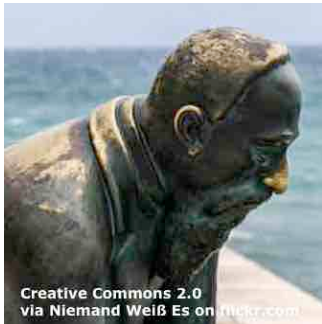


## Brains do not slow down until after 60

21st February, 2022



Scientists in Germany have cast doubt on a previously believed assumption that the processing speed of our brain starts to decline from the age of 20. Until now, it has been thought that our cognition level peaks when we are 20 and declines thereafter. Lead

researcher doctor Mischa von Krause, of Heidelberg University, offered hope to older people who worry about increasing forgetfulness or reduced brain power. He said cognitive skills were still powerful at the age of 60 and do not diminish before then. He wrote: "Our finding is encouraging, as our results show that average levels in mental speed in contexts demanding fast and forced decisions do not decline until relatively late in the lifespan."

The study was based on data from over 1.1 million people, aged between 10 and 80 years old. The results show that our mental processing speed remains relatively constant until the age of 60, but does start to decline from our seventh decade. The researchers said people's mental processing speed actually increases in their 20s and remains high until 60. Dr von Krause said: "Until older adulthood, the speed of information processing in the task we studied barely changed." He added that older people do take longer to make decisions, but said this was because we become more cautious, and less impulsive and reckless as we age. The study could cast light on neurodegenerative diseases such as Alzheimer's.

### Sources:

[theguardian.com](https://www.theguardian.com) / [medicalxpress.com](https://www.medicalxpress.com) / [newscientist.com](https://www.newscientist.com)

## Writing

We need to live our lives to keep our brain healthy. Discuss.

## Chat

Talk about these words from the article.

scientists / doubt / processing speed / age / forgetfulness / skill / decline / lifespan / data / 80 years old / decade / mental / adulthood / decisions / cautious / impulsive

## True / False

- 1) Scientists believed brain power starts to decrease from the age of 30. T / F
- 2) A doctor from a university in Munich led the research. T / F
- 3) The doctor told people not to worry about forgetfulness. T / F
- 4) The doctor said cognitive skills do not diminish before we are 60. T / F
- 5) Research was done on over a million people. T / F
- 6) The doctor said older people take longer to make decisions. T / F
- 7) The doctor said older people are more reckless. T / F
- 8) The research will probably not help to understand brain diseases. T / F

## Synonym Match

(The words in **bold** are from the news article.)

- |                      |                |
|----------------------|----------------|
| 1. <b>doubt</b>      | a. hardly      |
| 2. <b>assumption</b> | b. reasoning   |
| 3. <b>cognition</b>  | c. statistics  |
| 4. <b>hope</b>       | d. continuous  |
| 5. <b>decline</b>    | e. belief      |
| 6. <b>data</b>       | f. stays       |
| 7. <b>constant</b>   | g. optimism    |
| 8. <b>remains</b>    | h. throw       |
| 9. <b>barely</b>     | i. uncertainty |
| 10. <b>cast</b>      | j. reduce      |

## Discussion – Student A

- a) What do you think of the brain?
- b) What do you think of your brain power?
- c) Do you think you use your brain effectively?
- d) Would you prefer to keep your brain active or relaxed?
- e) Do you worry about your brain slowing down?
- f) How forgetful are you?
- g) Would you say that your brain is powerful?
- h) When is the most active your brain has been?

## Phrase Match

1. cast doubt on a previously
  2. our brain starts to decline
  3. our cognition level
  4. people who worry about increasing
  5. relatively late in the
  6. our mental processing speed remains
  7. the task we studied
  8. older people do take longer
  9. less impulsive and
  10. cast light on neurodegenerative
- a. forgetfulness
  - b. reckless as we age
  - c. lifespan
  - d. barely changed
  - e. peaks when we are 20
  - f. diseases
  - g. believed assumption
  - h. relatively constant
  - i. from the age of 20
  - j. to make decisions

## Discussion – Student B

- a) What do you think about what you read?
- b) What do you know about the brain?
- c) What do you do to look after your brain?
- d) Do you take a long time to make decisions?
- e) What reckless things have you done?
- f) How impulsive are you?
- g) What do you know about neurodegenerative diseases?
- h) What questions would you like to ask the researchers?

## Spelling

1. cast bdto on
2. our conoigitr level peaks
3. when we are 20 and declines rheratftee
4. do not nimsdiih before then
5. Our finding is eoganguncir
6. until teariyllve late in the lifespan
7. our mental ornegpsic speed
8. ntastocn until the age of 60
9. the task we studied yalrbe changed
10. become more cautious and less uepisilvm
11. skrecels as we age
12. vnreereeteaguedion diseases

### Answers – Synonym Match

|      |      |      |      |       |
|------|------|------|------|-------|
| 1. i | 2. e | 3. b | 4. g | 5. j  |
| 6. c | 7. d | 8. f | 9. a | 10. h |

## Role Play

### Role A – Chocolate

You think chocolate is the best thing for the brain. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the worst of these (and why): studying English, music or hiking.

### Role B – Studying English

You think studying English is the best thing for the brain. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the worst of these (and why): chocolate, music or hiking.

### Role C – Music

You think music is the best thing for the brain. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the worst of these (and why): studying English, chocolate or hiking.

### Role D – Hiking

You think hiking is the best thing for the brain. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the worst of these (and why): studying English, music or chocolate.

## Speaking – Brain

Rank these with your partner. Put the best things for our brain at the top. Change partners often and share your rankings.

- Crossword puzzles
- Keeping busy
- Chocolate
- Studying English
- Sleeping
- Music
- Painting
- Hiking

### Answers – True False

|     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 F | 2 F | 3 T | 4 T | 5 T | 6 T | 7 F | 8 F |
|-----|-----|-----|-----|-----|-----|-----|-----|

Answers to Phrase Match and Spelling are in the text.