



AOTA Evidence Briefs

Stroke

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

S #2

Intervention to promote leisure activities may need to be fairly intensive and address inhibiting environmental factors

Jongbloed, L., & Morgan, D. (1991). An investigation of involvement in leisure activities after a stroke. *American Journal of Occupational Therapy, 45*, 420–427.

Level IB1a

Randomized controlled trial, 20 or more participants per condition of group, high internal validity, high external validity

Why research this topic?

Occupational therapists may assist stroke clients in resuming former leisure activities or learning new ones. But as of the early 1990s, no studies had examined the effectiveness of such interventions. Previous research had shown that after a stroke people did not resume their social and leisure activities on their own and that they reported a deterioration in their quality of life.

What did the researchers do?

Jongbloed and Morgan (1991), of the University of British Columbia (Vancouver, B.C., Canada) and St. Michael's Centre (Burnaby, B.C., Canada), respectively, designed a study to determine whether occupational therapy intervention would produce differences in stroke clients' involvement in leisure activity, and in their satisfaction with that involvement.

The study involved 40 participants: 27 men and 13 women. Their average age was 69.6 years. All were stroke patients who had been discharged from one of three rehabilitation hospitals in the Lower Mainland of British Columbia, Canada, between October 1986 and February 1988. To be eligible, they had to have experienced a stroke within the previous 15 months, have completed a rehabilitation program, not be on antidepressant medication, not have severe aphasia (unable to use or comprehend words), and have a close relative or friend who was willing to participate in the study.

The participants were randomly assigned to an experimental group or a control group. The intervention with the experimental group involved assistance from an occupational therapist in resuming former leisure activities, engaging in new ones, or both. The intervention with the control group involved a visit by an occupational therapist, who asked the participants questions about involvement in leisure activity throughout their life span and about the effects of the stroke on their lives. Delivered in the home, the interventions occurred once a week for 5 weeks and were each 1 hour long.

The outcome area of interest was *leisure activities* (as measured by two subscales of the Katz Adjustment Index: Level of Free-Time Activities and Level of Satisfaction with Free-Time Activities).

What did the researchers find?

Overall, the participants' involvement in some leisure activities increased over the 4 months of the study, as did their satisfaction with that involvement. But the researchers found **no significant** (*see Glossary*) differences between the two groups on either outcome. They noted, however, that the intervention was very limited (only five visits) and that environmental factors such as access to recreational pursuits and support from family and friends exert a strong influence in this area. Also, the intervention for the control group was related to leisure activity. Thus the effectiveness of the leisure intervention may have been underestimated.

What do the findings mean?

For therapists and other providers, the findings suggest that a limited amount of occupational therapy to promote leisure activity is ineffective. More intensive therapy that also addresses specific factors inhibiting leisure activity may be effective, but further research is needed.

What are the study's limitations?

The study was well controlled. The high rating (1) that it received on internal validity indicates that the outcome was due to the intervention and not some other factor.

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 (like the treatment of interest). A nonsignificant result is not generalizable 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.

■ 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).

This work is based on the evidence-based literature review completed by Hui-ing Ma, ScD, OTR, and Catherine A. Trombly, ScD, OTR/L, FAOTA.

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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