# Older Age, Vocational Functioning and Employment Among People with Psychiatric Disabilities

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# **Collaborators & Funder**

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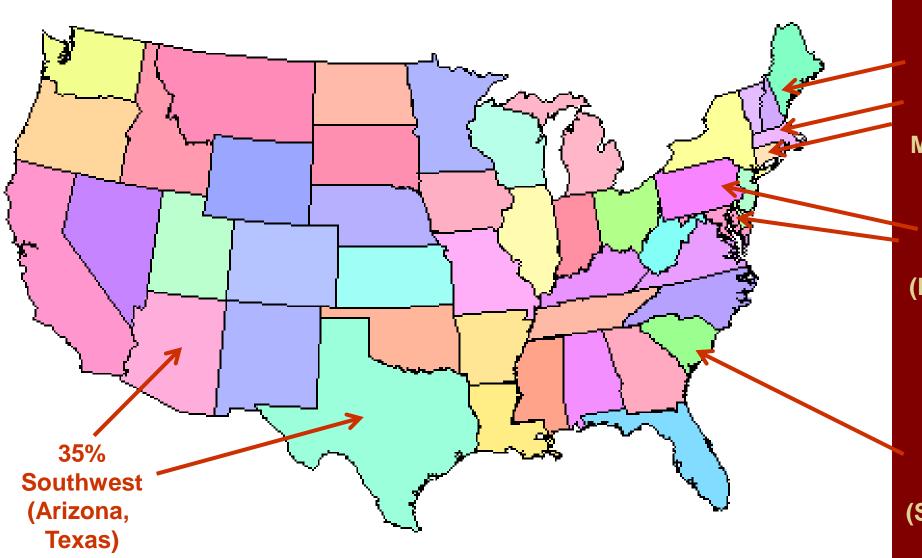
# Background

- There is interest in refining the determination of work functional ability as a means of constraining growth in Social Security disability program costs.
- Work functioning is determined by age, education and work experience, but there is little empirical research on the relationship of these factors to the ability to do work, or to do work not previously performed (Mann et al., 2014).
- We examine the potential of age, education and recent work experience as predictors of vocational ability as well as vocational outcomes.

## **Objectives & Methods**

- We explore the relationship of age, education, & recent work experience to employment among people with PDs.
- We look separately at employment outcomes & job characteristics among older vs. younger individuals.
- Data are from the Employment Intervention Demonstration Program (EIDP) which enrolled 1,648 adults with psychiatric disabilities at 8 sites in 8 states and followed them for a minimum of 24 months from 1996-2000.
- Analysis sample contrasts those age 50+ years at study baseline (n=192) and those under age 50 (n=1,423).

## Geographic Regions of EIDP Sites



31% Northeast (Maine, Massachusetts, Connecticut)

25% Mid-Atlantic (Pennsylvania, Maryland)

9% Southeast (South Carolina)

# EIDP Participant Characteristics by Age Group

Characteristic	>=50 Years 12% (n=192)	<50 Years 88% (n=1,423)	ANOVA or chi- square p-value
Female	59%	45%	<.001
White non-Hispanic	64%	47%	<.001
Black non-Hispanic	17%	33%	<.001
Hispanic/Latino	12%	14%	.398
SSI/DI recipient during EIDP	79%	77%	.661
Northeastern U.S.	34%	31%	.445
Mid-Atlantic U.S.	22%	25%	.385
Southeastern U.S.	5%	9%	.065
Southwestern U.S.	39%	35%	.259
Mean physical health self-rating (0-100) (sd)	56 (25)	59 (24)	.162

# Employment Outcomes by Age Group

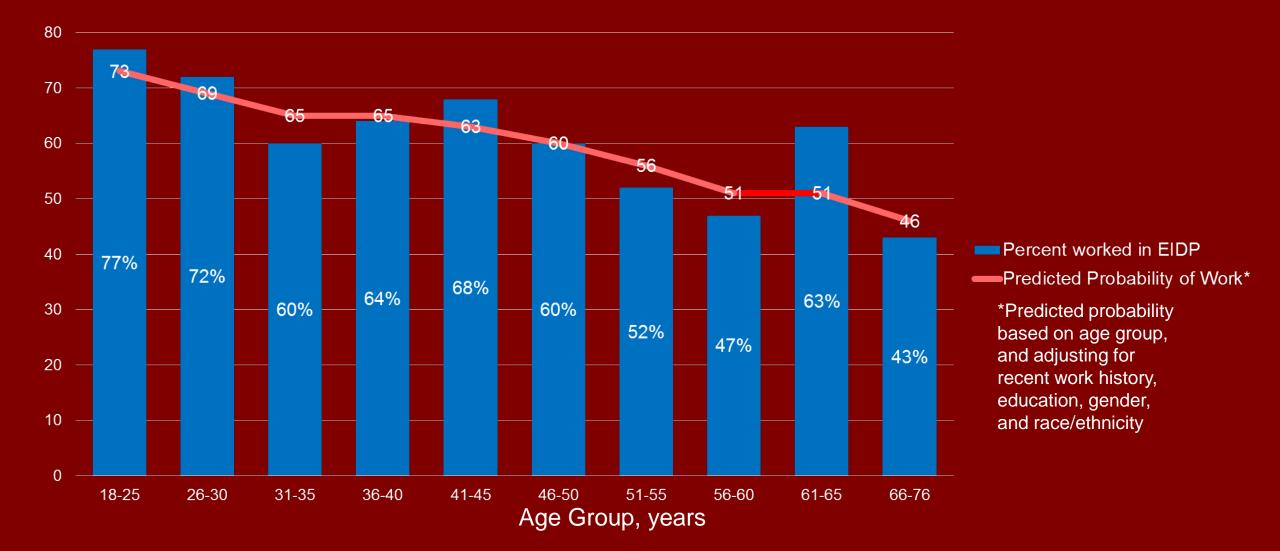
Characteristic	>=50 Years (n=192)	<50 Years (n=1,456)	ANOVA x <sup>2</sup> p- value
Employed at All	54%	66%	.001
Competitive Employment	36%	48%	.004
Total hours worked, mean (sd)	382 (725)	593 (953)	.004
Total dollars earned, mean (sd)	\$2,256 (\$4,404)	\$3,550 (\$7,012)	.016

## Recent Work History & Education by Age Group

Characteristic	>=50 Years (n=192)	<50 Years (n=1,423)	ANOVA or chi-square p-value
Employed in 5 years prior to EIDP	54%	69%	<.001
Highest education level <high school<="" td=""><td>32%</td><td>34%</td><td>.535</td></high>	32%	34%	.535
Highest education level high school/GED	22%	32%	.007
Highest education level an post-secondary	46%	34%	.001

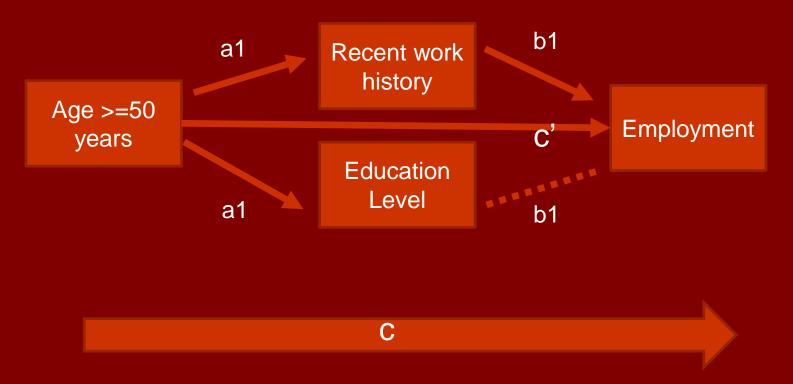
# Likelihood of Work Diminishes with Older Age

Each ~10 year increment in age is associated with less likelihood of work: OR=0.82, p<.001



# Tests of Recent Work History as Mediator of Age Effect on Employment

## Multiple mediation model



a1. Age  $\rightarrow$  work history -16, p<.001 a2. Age  $\rightarrow$  education .14, p=.040 b1. work history  $\rightarrow$  work 1.01, p<.001 b2. education  $\rightarrow$  work .08, p=.269

c. Total (direct+indirect) effect -.49, p=.005 c'. Direct effect -.34, p=.049

Recent work history partially mediates the effect of age on work, explaining about 31% of the total relationship.

However, there remains a significant and negative direct effect of older age on employment.

# Job Characteristics by Age Group Among those who Worked (n=1,035)

Characteristic	>=50 Years (n=104)	<50 Years (n=961)	ANOVA x <sup>2</sup> p- value
Number of jobs held, mean (sd)	1.9 (1.5)	2.4 (1.8)	.018
Length of jobs in months, mean (sd)	4.7 (6.7)	3.7 (5.2)	.021
Held a temporary job	40%	28%	.001
Ever quit a job	46%	60%	<.001
Ever fired from a job	10%	17%	.018
Ever laid off	16%	10%	.012

Highest Job Worker Function by Age Group

## DATA

- 0 Synthesizing
- 1 Coordinating
- 2 Analyzing
- 3 Compiling
- 4 Computing
- 5 Copying
- 6 Comparing

<mark>≥50=4.4</mark> <50=4.9 p<.001

## PEOPLE

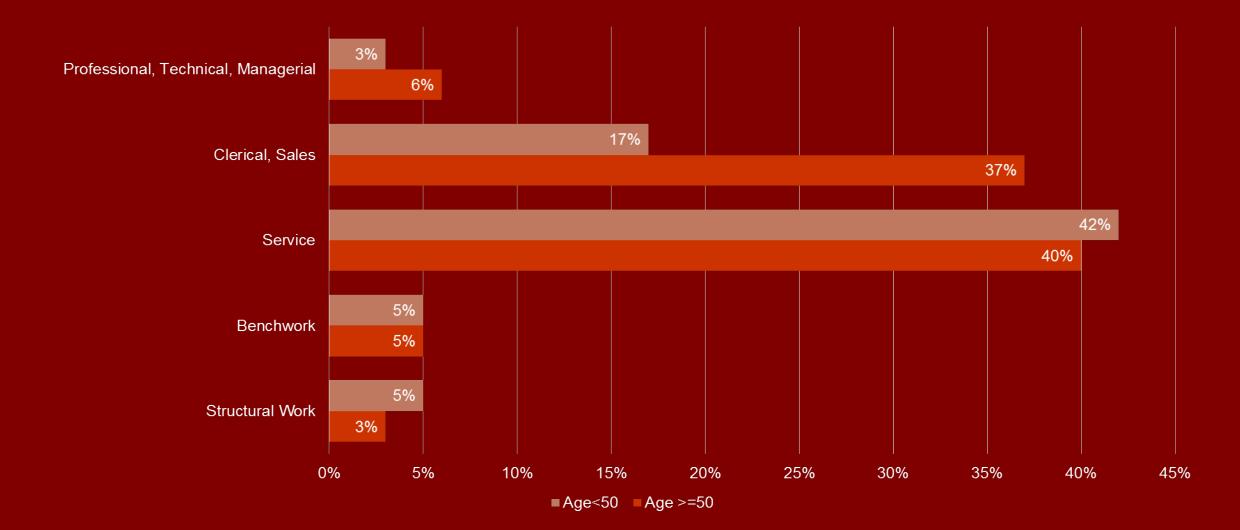
- 0/1 Mentoring/Negotiating
- 2 Instructing
- 3 Supervising
- 4 Diverting
- 5 Persuading
- 6/7 Speaking/Serving
- 8 Taking Instruction/Helping

#### <mark>≥50=6.8</mark> <50=7.1 p=.006

## THINGS

- 0 Setting Up
- 1 Precision Working
- 2 Operating-Controlling
- 3 Driving-Operating
- 4/5 Manipulating/Tending
- 6 Feeding-Offbearing
- 7 Handling
- ≥50=5.7<50=5.9</p>p=.267

# Highest Job Occupation by Age Group



# Clinical Characteristics as Measures of Vocational Functioning

- Prior research has shown that compared to mood and anxiety disorders, people with schizophrenia spectrum diagnoses have poorer vocational outcomes (Cook et al., 2008).
- Psychiatric symptomatology is a predictor of poorer vocational outcomes, in particular negative symptoms (e.g., withdrawal, diminished affect) (Cook & Razzano, 2000).
- Cognitive impairments are associated with poorer vocational outcomes among people with psychiatric disabilities (Mueser, 2002).

# EIDP Clinical Characteristics by Age Group

Characteristic	>=50 Years (n=192)	<50 Years (n=1,423)	ANOVA or chi- square p-value
Schizophrenia spectrum	36%	50%	<.001
Major Depression	32%	24%	.014
Bipolar Disorder	24%	16%	.004
Baseline Positive psychiatric symptoms <sup>1</sup>	13.3 (5.2)	14.4 (5.1)	.007
Baseline Negative psychiatric symptoms <sup>1</sup>	15.3 (5.6)	16.1 (5.6)	.081
Baseline General psychiatric symptoms <sup>1</sup>	33.0 (9.1)	34.2 (8.9)	.090
<=75% adherent to psychiatric medications	15%	23%	.018
Developmental disability/cognitive disorder	8%	18%	<.001

#### <sup>1</sup>Assessed by Positive and Negative Psychiatric Symptom Scale (PANSS)

## Summary

- We found a direct & negative relationship between older age and employment among people with PDs.
- Some of this relationship stems from the poorer recent work histories of older people.
- Older people had more post-secondary education.
- Older workers had higher quality & more demanding jobs.
- Older workers stay in their jobs longer & were less likely to quit or be fired.
- Older participants had lower symptoms, better medication adherence & were less likely to have cognitive impairments.

# Conclusion

- Older people with psychiatric disabilities may have better vocational ability and functioning in terms of educational attainment, as well as more stable clinical symptoms, and experience in jobs that reflect more complicated abilities.
- However, older people's lack of recent work history & poorer work outcomes seem to suggest lower levels of vocational ability.
- Older people with psychiatric disabilities may be subject to age discrimination that overrides vocational functioning & residual capacity (GAO, 2012; Burke-Miller et al., 2006).

# **Contact Information**

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