

A sense of humor helps keep you healthy until retirement age

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Source: The Norwegian University of Science and Technology (NTNU)

A sense of humor helps to keep people healthy and increases their chances of reaching retirement age. But after the age of 70, the health benefits of humor decrease, researchers at the Norwegian University of Science and Technology (NTNU) have found.

The study has just been published in the International Journal of Psychiatry in Medicine, and was composed of an examination of records from 53,500 individuals who were followed up after seven years. The study is based on a comprehensive database from the second Nor-Trøndelag Health Study, called HUNT 2, which is comprised of health histories and blood samples collected in 1995-1997 from more than 70,000 residents of a county in mid-Norway.

A positive effect "There is reason to believe that sense of humor continues to have a positive effect on mental health and social life, even after people have become retirees, although the positive effect on life expectancy could not be shown after the age of 75. At that point, genetics and biological aging are of greater importance," says project leader Professor Sven Svebak at NTNU's Department of Neuroscience.

Svebak and his colleagues evaluated people's sense of humor with three questions from a test designed to measure only friendly humor. The test is not sensitive to humor that creates conflicts, is insulting or that is a variation of bullying, explains Svebak.

The questions revealed a person's ability to understand humor and to think in a humorous way, Svebak says. He believes there are many myths and misunderstandings about humor. For example, one myth is that happy people have a better sense of humor than people who are more serious.

"But it is not enough to be full of laughter, as we say in Trøndelag. Humor is all about ways of thinking and often occurs in a process or in dialogue with others. It does not need to be externalized," he says. "What people think is fun, is a different matter. Commonly, people with the same sense of humor tend to enjoy themselves together and can communicate humor without huge gestures. A twinkle in the eye can be more than enough." He adds that a sense of humor can be learned and improved through practice.

Health and mood One possible objection to the research findings is that people who have the best sense of humor may believe that they are in good health and are therefore always in the best mood. This would mean that a good sense of humor only reflected a subjective sense of health and well being.

To ensure that their findings were genuine, the researchers studied the effect of sense of humor in two separate groups. One group was composed of people who believed they were healthy, while the other

was composed of people who felt they were in poor health. But researchers found the effect of a good sense of humor was the same in the two groups.

"This gives us reason to maintain that sense of humor has a real effect on the health until people reach about 70 years old," says Svebak.

Two groups The report shows that the size of health effect was dependent on how researchers grouped people with different scores. One approach was to divide the participants into two groups, one group that scored highest in terms of a good sense of humor and one with a low score. In this comparison, mortality was reduced by about 20 percent in people with high scores compared to people with low scores. Another approach compared individuals with the highest and lowest scores using a nine-level scale. In this comparison, people with the highest scores were twice as likely to survive the seven year period of follow-up than those with the lowest scores.

Confirms previous findings The results from the Nord-Trøndelag County population confirm findings from a patient group that was studied in Sør-Trøndelag County. These results were published in the International Journal of Psychiatry in Medicine four years ago.

That study, which was based on patients with chronic renal failure who were followed over two years, showed that survival was greatest among those with the best sense of humor. One objection to that research was that the findings could not be generalized to the population at large. The current study confirms those results for the first time in a large population.

Intelligence Test Svebak said that it has been fifteen years since researchers first attempted to evaluate the effect of sense of humor on life expectancy. At that time, a group of American scientists published data on life expectancy in the journal Psychosomatic Medicine.

Their results were based on a personality survey of 10-year-olds conducted around 1920. The project was initiated by a pioneer in intelligence research, Lewis Terman, in California. The children had to score above 135 on an intelligence test to participate. Over 1,200 children were involved. The results were surprising: Children with the least sense of humor were most likely to be alive 80 years later.

"But in this case, the children's sense of humor had been rated by the children's teachers and parents. They measured the social image of a sense of humor, while we measured self-image, and people's perception of their own sense of humor. There are also several other differences between the two studies that may affect the results," said Svebak. The world's first "Nevertheless, the results from the HUNT 2 are the first in history that say something about a sense of humor and health in a large population," Svebak notes. The Humor Project has been conducted in collaboration with Solfrid Romundstad, PhD, now employed at Levanger Hospital, and Professor Jostein Holmen at the HUNT Research Centre.

An Introduction to Claim-Evidence-Reasoning (CER)

What exactly is CER, and how does it work? CER all starts with a question asked by the teacher. This question is based on a phenomena or lab experience. The student's explanation or answer, as you may have guessed, will consist of three parts: a claim, the evidence, and the student's reasoning.

Claim: *A claim is a statement that answers the question. It will usually only be one sentence in length. The claim does not include any explanation, reasoning, or evidence so it should not include any transition words such as "because."*

Evidence: *The evidence is the data used to support the claim. It can be either quantitative or qualitative depending on the question and/or lab. The evidence could even be a data table the student creates. Students should only use data within their evidence that directly supports the claim.*

Reasoning: *The reasoning is the explanation of "why and how" the evidence supports the claim. It should include an explanation of the underlying science concept that produced the evidence or data.*

Directions: Read the article above and complete the following three questions. Grading rubric can be found on page 4. Answer in complete sentences.

1. **CLAIM:** What is the CLAIM stated in this article?

2. **EVIDENCE:** What is the EVIDENCE to support your CLAIM?

3. **REASONING:** How does the EVIDENCE support your CLAIM?

Conclusion <i>Scientific Explanation</i>	Claim <i>Statement or conclusion that answers the original question/problem</i>	0 Does not make a claim, or makes an inaccurate claim	1 Makes an accurate but vague or incomplete claim	2 Makes an accurate and complete claim
	Evidence <i>Scientific data that supports the claim. The data needs to be appropriate and sufficient to support the claim.</i>	0 Does not provide evidence, or only provides inappropriate evidence (evidence that does not support the claim)	1 Provides appropriate, but insufficient evidence to support claim. May include some inappropriate evidence.	2 Provides appropriate and sufficient evidence to support claim.
	Reasoning <i>Justification that links the claim and evidence and includes appropriate and sufficient scientific principles to defend the claim and evidence</i>	0 Does not provide reasoning, or only provides reasoning that does not link evidence to claim.	2 Repeats evidence and <u>links</u> it to some scientific principles, but not sufficient.	4 Provides accurate and complete reasoning that links evidence to claim. Includes appropriate and sufficient scientific principles.
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