



AOTA Evidence Briefs

Older Adults

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

OA#2

Preventive occupational therapy reduces the health risks of older adulthood

Clark, F., Azen, S. P., Zemke, R., Jackson, J., Carlson, M., Mandel, D., Hay, J., Josephson, K., Cherry, B., Hessel, C., Palmer, J., & Lipson, L. (1997). Occupational therapy for independent-living older adults: A randomized controlled trial. *Journal of the American Medical Association*, *278*, 1321–1326.

Level: IA1b

Randomized control trial, 20 or more participants per condition, high internal validity, moderate external validity

Why research this topic?

According to research, a key to successful aging is to stay active and productive. Doing so involves addressing a variety of physical, psychological, economic, and social factors.

What did the researchers do?

Clark and her associates (1997), all affiliated with the University of Southern California (Los Angeles), designed a study to evaluate the effectiveness of preventive occupational therapy targeted at urban older adults from a variety of ethnic backgrounds who were living independently.

The participants were residents of two government-subsized apartment complexes, one in Los Angeles and one in Pasadena (Calif.) and residents of private homes or other facilities who used the facilities for older adults at the Los Angeles apartment complex. Of the 361 who began the study, 126 were men and 235 were women, with an average age of 74.4 years. All were more than 60 years old, living independently, and able to benefit in various ways from occupational therapy. The ethnic groups represented included Asian (47%), white (23%), African-American (17%), and Hispanic (11%).

The researchers randomly assigned the 361 participants to one of three treatment groups: an occupational therapy group (122); a “social” control group (120), which participated in generalized group activity; or a control group (119), which received no treatment. By the end of the 9-month treatment period, 55 had discontinued participation. The researchers found only one **significant** (see *Glossary*) difference between these people and those who continued in the study.

The participants in the occupational therapy group received 2 hours per week of group occupational therapy and 9 hours of individual occupational therapy across the 9 months of treatment. The therapeutic approach used didactic teaching and direct experience with a variety of daily life topics and occupations. Topics included home and community safety, use of transportation, protection of joints, and exercise. The intent was “to help the participants better appreciate the importance of meaningful activity in their lives, as well as to impart specific knowledge about how to select or perform activities so as to achieve a healthy and satisfying lifestyle” (p. 1322). Occupational therapists conducted the group and individual sessions.

The participants in the social control group met for 2.25 hours a week over the treatment period. The program focused on activities intended to promote social interaction among them: going on community outings, working on craft projects, viewing films, playing games, and attending dances. Nonprofessionals conducted the group sessions. The participants in the control group received no intervention.

The outcome areas of interest to the researchers were *potential functional disabilities or disruptions of daily activities in physical and social domains*—specifically, physical function and social function (as measured by four subscales of the Functional Status Questionnaire: basic activities of daily living, instrumental activities of daily living, social activity, and quality of interaction); *life satisfaction* (as measured by the Life Satisfaction Index-Z); *depression* (as measured by the Center for Epidemiologic Studies Depression Scale); *self-perception of health* (as measured by the Medical Outcomes Study Short Form General Health Survey); and *dimensions of physical and mental health* (as measured by the RAND 36-Item Health Status Survey, Short Form-36). Assessments were made before the intervention began and after it ended.

What did the researchers find?

Compared with the two control groups, the occupational therapy group showed a significant benefit in quality of interaction, life satisfaction, self-perception of health, and seven dimensions of physical and mental health (bodily pain, physical functioning, role limitations attributable to health problems, vitality, social functioning, role limitations attributable to emotional problems, and general mental health).

Analyzing the data for the occupational therapy group by ethnicity, the researchers found a significant benefit for Asians in life satisfaction, depression, and self-perception of health; for Hispanics in one dimension of physical and mental health (general mental health).

What do the findings mean?

For therapists and other providers, the findings suggest that “preventive [occupational therapy] programs may mitigate against the health risks of older adulthood.” Further, they suggest that such programs “could be used in conjunction with other services to proactively manage health care and either generate health improvements or at least slow decline” (p. 1325).

The findings also challenge the notion that people stay healthy by keeping busy. The researchers included the social control group to test this idea. Being regularly engaged in activity “was no more effective in promoting health than receiving no treatment” (p. 1325).

What are the study’s limitations?

The study is well controlled and has no threats to internal validity. That is, consumers of the research can have confidence that the intervention accounted for the outcomes.

Glossary

significance (or significant)—A statistical term, this refers to the probability that the results obtained in the study are not due to chance, but to some other factor (such as the treatment of interest). A significant result is one that is likely to be generalizable 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 the control. However, if you read the study you may find that the treatment group was able to walk, on average, 6 feet, while the control group was able to walk, on average, 5 feet. While the outcome may be statistically significant, a clinician may not believe that a 1-foot increase will make his or her client functional.

■ Terminology used in this document is based on two systems of classification current at the time the evidence-based literature reviews were completed: *Uniform Terminology for Occupational Therapy Practice—Third Edition* (AOTA, 1994) and *International Classification of Functioning, Disability and Health (ICIDH-2)* (World Health Organization [WHO], 1999). More recently, the *Uniform Terminology* document was replaced by *Occupational Therapy Practice Framework: Domain and Process* (AOTA, 2002), and modifications to *ICIDH-2* were finalized in the *International Classification of Functioning, Disability and Health* (WHO, 2001).

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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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