

Criminals have smaller brain size, says study

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A new study has found that antisocial people are more likely to have smaller areas of their brain. Researchers said criminals' brains had a different structure to the brains of people who followed the law. The study is published in the journal "Lancet Psychiatry". Researchers used data from 672 people born in 1972-73. They looked at records of the people's antisocial behaviour between the ages of seven and 26. At the age 45, the researchers scanned the people's brains. Eighty of the people had a history of criminal and antisocial behaviour from being early teenagers. Researchers found that the areas of the brain linked to emotions, motivation and behaviour control were smaller in the long-term criminals' brains.

Professor Terrie Moffitt, a co-author of the research, said the research could help doctors understand what is behind long-term antisocial behaviour. She said the antisocial people in the study may have behaved badly because of their brain structure. She said: "They are actually operating under some [disability] at the level of the brain." She added that because of this, we needed to care for these people in a kinder way. Lead author Dr Christina Carlisi said: "Differences in brain structure might make it difficult for people to develop social skills. This may prevent them from engaging in antisocial behaviour. These people could benefit from more support throughout their lives."

Sources: theguardian.com / medicalxpress.com / thelancet.com

Writing

Doctors should check our brain size at school and give help if needed. Discuss.

Chat

Talk about these words from the article.

study / antisocial / brain / journal / researcher / history / criminal / emotion / control / author / doctor / behaviour / disability / level / structure / care / kinder / social skills

True / False

- a) The article said antisocial people have smaller areas of the brain. T / F
- b) A part of the brain for people who follow the law is larger than that in criminals. T / F
- c) Researchers looked at the brains of 6,720 people. T / F
- d) Eight hundred people in the research were antisocial as teenagers. T / F
- e) An author said the research could help doctors. T / F
- f) A researcher said being antisocial might be part of a disability. T / F
- g) The researcher said we had to be stricter with antisocial people. T / F
- h) Another researcher said brain structure affects how we learn social skills. T / F

Synonym Match

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

- | | |
|-----------------------|-------------------|
| 1. study | a. assist |
| 2. areas | b. conduct |
| 3. data | c. impairment |
| 4. behaviour | d. regions |
| 5. linked | e. stop |
| 6. help | f. during |
| 7. disability | g. connected |
| 8. care | h. research paper |
| 9. prevent | i. look after |
| 10. throughout | j. information |

Discussion – Student A

- a) What do you think about what you read?
- b) What do you do when you see antisocial behaviour?
- c) Why are some people antisocial?
- d) Should schools teach children about antisocial behaviour?
- e) What do you do to look after your brain?
- f) What do you do that might harm your brain?
- g) Do smartphones help our brain?
- h) What questions would you like to ask the researchers?

Phrase Match

- | | |
|-----------------------------------------------------|--------------------------|
| 1. A new study has found that antisocial people are | a. badly |
| 2. the brains of people who followed | b. "Lancet Psychiatry" |
| 3. The study is published in the journal | c. develop social skills |
| 4. the researchers scanned | d. the law |
| 5. the areas of the brain linked | e. antisocial behaviour |
| 6. understand what is behind long-term | f. a kinder way |
| 7. people in the study may have behaved | g. more likely to |
| 8. care for these people in | h. to emotions |
| 9. make it difficult for people to | i. more support |
| 10. These people could benefit from | j. the people's brains |

Discussion – Student B

- What do you think of your brain?
- Do you think brain size affects behaviour?
- How can we look after our brain?
- How much antisocial behaviour is there in your country?
- What do you think of antisocial behaviour?
- Have you ever been antisocial?
- Why are teenagers more likely to be antisocial?
- How can we help people who are antisocial?

Spelling

- aasiocitln people
- brains had a different cruertstu
- The study is pesldihbu in the journal
- people had a history of cmrailin and...
- areas of the brain linked to onotisme
- namivoitot and behaviour control
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- the crasehr could help doctors
- operating under some ldsiyibtai
- Lead otahur Dr Christina Carlisi
- These people could feenbti
- more rpsoupt throughout their lives

Answers – Synonym Match

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

Role Play

Role A – Sleep

You think sleep 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 least effective of these (and why): exercise, chocolate or travelling.

Role B – Exercise

You think exercise 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 least effective of these (and why): sleep, chocolate or travelling.

Role C – 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 least effective of these (and why): exercise, sleep or travelling.

Role D – Travelling

You think travelling 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 least effective of these (and why): exercise, chocolate or sleep.

Speaking – The Brain

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

- | | |
|-------------|--------------|
| • Sleep | • Puzzles |
| • Reading | • Laughing |
| • Exercise | • Coffee |
| • Chocolate | • Travelling |

Answers – True False

a	T	b	T	c	F	d	F	e	T	f	T	g	F	h	T
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Answers to Phrase Match and Spelling are in the text.