

# BRAIN GAIN



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Rosemary Shirley, a resident at Passavant Retirement Community in Zelenople, participates in a Brain Fitness program at the sen-

ior living campus. The computer exercises are designed to improve memory and attention in older adults.

## Computer programs let seniors exercise mentally

By **BOB SCHULTZ**  
Eagle Staff Writer

**ZELIENOPLE** — Residents at the Passavant Retirement Community are working to keep their brains alert and fit through computer software aimed at improving cognitive function in older adults.

Posit Science's Brain Fitness and InSight programs use computer exercises, the Brain Fitness through auditory responses and InSight through visual responses, to improve brain functions.

The computer classes are offered free to all residents on the Zelenople senior living campus.

The multistep Brain Fitness program began last fall, with the InSight program added this year.

Laura Roy, executive director of the Passavant Retirement Community, said residents

who have participated in the program have seen improvements in their daily lives, whether it was remembering telephone numbers or becoming more self-confident.

She added the new computer programs are another part of the community's wellness program that helps residents stay healthy and independent.

Both computer programs engage the brain's neuroplasticity — its ability to remodel at any age — given the right conditions.

More than 30 published reviews of the program show that in randomized controlled trials the company's patented technologies significantly increase processing speed, improve memory and attention, and enhance the quality of everyday life. The two programs' benefits have been featured on CNBC, CBS News

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Linda Ankney, a resident at Passavant Retirement Community in Zelienople, participates in a Brain Fitness program to improve cognitive function in older adults. Ankney, who plays the piano, said the program has helped her look at music

sheets more quickly and better recognize the intervals. The computer classes are offered free to all residents on the Zelienople senior living campus.

# Programs

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and a PBS special program.

A study published in April in the Journal of the American Geriatrics Society showed that computerized brain exercises can improve memory and attention in older adults.

A total of 487 healthy adults over the age of 65 participated in the randomized controlled trial, called the IMPACT Study. Half were assigned to a group that trained on a brain fitness software program for a total of 40 hours over the course of eight weeks. The other half spent an equal amount of time learning from educational lectures on the computer followed by quizzes.

The study found that participants who trained on the software, The Brain Fitness Program from Posit Science, more than doubled their processing speed, with an average increase of 131 percent. They also saw gains on standard measures of memory and attention of 10 years, on average. These changes were big enough that participants reported significant improvements in everyday activities such as remembering names or understanding conversations in noisy restaurants.

Posit Science had worked with more than 50 scientists from U.S. universities to

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**JUNE MORRISON,**

Passavant Retirement Community resident

design and test its computer-based programs.

The program is used by more than 30 senior living communities in Pennsylvania, including the Passavant Retirement Community, and also is used in retirement communities in 24 other states and in Canada.

These programs target the root causes of change in brain function that occur with age, rather than teaching how to compensate for those changes or drilling memory.

The Posit Science programs adjust to the users’ abilities. Both of the programs begin with a baseline assessment.

It will get harder if the user is showing marked improvements, but if the user is not doing well, the program will get easier, Roy said.

Those participating in the Brain Fitness auditory exercises are required to participate an hour per day, five days per week for eight weeks.

The Brain Fitness program features six separate comput-

er exercises.

The exercises use auditory stimuli and users have to distinguish between different sounds. There also is a listening comprehension exercise in which the user listens to a story and then is asked to answer a series of related questions.

Roy said the InSight visual program is more challenging cognitively, but all residents need to learn on the computer to use the program is how to use a mouse since many of the exercises ask the user to pick the difference between visual items.

The InSight program features five visual exercises that include distinguishing between different pictures and matching similar pictures that appear during the exercises.

There also is a virtual driving exercise that asks the driver to pick up different things like signs along the road.

“In healthy aging adults, the average memory gain

from the programs is 10 years,” Roy said.

The programs are challenging, Roy explained, adding that some residents have sometimes felt exhausted after going through the brain exercises, while still others felt energized and went swimming or took part in other activities.

Resident Linda Ankney, who plays the piano, said the program has helped her look at music sheets more quickly and better recognize the intervals.

Resident June Morrison used the term “intense” to describe the program.

“It really forces you to focus,” Morrison said. “I’ve noticed it has helped me concentrate more on my hearing.”

Resident Carol Johnson said the program has helped her become more alert in general.

“The more you use it, the more you become addicted to it. It’s good to hear the voices on the program over and over again,” said resident Dottie Asimakis, who added it has helped her remember things like telephone numbers better instead of having to look them up all the time.