

**Lesson-03**      **Semester-3**

**Comprehension  
Exercise**

**September 23, 2013 Monday**

# Agenda:

- Discussing issues of understanding;
- Video exercise;
- Reading & Translation exercise

It's been said that video information accompanied with audio, such as TV program fragments, is much more difficult to understand.

The given exercise has a video clip and textual information contextually connected with it.

Students are offered to view the video clip first, then read the text and explain their understanding in both cases.

Afterwards students are offered to view the video clip one more time and explain what new information they discovered that was not in the text.

## Video Game Boosts Brain Power of Older Adults



**Jessica Berman**

September 05, 2013

Scientists have developed a video game for older adults that appears to improve their short-term memory and long-term focus.

Seniors who play the so-called

multi-tasking game develop neurological improvements rivaling those of 20-year-olds.

Peoples' short and long-term cognitive abilities decline with each passing decade. But there is growing scientific evidence that the human brain, with the right stimulation, can be reprogrammed to counteract the effects of age.

The latest research comes out of the University of California San Francisco, where researchers developed a video game for seniors called NeuroRacer.

The game study involved more than a dozen 60 to 80-year-old participants, who were asked to maneuver a video-screen car at the same time that signs flashed in front of them on a screen. The signs were either relevant or irrelevant to the game play. The participants followed signs they deemed relevant and disregarded those they thought were unimportant.

Researchers began their investigation by measuring how well participants performed on one task and compared it to how well they did when a second task was added.

Compared with young people who played the game once, study lead author Adam Gazzaley said in a telebriefing with reporters there was a striking improvement in multi-tasking after seniors practiced at home for one month.

"Before training, they had a 65 percent drop in performance when they do the two tasks versus one task. After training, they only had a 16 percent drop in performance. And that's better than the 20-year-olds that had a performance drop in the 27 percent range," said Gazzaley.

Most striking to Gazzaley was that improvements in the seniors' brain power carried over for six months into other mental areas and without any additional game play...

**Adam Gazzaley:** "...like sustained attention, which is vigilance, ability to hold your attention to something that is very boring and respond to it rapidly and accurately, that improved selectively in this group. And also working memory, their ability to hold something in mind for a short period of time and respond to it accurately and rapidly; that also improved."

Although he's reluctant to endorse commercially available video games, Gazzaley says some shooter games that focus players' attention on a particular target could have a similar benefit.

Gazzaley says his lab is in the process of developing other video games for people with attention deficit disorder and depression.

An article on a video game that boosts the brain power of older individuals is published in the journal *Nature*.

# More deep exploration of the issue

The following information will  
deepen your knowledge  
on the Video Gaming study

<http://www.nature.com/nature/journal/v501/n7465/full/nature12486.html>

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日本語要約

## Video game training enhances cognitive control in older adults

J. A. Anguera, J. Boccanfuso, J. L. Rintoul, O. Al-Hashimi, F. Faraji, J. Janowich, E. Kong, Y. Larraburo, C. Rolle, E. Johnston & A. Gazzaley

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*Nature* 501, 97–101 (05 September 2013) | doi:10.1038/nature12486

Received 16 January 2013 | Accepted 18 July 2013 | Published online 04 September 2013

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Cognitive control is defined by a set of neural processes that allow us to interact with our complex environment in a goal-directed manner<sup>1</sup>. Humans regularly challenge these control processes when attempting to simultaneously accomplish multiple goals (multitasking), generating

### Editor's summary

العربية

Our ability to multitask and our capacity for cognitive control decline linearly as we age. A new study shows that cognitive training can help repair this decline. In older adults aged between 60 and ...

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Reving up brain skills



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A video game can improve declining cognitive function in older adults

<http://www.nature.com/news/gaming-improves-multitasking-skills-1.13674>

## Gaming improves multitasking skills

Study reveals plasticity in age-related cognitive decline.

[Alison Abbott](#)

04 September 2013



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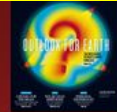
Sixty-five-year-old Ann Linsey was starting to worry about how easily she got distracted from whatever she was doing. "As you get older, it seems harder to do more things at once," she says.

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Brain training game NATURE.flv



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**Thanks**