Video games: 9 amazing benefits for the body and health

VIDEO GAMES - Your mother was wrong. Video games aren't bad for you. In fact, they improve your life. Despite popular beliefs about the supposed link between violence and video games (hint: there is none), many academic studies indicate that playing video games has a lot of psychological, and even physical, benefits. Taken together, it would appear that video games actually make you a better human being.

1. 'Mario' works on your brain

To better understand how video games affect the brain, German researchers conducted a study, published this week. They asked 23 adults, an average of 25 years old, to play "Super Mario 64" for 30 minutes a day for two months. A control group did not play video games at all.

MRI scans of their brains showed that the group of players saw their gray cells increase in the right hippocampus, right prefrontal cortex, and cerebellum - areas of the brain responsible for spatial navigation, memory, organization and motor skills of the hands.

"While previous studies had shown differences in brain structures in video game players, the current study reveals the existence of a link between playing video games and an increase in brain volume", explains Simone Kühn, who led the study. "It shows that specific areas of the brain can be exercised through video games."

Kühn and his colleagues concluded that video games could potentially be used as therapy on patients with mental disorders causing reduction or alteration of certain parts of the brain. These disorders include schizophrenia, post-traumatic stress disorder and Alzheimer's.

2. You might get smarter with 'Starcraft'

Last August, British researchers found that certain video games, especially strategy games like "Starcraft" can increase "brain flexibility," which scientists describe as "the cornerstone of human intelligence."

The study, conducted by Queen Mary University of London and University College London, is based on psychological tests conducted before and after 72 volunteers played "Starcraft" or the life simulation game "Sims" during 40 hours, spread over six to eight weeks. According to the study, during psychological tests, participants who played "Starcraft" completed cognitive flexibility tasks faster and more accurately.

"Now we need to understand what exactly is causing these changes, and whether these cognitive lashes are permanent or if they diminish over time," said study researcher Brian Glass in August . "Once we understand it, it will be possible to develop clinical interventions for, for example, symptoms related to Attention Deficit Hyperactivity Disorder or head trauma."

3. Video games could slow down aging

تنزيل العاب كمبيوتر سيمو

According to a study conducted this year by the University of Iowa, playing stimulation games two hours a week would be enough to slow the degree of mental decline associated with natural aging.

A study of 681 individuals aged 50 and over found that playing some video games for 10 hours could delay the natural decline of various cognitive skills for up to seven years.

For five to eight weeks, one group of seniors practiced computer crossword puzzles while three other groups played a computer game called "Road Tour." This game consisted of finding photos of vehicles while remembering where a particular road sign was placed, with more and more traps as the player advanced. The experience should reflect the difficulty older drivers have in dealing with a wealth of information at a junction.

"Whether it's a specific game or a game like 'World of Warcraft,' they are cognitively complex and require mental energy and skill to play," explains Jason Allaire, professor. in the psychology department at North Carolina State University in Raleigh, which was not involved in the study. "Anytime you do something that requires mental energy, you are exercising your abilities - it's just like when you exercise your muscles, you get stronger."

4. They could help dyslexic children read better.

A study from the University of Padua cast a chill on the idea that video games are bad for the brains of young children . In February, Italian researchers showed that playing action video games can improve the reading skills of children with dyslexia.

The team split children aged 7 to 13 into two groups, one to play an action game called "Rayman Raving Rabids" while the other played a less paced game. When children's reading skills were subsequently tested, those who had had the action play could read faster and more accurately. The study authors hypothesized that action games helped children expand their focus of attention, which is crucial for reading.

5. Teenagers who play video games do better on a surgical simulator than real medical interns.

In November 2012, scientists from the University of Texas at Galveston conducted an experiment: high school and college students who were fond of video games competed against medical interns to see who could perform the best virtual surgeries. Players completed a series of exercises on a surgical simulator that measured their skills in 32 different categories such as eye / hand coordination, key manipulation and timing.

The high school students, who played video games two hours a day, did much better than the students (who played four hours a day) and the medical interns (who only played video games sporadically). The real experience of the interns in this case probably worked against them.

Sami Kilic, a University of Texas professor who helped shape the experiment, insisted that students looking for a medical career should continue to focus on their studies, not virtual surgery. However, according to a different study, surgeons who played video games for at least three hours per week made 37% fewer errors when performing laparoscopies.

6. Video games can relieve pain

In 2010, at the annual meeting of the American Pain Society, researchers demonstrated that video games, especially those with an emphasis on virtual reality, were effective in reducing anxiety or pain. pain caused by medical procedures or chronic illnesses . The study found that when people undergoing chemotherapy or other heavy treatments were immersed in a virtual video game world, they reported feeling much less stress and fear. In addition, those who were treated for burns experienced a reduction in their sentence ranging from 30 to 50%.

Referring to the motion capture technology of the Xbox Kinect or the Wii, Charles Friedman, of the Pain Relief Centers, explains that video games allow the brain to stay active by using other senses instead. to stay focused on the pain. Playing video games also releases endorphins in the brain, a chemical component generally associated with happiness and capable of lulling feelings of discomfort to sleep.

7. 'Call Of Duty' can improve your eyesight.

According to a study from the University of Rochester, shooting bad guys in video games can improve your vision, amazing as it sounds.

In this 2009 study, expert action game players played first-person shooter games like "Unreal Tournament 2004" and "Call of Duty", while players not experienced in this type of game have played "Sims 2". Those who played violent

games experienced an improvement in contrast in their vision or in their ability to distinguish subtle changes in the brightness of an image. Considered one of the first visual skills to diminish over time, the ability to capture bursts of light is fundamental in certain tasks such as night driving.

The authors of the study believe that having to locate and target enemies allows players' eyes to practice. Having to react to villains that can pop up at any time forces them to analyze visual data instantly. The researchers believe their study shows that video games - especially action games - have the potential to help correct poor eyesight.

8. Video games can be as effective as a one-to-one therapy session.

While video games are often accused of being one of the causes of mental illness, studies have shown that they can also act as a remedy.

In 2012, researchers in New Zealand created a new way to treat depressed adolescents with "SPARX," a video game designed to make therapy for these young people more fun and active than a traditional consultation. The name of the game is an acronym for "smart, positive, active, realistic and x-factor thoughts", strategies often used to fight depression.

The study involved 168 adolescents, with an average age of 15, who had previously sought help or were struggling with depression. Half of this group had been assigned to "normal treatment" generally consisting of 5 individual psychotherapeutic consultations. The other half played SPARX, a fantasy game where subjects created avatars to eliminate "all negative thoughts" and restore order in a virtual world. Each level taught players basic facts about depression, strategies for dealing with negative emotions, and relaxation techniques.

The results for the SPARX group were very encouraging. Almost 44% of SPARX players came out of the depression compared to 26% of the control group.

9. They can help stroke victims recover fully.

For stroke victims, recovery can be a long process, if not impossible. Seeking a cheaper and more efficient approach to regaining speech and movement after a stroke, Debbie Rand, of Tel Aviv University, turned to video games.

Individuals who had suffered a stroke up to seven years before the study were assigned to one of two groups. One did traditional rehabilitation exercises, while the other played video games on the Xbox 360, PlayStation 3, and Nintendo Wii.

For an occupational therapist like Rand, using video games for rehabilitation had obvious advantages in several ways. While both groups showed some improvement in certain activities such as grip, only the group of players continued to show improvement in hand strength after treatment. Video game players not only accomplished double the arm movements in each session, but their movements "were directed towards a goal" and not just repetitive exercises.

"When individuals organize their movements and move deliberately to accomplish a specific goal, there is a good chance that this has a positive impact on neural plasticity," explains Rand, observing that because video games are fun and enjoyable, subjects will be more inclined to fully invest in rehabilitation.