiatric diagnosis:**
 - **Treatment group had statistically significantly higher odds of earning over time compared to control group**
 - **No significant difference between groups in amount of earnings per earner**
 - **Increases in earnings over time were significantly greater for the treatment group**
 - **No significant difference between groups in odds of having disability benefits suspended or terminated for work**

Policy-relevant Considerations

- **Participants may not be representative of SSDI rolls**
- **Study sites received considerable training and technical assistance, may not be replicable for programs lacking such assistance**
- **Not possible to determine effectiveness of specific components of the intervention**

Conclusion

- **MHTS benefits package had long-term positive effect on the likelihood of employment**
 - No effect on average earnings or STW
- **Additional research is needed on ways to increase earnings and achieve SGA over the longer term**
- **Although intervention may not influence receipt of SSDI benefits, employment could have positive impact on mental health**

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**EVIDENCE-BASED SUPPORTED EMPLOYMENT (SE)
FOR PEOPLE WITH PSYCHIATRIC CONDITIONS:
INDIVIDUAL PLACEMENT AND SUPPORT (IPS) MODEL**

Principles of Evidenced-based SE for People with Psychiatric Disabilities

- Eligibility based on consumer choice (no one is excluded)
- Competitive employment (open labor market, market wages, integrated community settings)
- Rapid job search (place and train rather than train and place)
- Consumer preferences regarding jobs and supports
- Integrated vocational and clinical services
- Ongoing time-unlimited support, as needed (whether working or not)
- Personalized benefits counseling (how affected by work)

How Evidence-based IPS Differs from Some Other Types of SE

- **Disclosure is consumer's choice**
- **Jobs are in the competitive labor market (not sheltered workshops, transitional employment positions, or work crews controlled by service providers; not carved out)**
- **Emphasis is on rapid job placement rather than extensive assessment and training**
- **Most supports are provided off-site (not in the workplace)**
- **Support continues after placement**