Report Highlights Gaps in Alzheimer’s Research

BY LEANNE SULLIVAN

“Brain training” does not improve general cognitive function, according to a 6-week trial of more than 11,000 participants. The study results “provide no evidence for any generalized improvements in cognitive function following brain training in a large sample of healthy adults,” Adrian M. Owen and his colleagues reported.

The participants were divided into three groups: the experimental group (14,678 subjects), which practiced six tasks emphasizing reasoning, planning, and problem solving; experimental group 2 (4,014 subjects), which practiced six tasks which were no longer continued; and control group (2,738 subjects), which received a standardized test battery.

The results showed that participants who practiced the cognitive tasks had no significant improvement in cognitive function compared to those who did not practice. The authors concluded that the practice effect, studies such as that of Owen and his colleagues, and the belief that brain training can improve cognitive function are not supported by the evidence.

Dr. Owen and his colleagues emphasized the importance of rigorous, randomized, controlled trials and the need for high-quality evidence to determine the efficacy of cognitive training interventions.

Healthy Lifestyle Linked To Lower Mortality Risk For Stroke Patients

BY AMY ROTHMAN SCHONFELD

The benefits of five simple healthy lifestyle factors had been shown in the general population, but had not been shown before for the stroke survivor population, said Dr. Towfighi. The benefits of these factors include reductions in blood pressure, improved blood glucose levels, greater physical activity, less smoking, and increased consumption of fruits and vegetables, which may reduce the risk of death in stroke patients.

The study was conducted among 388 stroke survivors, 75% of whom were male, with a mean age of 67 years. The participants were assessed for stroke risk factors, and the mortality rate was 2.4% per year. The results showed that those who followed five healthy practices, the greater the benefit, according to Dr. Towfighi. The study was conducted among 388 stroke survivors.

Brain Exercises Fail To Improve Memory, Cognitive Function

Credible Study on Complex Question

The notion of exercising the mind to reduce its deterioration is particular to the world of Alzheimer’s disease. Do more crossword puzzles and you will slow the progression of dementia. But is it true? Epidemiological studies have shown mixed results, possibly reflecting pre-symptomatic-stage disease, confounding medical issues, and medications influencing outcomes. Functional brain imaging studies show activation of prefrontal cortices during the early attentional practice stage that diminishes and ultimately vanishes as any skill becomes automatic (Proc. Natl. Acad. Sci. USA 1998;95:853-60).

Cognitive tasks, in contrast to sensorimotor tasks, rely on the integration of multiple brain regions that are geographically distant and serve different functions. Because a related, nonidentical task might use this network, it is conceivable that related tasks may be performed with greater facility and dexterity.

Given the effort required to monitor any skill becomes automatic, studies such as that of Adrian M. Owen and his colleagues that fail to show any major translational skill differences after a mere 6 weeks of “brain exercises” that sound far less grueling than the practice of professional musicians and athletes are certainly credible.