



Healthy Minds at Work: Addressing the Mental Health Needs of Youth in Job Training Programs

37% of adolescents participating in the Youth Opportunity (YO!) job training program in Baltimore reported symptoms of depression, compared to **4.3%** of the general adolescent population¹. Forty-two percent of YO! participants reported symptoms of PTSD, which is comparable to rates found among **combat** veterans.

51% of YO! participants had either clinically relevant depression, anxiety or PTSD symptomology but only 19.6% of those who needed mental health services had obtained them before program entry.

Inner-city youth in Baltimore have significant mental health needs that are formidable barriers to employment.

HEALTHY MINDS AT WORK: Mental health services in a job training context

A multi-component intervention called Healthy Minds at Work was designed to improve the mental health access and outcomes of youth (16-22 years old) enrolled in the Historic East Baltimore Community Action Coalition, eastside YO! job training program. Youth at the westside YO! program did not receive the intervention. The four intervention components were:

1. Screening for all newly enrolling YO! members:

Screening was conducted at intake on depression, PTSD, anxiety, stress, coping, and social support using an innovative computer tool.

2. Comprehensive clinical services for YO! members:

Participants were given access to at least one on-site clinician visit. Intervention participants were assigned to a combination of one-on-one, group, and/or trauma-focused cognitive behavioral therapy based on the presentation of depressive symptoms at intake.

3. A program of education activities for YO! members:

A peer-led coping curriculum was integrated into employment development activities for those with elevated depressive symptoms. Also, workshops and events discussing interpersonal communication skills, healthy relationship, anger management, violence and self-awareness were offered

4. Training for YO! program staff and peer leaders:

Training was designed to reduce stigma associated with the use of mental health services and facilitate awareness and utilization of newly available mental health resources at YO!.

Participants

New YO! program enrollees between the ages of 16 and 22, not incarcerated and not in foster care were eligible for participation in Healthy Minds at Work.

- 782 youth were included across the comparison (N = 270) and intervention (N = 512) samples
- Average age: 19 years old
- 94% were African American
- 49% were men
- 85% had not obtained a GED or high school diploma
- 61% (N = 477) were interviewed at 6 months
- 57% (N = 444) were interviewed at 12 months

Access to the intervention

88% of men and 89% of women in the intervention received at least 1 mental health service

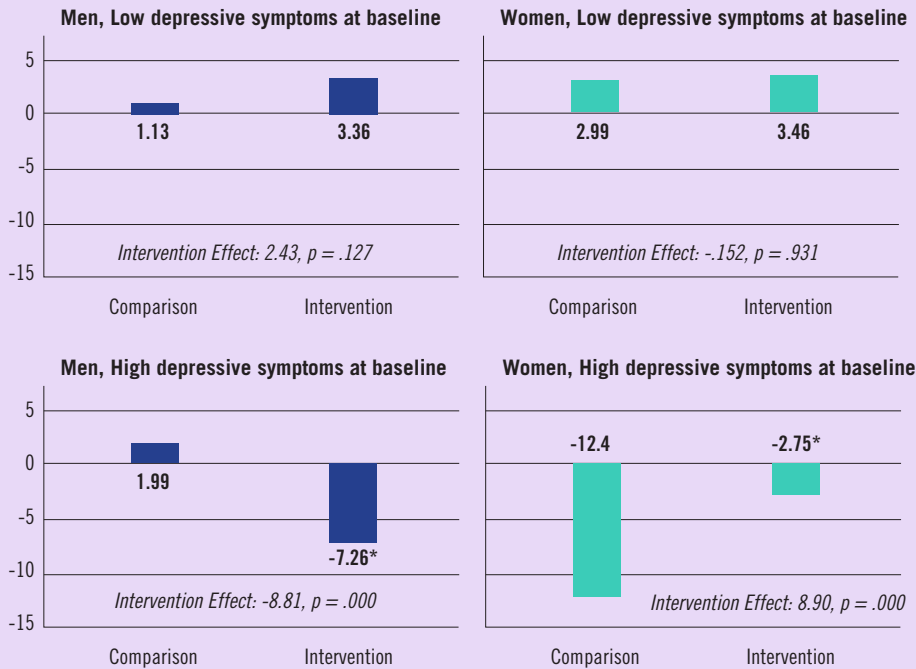
- Eastside YO! participants received job training, mental health screening and intervention. West side YO! participants received job training and the mental health screening only
- The median number of mental health services used by intervention participants was **3 [range: 1, 59]**
- The average number of days between the first and last Healthy Minds at Work intervention service: **86.6**
- 70% of intervention group participants engaged in no further mental health services after **6 months**

¹Pratt LA, Brody DJ. Depression in the United States household population, 2005-2006. NCHS Data Brief. 2008(7):1-8.

Results: Mental Health Outcomes

Depressive symptoms improve at 12 month follow-up among those with moderate-to-severe depressive symptoms

Among men with moderate-to-severe depressive symptoms at time of enrollment, reductions in scores on a scale of depressive symptoms were 8.8 points greater in the intervention group than the comparison group, adjusting for baseline differences. Among women, the intervention was not associated with a decrease in depressive symptoms relative to the comparison group, although depressive symptoms decreased in both the comparison and intervention groups.



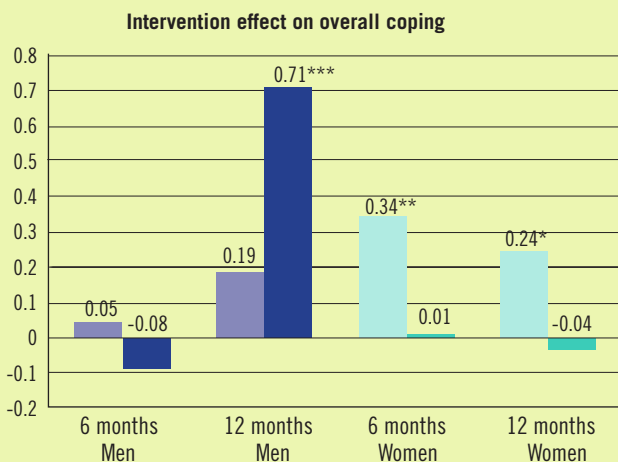
Intervention Dose Effect: Comparing those with high (mean = 8.0 mental health services) and low (mean = 2.8 mental health services) doses of the intervention, higher dose was associated with a 3.37-point decrease in depressive symptoms for men. No dose effect was observed for women.

*Denotes statistically significant differences between intervention and comparison groups

Coping skills improve for men and women

At both 6 and 12 months, women in the intervention with lower depressive symptoms at baseline demonstrated a greater improvement in coping strategies (i.e., overall, active and support-seeking) than women in the comparison group.

At 12 months, men in the intervention with moderate-to-severe depressive symptoms at baseline demonstrated a greater improvement in coping strategies (i.e., overall, active, distraction, and support seeking) than men in the comparison group.



Legend: Low depressive symptoms at baseline (light blue), Moderate-to-severe depressive symptoms at baseline (dark blue)

* p<.05 ** p<.01 *** p<.001

Denotes statistically significant differences between intervention and comparison groups

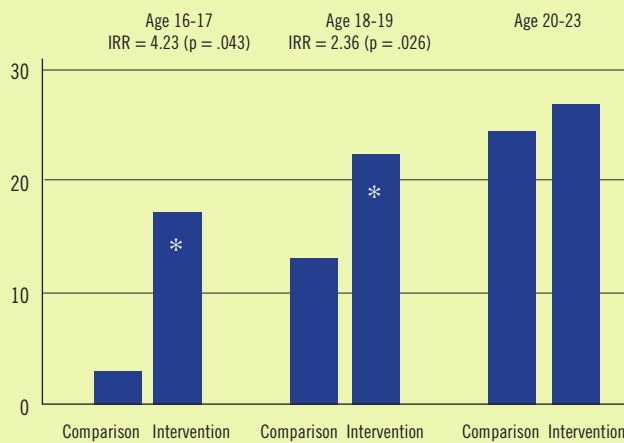
Results: Life-course Outcomes

Self-reported employment rates increase at 6 months for young men unemployed at program entry

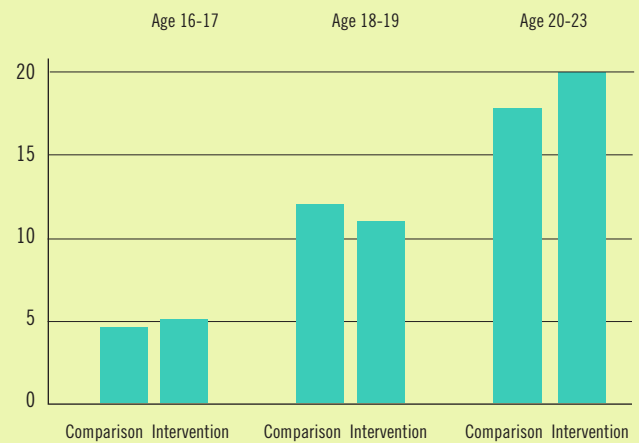
Young men (16-19) in the intervention group were 2-4 times more likely to be employment at 6 months compared to similar men in the comparison group. (No significant differences were seen for women.)



Percent employed at 6 months among those unemployed at baseline (Men)



Percent employed at 6 months among those unemployed at baseline (Women)



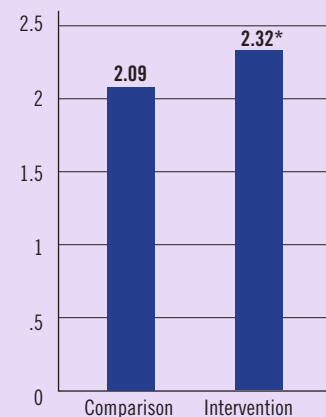
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Employment rates did not increase according to Unemployment Insurance data, but job retention increased among those who became employed

Adjusting for baseline differences, analyses of the Unemployment Insurance wage data found no significant intervention effects on employment within 6 months among men who were unemployed at baseline, regardless of age. Similar findings were observed when analyses were extended to 1 year and to women.

However, among men and women employed for at least one quarter during the year following enrollment, the intervention group was employed for more quarters (2.32) than the comparison group (2.09) ($p = .085$) a finding that approached statistical significance.

Number of quarters employed 1 year post-enrollment among men and women, unemployed at baseline



*Difference marginally statistically significant ($p = .085$)

Methods

Data Collection

Data collection occurred between November 2008 and May 2012.

Data Sources

Audio Computer-Assisted Interview Data

Depressive symptoms: The 20-item CES-D was used to assess depressive symptoms. Participants with CES-D ≥ 16 were considered to have moderate-to-severe depressive symptoms.

Coping skills: Overall coping, assessed using the Children's Coping Strategy Checklist, consisted of three domains of engaged coping: active coping (e.g., trying to figure out why things like this happen), support seeking (e.g., telling people how you feel about a problem), and distraction (e.g., listening to music). Respondents rated their frequency (1, never - 4, most of the time) of engaging in different types of coping.

Self-reported employment: Collected during baseline, 6- and 12-month follow-up surveys, self-reported employment indicates whether an individual self-reported current full- or part-time employment at the time of the interview.

Other Data Sources

UI wage employment: Unemployment Insurance wage data has no loss to follow-up and indicates whether a participant had any wages reported in the Maryland Unemployment Insurance database during the 4 quarters following YO! enrollment.

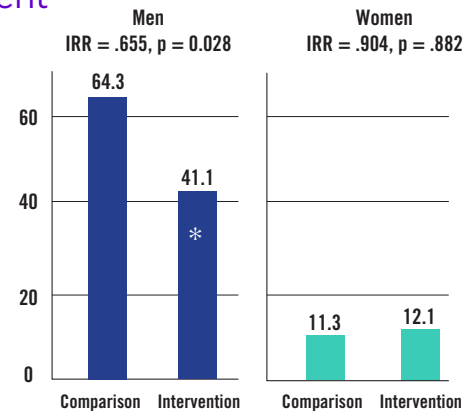
Incarceration: Incarceration was assessed for two years post-enrollment among those 18 and older using records from the Maryland Judiciary Case Search system. Neighborhood bias was suspected due to district-specific changes in city policing and arrest strategies during the time of the intervention. Therefore, participant addresses were geocoded and participants were matched by juvenile arrest rates specific to their community statistical areas.

Analysis

Intervention effects for all outcomes were estimated using propensity-score matched samples which adjusted for differences between the intervention and control groups at baseline. Weighted linear and generalized linear regression analyses were then performed using the matched data, incorporating the matching variables for robust adjustment.

Incarceration rates for males decreased at 24 months post-enrollment

There was a 34% reduced rate of incarceration 24 months post enrollment among men 18+ in the intervention group compared to the control group, adjusting for geographical differences in 2010 juvenile arrest rates. No intervention effects on incarceration were observed among women.



* Denotes statistically significant differences between the intervention and control group

Implications: How can we best equip our youth in job training programs to succeed?

Findings:

- Urban youth enter job training programs with high levels of unaddressed mental health issues.
- Healthy Minds at Work, which integrated and streamlined mental health services into a job training context, was particularly successful in addressing the needs of young Black men.
- Following the Healthy Minds at Work intervention, participants exhibited:
 - A trend towards increased number of quarters employed, which may be an indicator of job retention.
 - Significantly increased rates of self-reported employment among men.
 - Significantly improved depressive symptoms among men.
 - Significantly improved coping skills among men and women.
 - Significantly decreased risk of incarceration among men.

Addressing the mental health needs of out-of-school, out-of-work youth in a job training context shows promise for improving psychosocial and life-course outcomes for men. Further attention should be given to the needs of women.

Job training programs serving youth with needs similar to those of Healthy Minds at Work participants should consider integrating mental health services and supports.

Sonenstein FL, Marshall B, Tandon SD. Employment and Training Programs: A Context for Reaching Out of School Youth with Mental Health and Other Health Programs. Adolescent Medicine: State of the Art Reviews. 2011;22(3),441-57.

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Authors: Amanda Latimore, PhD (alatimore@jhu.edu); Darius Tandon, PhD; Freya Sonenstein, PhD

Center for Adolescent Health
Philip J. Leaf, PhD, Director
Johns Hopkins Bloomberg School of Public Health
Department of Population, Family and Reproductive Health
615 N. Wolfe Street, Baltimore, MD 21202
443-287-3012 • www.jhsph.edu/adolescenthealth



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