

# Learning New Skills Keeps an Aging Mind Sharp

October 21, 2013



Older adults are often encouraged to stay active and engaged to keep their minds sharp, that they have to “use it or lose it.” But new research indicates that only certain activities — learning a mentally demanding skill like photography, for instance — are likely to improve cognitive functioning.

These findings, forthcoming in [\*Psychological Science\*](#), a journal of the [Association for Psychological Science](#), reveal that less demanding activities, such as listening to classical music or completing word puzzles, probably won’t bring noticeable benefits to an aging mind.

“It seems it is not enough just to get out and do something—it is important to get out and do something that is unfamiliar and mentally challenging, and that provides broad stimulation mentally and socially,” says psychological scientist and lead researcher Denise Park of the University of Texas at Dallas. “When you are inside your comfort zone you may be outside of the enhancement zone.”

The new findings provide much-needed insight into the components of everyday activities that contribute to cognitive vitality as we age.

“We need, as a society, to learn how to maintain a healthy mind, just like we know how to maintain

vascular health with diet and exercise,” says Park. “We know so little right now.”

For their study, Park and colleagues randomly assigned 221 adults, ages 60 to 90, to engage in a particular type of activity for 15 hours a week over the course of three months.

Some participants were assigned to learn a new skill — digital photography, quilting, or both — which required active engagement and tapped working memory, long-term memory and other high-level cognitive processes.

Other participants were instructed to engage in more familiar activities at home, such as listening to classical music and completing word puzzles. And, to account for the possible influence of social contact, some participants were assigned to a social group that included social interactions, field trips, and entertainment.

At the end of three months, Park and colleagues found that the adults who were productively engaged in learning new skills showed improvements in memory compared to those who engaged in social activities or non-demanding mental activities at home.

“The findings suggest that engagement alone is not enough,” says Park. “The three learning groups were pushed very hard to keep learning more and mastering more tasks and skills. Only the groups that were confronted with continuous and prolonged mental challenge improved.”

The study is particularly noteworthy given that the researchers were able to systematically intervene in people’s lives, putting them in new environments and providing them with skills and relationships:

“Our participants essentially agreed to be assigned randomly to different lifestyles for three months so that we could compare how different social and learning environments affected the mind,” says Park. “People built relationships and learned new skills — we hope these are gifts that keep on giving, and continue to be a source of engagement and stimulation even after they finished the study.”

Park and colleagues are planning on following up with the participants one year and five years down the road to see if the effects remain over the long term. They believe that the research has the potential to be profoundly important and relevant, especially as the number of seniors continues to rise:

“This is speculation, but what if challenging mental activity slows the rate at which the brain ages?” asks Park. “Every year that you save could be an added year of high quality life and independence.”