

Creative Hobbies Can Keep Your Brain Young, Study Finds: Best Activities to Try

Engaging in creative activities such as music, dance, painting, and even certain video games may help keep the brain biologically younger, according to a **large international study** involving over 1,400 adults from 13 countries. Researchers from institutions including **Trinity College Dublin** in Ireland and **SWPS University** in Poland analyzed brain patterns across a diverse population, finding that those who regularly pursue creative hobbies show neurological signatures that appear younger than their chronological age.

The findings, published in **Nature Communications** in October 2025, suggest that creativity could play a role in slowing brain aging, supporting mental agility, and potentially protecting against age-related cognitive decline.

How the Study Was Conducted

The research team studied adults with varying experience in creative domains, including **tango, music, visual art, and strategy-based video games**, while also including participants with no prior experience for comparison. To assess the impact of short-term learning, a subgroup of beginners trained in **StarCraft II**, a strategy video game, over a few weeks.

All participants underwent **EEG (electroencephalogram)** and **MEG (magnetoencephalography)** brain scans. The data were analyzed using **machine-learning brain age models**, often referred to as “**brain clocks**.” These tools estimate how old a person’s brain appears biologically, relative to their chronological age.

The researchers then examined how creative pursuits influence neural networks responsible for **attention, movement, coordination, and problem-solving**, areas that typically weaken as people age.

Short-Term Creativity Has Immediate Benefits

One of the study’s key findings is that even brief engagement in creative activities can produce measurable brain benefits. For example, participants who spent roughly **30 hours on**

strategy-based video games showed improved brain-age markers, indicating that the brain can respond quickly to new cognitive challenges.

Dr. Carlos Coronel, a postdoctoral fellow at the **Global Brain Health Institute**, said:

"You do not need to be an expert to benefit from creativity. Even beginners gained cognitive advantages from short-term training in creative activities, including strategy games."

The research underscores the importance of **active learning and skill acquisition** throughout life, demonstrating that mental plasticity is not limited to youth.

Long-Term Creativity Strengthens Neural Networks

Adults with years of experience in music, dance, or visual arts exhibited the most pronounced reductions in biological brain age. These findings suggest that sustained creative engagement strengthens critical neural networks, enhancing mental flexibility, attentional control, and coordination.

According to Dr. Agustin Ibanez, senior author of the study:

"Creativity emerges as a powerful determinant of brain health, comparable to physical exercise or a healthy diet. Our results open new avenues for interventions that leverage creative activities to protect the brain against aging and disease."

Dr. Aneta Brzezicka of **SWPS University** added that creative hobbies should be **integrated into educational curricula and public health programs** to promote cognitive resilience from childhood into older adulthood.

Creative Hobbies Comparable to Exercise and Nutrition

The study highlights that creativity may be as important for brain health as traditional lifestyle factors such as **exercise, diet, and social engagement**. Previous research has linked creative pursuits to better mood, higher life satisfaction, and improved overall well-being.

For example, engaging in activities like **painting, pottery, embroidery, dance, and music** strengthens brain regions involved in **problem-solving, coordination, and memory**, while even cultural activities like **museum visits** provide cognitive stimulation.

Dr. Jon Stewart Hao Dy, a neurologist not involved in the study, commented:

"Creative activities offer neuroprotective effects that help preserve cognition in older adults. While brain clocks are still a developing tool, they show promise in quantifying these benefits."

Brain Clocks: Measuring Cognitive Age

The study utilized **machine-learning brain clocks**, an emerging technology in neuroscience, to monitor changes in brain health. Brain clocks estimate how “old” a brain appears biologically, factoring in structural and functional patterns.

While the tool is still under development, it provides a quantitative way to assess the impact of interventions, such as learning new creative skills or engaging in regular arts activities, on cognitive aging.

Dr. Ibanez explained:

"Brain clocks allow us to track brain health over time and assess whether lifestyle changes, including creative engagement, can slow the aging process."

Caveats and Considerations

Researchers caution that the study has limitations. Most participants were healthy adults, and some subgroups were relatively small. The study did not follow participants over many years, so it cannot confirm whether younger-looking brains translate into reduced **dementia risk** or improved daily functioning.

Additionally, creative individuals often have other advantages, such as **higher education, social engagement, and access to artistic resources**, which could also contribute to cognitive resilience. The study could not fully isolate the effects of creativity from these factors.

Best Creative Activities for Brain Health

Based on the study and previous research, several creative activities stand out for their cognitive benefits:

- **Music:** Playing an instrument or singing strengthens attention, auditory processing, and coordination.
- **Dance:** Movement-based activities enhance motor skills, memory, and spatial awareness.
- **Visual Arts:** Painting, drawing, sculpture, and ceramics stimulate problem-solving and fine motor skills.

- **Strategy Video Games:** Games that require planning, resource management, and quick decision-making improve executive function and attention.
- **Cultural Activities:** Visiting museums, attending performances, or engaging in storytelling can stimulate memory and cognitive flexibility.
- **Crafts:** Pottery, embroidery, knitting, and other hands-on crafts encourage precision, focus, and coordination.

Even beginners can benefit from starting any of these activities, demonstrating that **it's never too late to engage the brain creatively**.

Implications for Public Health

The research supports integrating creative activities into **healthcare programs, education systems, and public policy initiatives**. By promoting hobbies that challenge the mind, societies can support **healthy cognitive aging** and improve quality of life for adults and seniors.

Dr. Dy emphasized:

"The evidence is strong enough to justify action. Encouraging participation in music, art, dance, and strategy games should become part of public health initiatives for brain health."

Takeaway

Whether you are young or old, engaging in creative hobbies can help maintain brain health and potentially slow cognitive aging. The benefits extend beyond enjoyment—these activities strengthen neural networks, improve problem-solving skills, and may even contribute to long-term cognitive resilience.

Start today: Pick up an instrument, join a dance class, paint, play strategy games, or explore new crafts. Even a few hours a week can make a measurable difference in your brain's vitality.