



AOTA Evidence Briefs

Children With Behavioral and Psychosocial Needs

**A product of the American Occupational Therapy Association's Evidence-Based Literature Review Project*

PSYCH 10

Supported employment is more effective than prevocational training at helping people with severe mental illness obtain competitive employment

Crowther, R. E., Marshall, M., Bond, G. R., & Huxley, P. (2001). Helping people with severe mental illness to obtain work: Systematic review. *British Medical Journal*, *322*, 204–208.

Level: I—Systematic Review

Why research this topic?

In the United States, an estimated 75–85% of people with severe mental illness are unemployed, and in the United Kingdom, 61–73%. Two primary approaches to helping such people return to work are prevocational training and supported employment. In prevocational training, people with severe mental illness receive preparation for competitive employment through sheltered workshops, transitional employment, work crews, skills training, and more. In supported employment, people begin jobs without extended preparation and receive on-the-job support from trained “job coaches.” Although the two approaches are widely used, their effectiveness is not clear.

This study was included in this review since the inclusion criteria for the evidence-based literature review were developed based on IDEA guidelines that recommend including research related to children and adolescents to age 21. This study met the inclusion criteria because participants between 18 and 21 years of age were incorporated into the research.

What did the researchers do?

Crowther et al. (2001), variously affiliated with the University of Manchester (England), King’s College Institute of Psychiatry (London), and Indiana University–Purdue University (Indianapolis), systematically reviewed available studies on the effectiveness of prevocational training and supported employment. Their criteria for inclusion of a study were that it be (1) a randomized, controlled trial that (2) was analyzed on an intention-to-treat basis (meaning that once someone was randomized to a group, they were included in the analysis of the data whether or not they received the treatment, dropped out of the program, or changed from one group to another); (3) compared prevocational training with supported employment, or either one with standard community care; (4) provided outcome data on 50% or more of the participants; and (5) involved participants mostly aged 18 to 65 years with severe mental illness.

The researchers identified 40 trials (reported in 13 reviews). Eleven trials met their criteria. Five compared prevocational training with standard community care; 1 supported employment with standard community care; and 5 supported employment with prevocational training.

From the reviews on the 11 trials, the researchers extracted data on eight outcomes. The primary outcome studied was the number of participants in competitive employment. Secondary employment outcomes included the number of participants in any other form of employment (for example, sheltered work), average hours per month in competitive employment, and average monthly earnings. Clinical and social outcomes included the rate of participation in the

program and the number admitted to hospitals. Cost outcomes were average monthly costs of the program and average monthly costs of all health care for the participants.

What did the researchers find?

Two of the five trials comparing prevocational training with standard community care provided data on the number of participants in competitive employment. Prevocational training was no more effective than standard community care at ages 18 and 24. Three trials generated data on the number of participants in any form of employment. Data taken at months 3, 6, 9, 12, 18 produced no evidence that prevocational training was more effective than standard community care. Two trials that provided data on participation rates in the two programs found **no significant** (see *Glossary*) difference between the two groups. Three trials generated data on the number of patients admitted to hospitals, and found no significant difference between groups. One trial provided data on self-esteem. It found no significant difference. Finally, one trial generated data on average monthly health care costs. Participants receiving prevocational training spent \$417.90; participants receiving standard community care spent \$651.50. However, the researchers did not report any statistical analysis of this difference.

Only one trial compared supported employment with standard community care. While this study reported better outcomes for the supported employment group, these results need to be interpreted with caution since the supported employment group received assertive community treatment. Assertive community treatment is a team treatment approach designed to provide comprehensive, community-based psychiatric treatment, rehabilitation, and support to people with serious and persistent mental illness.

All of the five trials comparing supported employment with prevocational training reported data on the number of participants in competitive employment. Data taken at 4, 6, 9, 12, 15, and 18 months showed that supported employment was **significantly** (see *Glossary*) more effective. One trial provided data on the number of participants in any form of employment. There was no significant difference at 6, 12, and 18 months. Three trials generated data on hours per month in competitive employment. The supported employment participants had significantly more hours than the prevocational training participants. Four trials provided data on average monthly earnings. Three of them found that the supported employment participants had significantly higher earnings than the prevocational training participants. The data were insufficient to establish whether participation rates differed. Two trials provided data on self-esteem, quality of life, and severity of symptoms and found no significant differences between groups. One trial found that program costs were greater for supported employment participants but overall health care costs were lower. Another trial found no significant differences between the approaches in the two types of costs.

What do the findings mean?

For therapists and other providers, the findings indicate that “supported employment [is] more effective than prevocational training at helping people with severe mental illness...obtain competitive employment” (p. 207). No recommendation is possible regarding the effectiveness of prevocational training over standard community care because the data available from the trials comparing these approaches were insufficient. Similarly, no recommendation is possible on the effectiveness of supported employment over standard community care because in the only trial that compared these approaches, the group participating in supported employment also participated in assertive community treatment.

What are the study’s limitations?

This systematic review is a well-designed study that has controlled for threats to validity.

Glossary

nonsignificant (or no significance)—A statistical term that refers to study findings that are likely to be due to chance differences between the groups rather than to other factors (e.g., the treatment of interest). A nonsignificant result is not able to be generalized outside the study. Like significance, a nonsignificant result does not indicate the clinical effect. Often studies will show nonsignificant results, yet the treatment group’s mean will be better than the control group’s. This is usually referred to as a trend in the right direction. Because significance is closely determined by sample size, nonsignificant results would often become significant if the sample size were increased.

significance (or significant)—A statistical term that refers to the probability that the results obtained in the study are not due to chance, but to some other factor (e.g., the treatment of interest). A significant result is likely to be able to be generalized to populations outside the study.

Significance should not be confused with *clinical effect*. A study can be statistically significant without having a very large clinical effect on the sample. For example, a study that examines the effect of a treatment on a client's ability to walk may report that the participants in the treatment group were able to walk significantly longer distances than those in the control group. However, after reading the study one may find that the treatment group was able to walk, on average, 6 feet, whereas the control group was able to walk, on average, 5 feet. Although the outcome may be statistically significant, a clinician may not feel that a 1-foot increase will make his or her client functional.

This work is based on the evidence-based literature review completed by Shari Nudelman, OTR/L, and Marian Arbesman, PhD, OTR/L. For more information about the Evidence-Based Literature Review Project, contact the Practice Department at the American Occupational Therapy Association, 301-652-6611, x 2040.



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