

Impact of a Train-the-Trainer Program on the Psychosocial Health Status of Staff Supporting Adults with Intellectual and Developmental Disabilities

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Study Aims and Objective

- Describe the psychosocial health status of staff in supporting adults with intellectual and developmental disabilities (I/DD) community-based agencies (CBAs).
- Discuss impact of a health promotion train-the-trainer program on staff in CBAs.
- Identify health promotion needs for staff in CBAs.
- Discuss policy and practice implications for staff providing support services for people with I/DD.

Caregiver Stress: Health Inequities

- Stress and resultant burnout experienced by caregivers:
 - Linked to poor health, emotional problems, unhealthy lifestyles, quality of life, marital and family problems.
 - Results in health inequity for both persons with I/DD and their caregivers.
- Caregiver stress impedes struggle for community participation and quality of life.
- Caregivers identify health promotion (health and vigor) as a priority to improve fitness and prevent health problems.

Caregiver Health Profiles

- Health profiles of caregivers (staff) employed in CBAs*:
 - 63.7% have a body mass index (BMI) > 25
 - 32% currently smoking
 - Staff with fewer barriers to engaging in physical activity are more likely to report greater health promoting behaviors.
 - Staff with health promoting behaviors are more likely to report better health status.
- Few studies show benefit of educational seminars and personal exercise for staff in increasing long-term workforce stability.

* Marks, Sisirak, & Heller (2005).

Research Questions

- What is the impact of a Health Promotion Train-the-Trainer Program for staff CBAs on the following variables:
 - psychosocial health status
 - exercise cognitions



Design/Methods

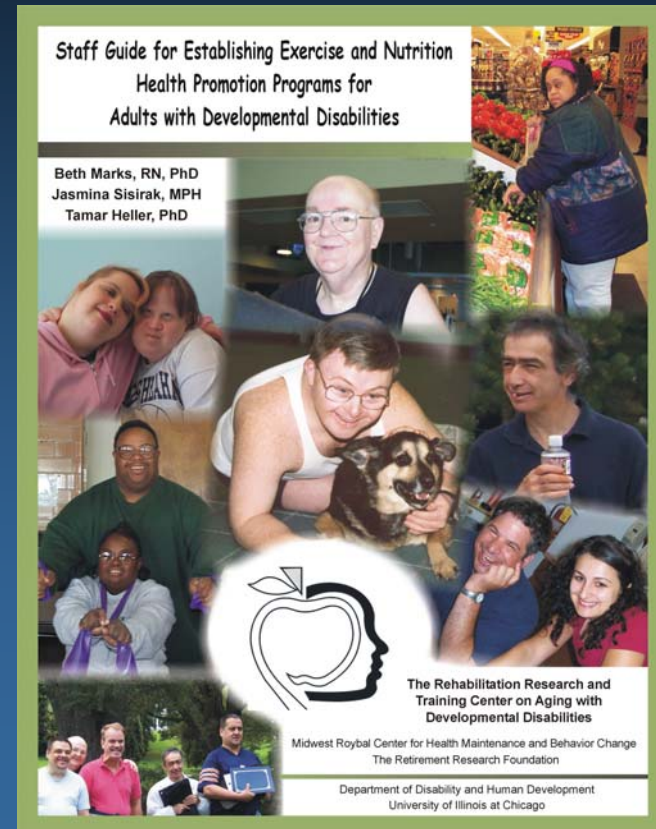
- Intervention study
 - Pre-test/post-test
 - Treatment and comparison group
- Participants included:
 - Direct Support Staff
 - 32 staff trained (5 staff lost to follow-up)
 - DSP, QMRP, Nutritionist, Management, Instructor
 - CBAs providing day/residential services (Illinois and New Mexico)

Instrument and Scales

- Caregiver Informant Survey
 - Self-administered
 - Demographics (age, gender, education, race, height, and weight)
 - Psychosocial Health Status
 - Energy (Fatigue Scale)
 - Psychological Well-Being (Distress Scale)
 - Pain Scale
 - Exercise Cognitions
 - Exercise Outcome Expectations
 - Barriers to Exercise (Cognitive-Emotional & Access)
 - Self-Efficacy to Perform Exercises

Train-the-Trainer Program

- Incorporates the Transtheoretical Model of Behavior Change and Social Cognitive Theory
- Aims to give staff/caregivers skills and strategies to:
 - Start a physical activity and health education program for adults with I/DD.
 - Teach adults with I/DD ways to increase physical activity and healthy food choices.
 - Support adults with I/DD to make long-term lifestyle changes.



Train-the-Trainer Intervention

- 6-8 hours of on-site instruction to staff
 - Training given to staff immediately before 12-week exercise and health education health promotion program for adults with I/DD
 - Technical assistance provided to staff (phone & email) during the Program
- Staff implement 12-week program
 - 6 hours/week
 - 36 classes

Demographics

Table 1. Baseline Characteristics of the Study Participants

	Intervention (<i>n</i> =27)	Control (<i>n</i> =13)	Total (<i>n</i> =40)
Age in years (range)	22-62	22-67	22-67
Mean (<i>SD</i>)	38.9 (10.6)	39.0 (14.8)	38.9 (12.0)
Gender (%)			
Female	89	85	88
Male	11	15	12
Race/Ethnicity (%)			
American Indian or Alaskan Native	4	0	2.5
Black, not of Hispanic origin	11	0	7.5
Hispanic/Latino	11	15	12.5
White, not of Hispanic origin	67	69	67.5
Other	7	15	10
Marital status (%)			
Single	54	39	50
Widowed	0	8	3
Divorced	4	15	15
Married	42	39	32
Education (%)			
High school or lower	15	15	15
Some college	26	39	30
College graduate	52	39	48
Post-college/graduate school	7	8	8

Percentages add up to >100 because of rounding up.

Body Mass Index

BMI Ratios by Group

		Participants' BMI Ratios			
		%			
		Intervention (n=23)	Control (n=17)	Total (n=40)	U.S. Adults ¹
BMI Guidelines					
< 18.5	underweight	–	–	–	
18.5-24.9	normal	41	33	38.2	
25.0-29.9	overweight	27	17	23.5	29.3
30-39.9	obese	23	50	32.4	30.5
40+	extremely obese	9	-	5.9	4.7
TOTAL % (Overweight and Obese)				61.8	64.5

(¹National Heart, Lung, Blood Institute, 1998)
 Source: CDC, NCHS, NHANES, 2002.

Outcome Measures: Psychosocial Health Status

Table 2. Outcome Measures: Analysis of Covariance

Psychosocial Health Status	<i>F</i>	<i>p</i>
General Health	.176	.677
Vitality, Energy, or Fatigue	4.75	.036*
Psychological Well-Being	2.77	.105
Pain Scale	3.44	.072

* $p = .05$; ** $p < .01$; *** $p < .001$

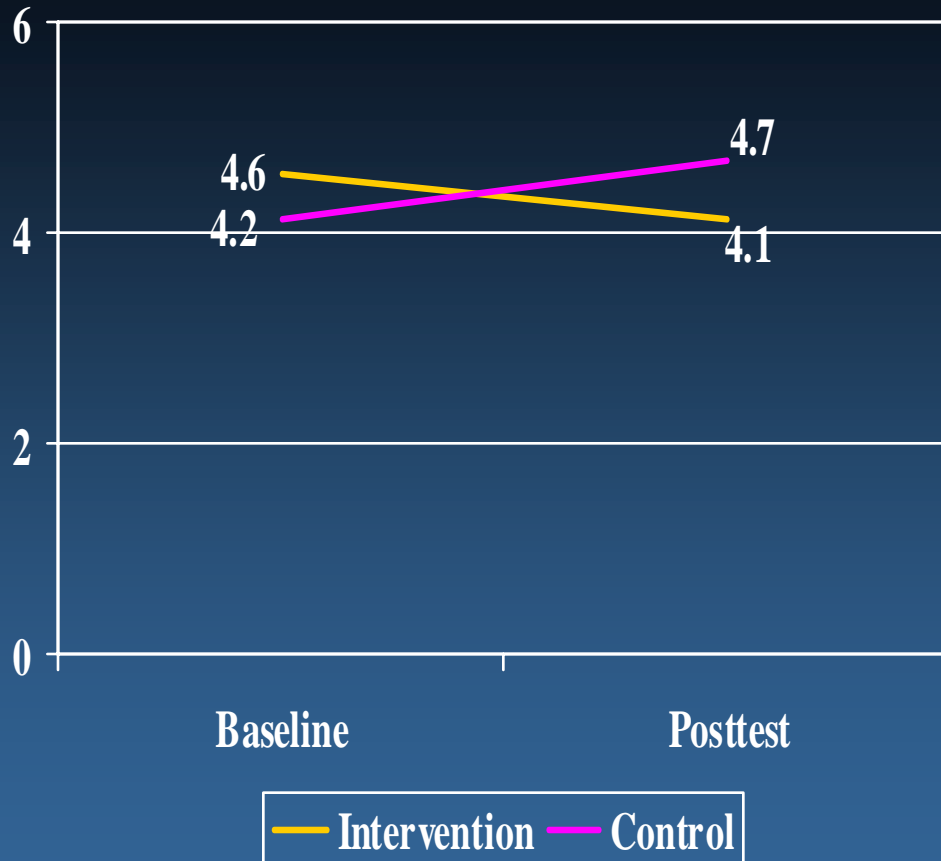
Outcome Measure: Vitality, Energy, or Fatigue



- Compared to the control group, participants in the intervention group reported higher vitality, energy, and less fatigue.
- ($F = 4.75; p = .036^*$)

* $p = .05$; ** $p < .01$; *** $p < .001$

Outcome Measure: Pain



- Compared to the control group, participants in the intervention group reported less pain.
- ($F = 3.44$; $p = .072$)

* $p = .05$; ** $p < .01$; *** $p < .001$

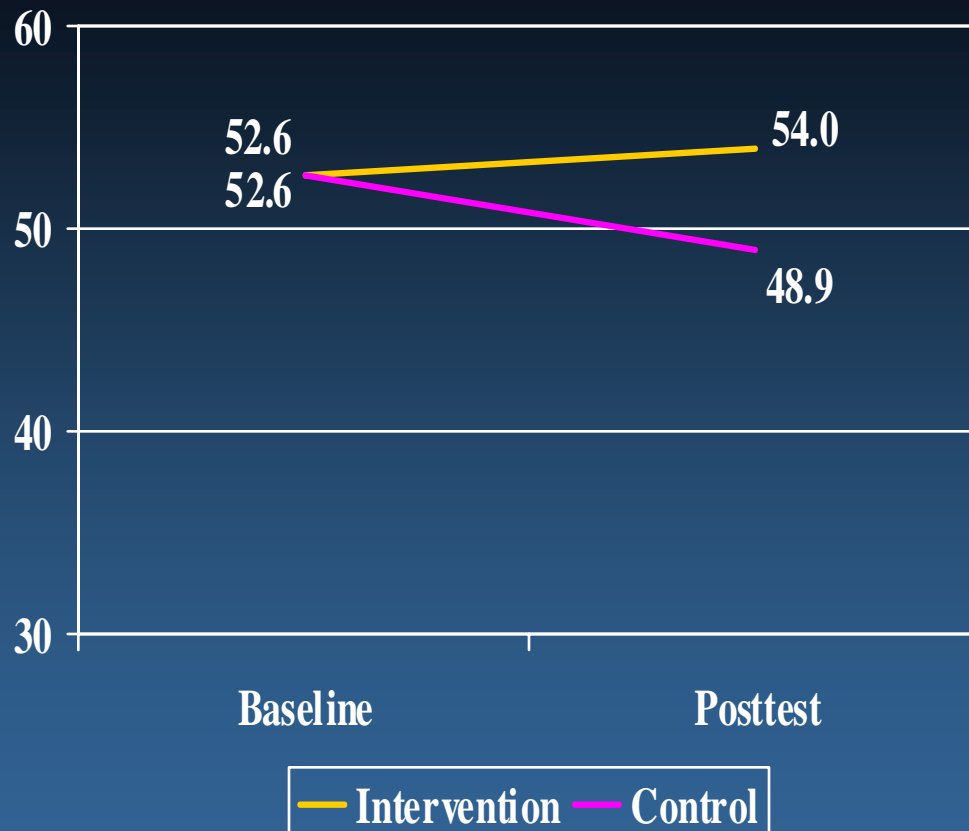
Outcome Measures: Exercise Cognitions

Table 4. Outcome Measures: Analysis of Covariance

Physical Activity Cognitions	<i>F</i>	<i>p</i>
Exercise Outcome Expectations	11.54	.002**
Barriers to Exercise	1.29	.263
Self-Efficacy Scale for Exercise	2.51	.123

* $p = .05$; ** $p < .01$; *** $p < .001$

Outcome Measure: Exercise Outcome Expectations



- Compared to the control group, participants in the intervention group reported greater exercise outcome expectations.
- ($F = 11.54$; $p = .002^{**}$)

* $p = .05$; ** $p < .01$; *** $p < .001$

Conclusion

- While training aimed at teaching staff to implement health promotion programs for adults with I/DD, staff in the treatment group showed improved psychosocial health status (improved energy) and cognitions (increased outcome expectations).
- Although not significant, intervention group had increased self-rated general health status, less pain, greater psychological well-being fewer exercise barriers, and greater self-efficacy to exercise regularly.
- Staff in CBAs can have a strong, positive impact in implementing tailored physical activity and health education program.



Next Steps

- Explore benefits of worksite health promotion programs on psychosocial / physical health for staff with larger sample size and more CBAs.
- Evaluate the impact of environment / organizational culture on agency and individual readiness and efficacy.
- Examine health promotion training models and staff development activities focused on staff retention and job performance.
- Incorporate theoretical frameworks as a basis for program plans and interventions.

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