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Seniors’ Memories Not So Bad After All

Forget everything you've heard about forgetfulness. Researchers at North Carolina State University believe that age-related declines in memory and cognitive functioning may not be as pronounced as once believed.

Dr. Thomas Hess, professor of psychology at NC State, says pessimistic notions of changes in mental abilities associated with growing older may in part be attributed to how early studies into cognition and aging were conducted. His findings were outlined in a recent edition of the Journal of Gerontology and chronicled in Science magazine. Hess' research is part of a three-year study into stereotype threat, aging and memory as part of a $403,000 grant from the National Institute on Aging.

"Age differences that we've seen in previous memory studies may not be entirely due to the biological changes associated with aging," Hess said. "They may also reflect older adults' reactions to the context in which we've tested people. When you look at older adults in the everyday context in which they function, you get a very different picture of their performance than when you look at them outside of this context."

Hess and his colleagues have argued that some of the age differences that have been found in standard laboratory studies may be due to a situation called "stereotype threat."

Stereotype threat refers to an individual's fear that his or her behavior will reinforce a negative stereotype that exists about a group to which one belongs. Researchers contend that individuals perform at lower levels when they are placed in situations where they are aware that
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their actions could confirm a negative stereotype. Hess theorizes that since older adults are aware of the negative connotations related to aging and memory, they experience heightened anxiety and evaluation concerns that could negatively affect their performance on memory tests. He examined the impact of stereotype threat on memory performance in older adults in an experiment in which he manipulated the expectations seniors had about their memories.

Hess had older adults read mock newspaper articles on recent findings related to aging and memory. Half of the articles presented actual negative findings that suggested mental declines were inevitable. The other half outlined more positive findings that implied some memory skills were preserved with age and that mental declines could be slowed. After reading the articles, the subjects were given a basic memory test in which they had to recall a list of words. Hess found that individuals who read the positive article performed about 30 percent better on the memory test than those who read the negative article.

To get a more realistic picture of cognitive functioning in older adults, Hess and his researchers have emphasized social contexts and the real-life settings in which seniors engage their minds in their memory studies. In other experiments, Hess has discovered that older adults perform as well or better than younger adults in tasks that involve making objective decisions and assessing people's character. Those studies are part of ongoing research into social cognition and aging funded by a $1 million grant from the National Institute on Aging.

In one study, Hess found that older adults were just as adept as younger adults at distinguishing between essential and extraneous information when making decisions on issues that could impact their lifestyle. In his experiment, adults ranging in age from 20 to 83 were asked to evaluate a number of fictitious tax-increase proposals that were under consideration by the state government. Before reading about the proposals, subjects were presented with information about the legislator who supposedly proposed the new tax programs. In half the cases, the legislator was presented in a positive light, while in the other half the legislator was presented in negative terms.

The results showed that older adults performed on par with younger adults in making decisions based on the merits of the tax program instead of their perceptions of the legislator when the information was perceived as relevant to their lives. In those situations that were perceived as less relevant, however, older adults were more likely to be influenced by extraneous information. This suggests that the degree to which aging deficits in cognition are observed is in part related to seniors’ perceptions of the task.

"We found that if the information was relevant to older adults, they could focus their cognitive resources, tune out the irrelevant information and make an informed decision," Hess said. "They performed almost exactly like younger adults. Older adults tended to focus on the argument that was made rather than on who made it, which is the way we would think an informed decision-maker would go about making a decision."

In another study, Hess presented groups of older and younger adults with positive and negative descriptions of fictitious individuals and asked the subjects to evaluate the honesty and intelligence of those individuals. Hess discovered that older adults were better than younger adults at judging a person's character and competence.

"Middle-aged and older adults make more complex judgments because they focus on the most meaningful factors that could impact an individual's behavior," Hess said. "Older people know what is important in
assessing character because of their years of experience and social expertise. Young people haven't had as much experience in the social world, and they haven't had as much time to learn about the many factors that relate to behavior, so they tend to focus on qualities that are somewhat superficial." Hess said he hopes his findings foster an increased sense of confidence among older adults and help improve public perceptions about seniors.

"Negative stereotypes that exist about aging have negative effects on people's sense of well-being and the extent to which people fear getting older," Hess said. "It's quite evident that most people over the age of 65 are functioning on their own, living on their own and doing quite well. Although some basic aspects of cognitive ability decline as we age, functioning is preserved in many contexts, and there are some areas that actually improve as you get older. These findings give us a more realistic view of how people adapt to the aging process, and what their functioning is like in everyday life."