

## Love is a drug called dopamine, say scientists

15th January 2024



Writers of novels and songs have for centuries claimed that love is a drug. Scientists have now gone a step further to prove this assertion. They conducted tests on the romantic relationships among prairie voles. Different pairs of the mouse-like

rodents were tested for levels of dopamine - a neurotransmitter that plays a role in our seeking pleasure and a craving for addictive things. It can provide an intense feeling of reward. The researchers found that the voles released large amounts of dopamine when they were physically with their "established partner". Researcher Dr Zoe Donaldson said parts of the voles' brains lit up "like a glow stick" when they were reunited with their mates, and dimmed when with unknown voles.

The researchers said their studies help to explain much about the complexities of human relationships. They say dopamine in our brains plays a key part when falling in love, and in the grief experienced when breaking up with a partner. Dr Donaldson said: "As humans, our entire social world is basically defined by different degrees of selective desire to interact with different people, whether it's your romantic partner or your close friends." She added: "This research suggests that certain people leave a unique chemical imprint on our brain that drives us to maintain these bonds over time." Research also suggests that women get over a breakup, and fall out of love faster than men.

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

### Writing

Love is a drug. Discuss.

### Chat

Talk about these words from the article.

writers / novels / songs / love / drug / romantic / relationship / addictive / brain / vole / complexities / dopamine / grief / social / breaking up / partner / chemical / bonds

### True / False

- 1) Writers wrote a song called "Love is a Drug". T / F
- 2) Researchers looked at the romantic relationships of a species of rodent. T / F
- 3) Dopamine is part of why we want things that make us feel good. T / F
- 4) Voles released a lot of dopamine when they were with their mate. T / F
- 5) Researchers said their study would make human relations less complex. T / F
- 6) Researchers say we cannot fall in love without dopamine. T / F
- 7) A researcher said dopamine helps us drive better. T / F
- 8) Research suggests men take longer to get over relationship breakups. T / F

### Synonym Match

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

- |                        |                  |
|------------------------|------------------|
| 1. <b>claimed</b>      | a. searching for |
| 2. <b>conducted</b>    | b. sorrow        |
| 3. <b>seeking</b>      | c. faded         |
| 4. <b>craving</b>      | d. whole         |
| 5. <b>dimmed</b>       | e. distinctive   |
| 6. <b>complexities</b> | f. asserted      |
| 7. <b>grief</b>        | g. complications |
| 8. <b>entire</b>       | h. friendships   |
| 9. <b>unique</b>       | i. carried out   |
| 10. <b>bonds</b>       | j. longing       |

### Discussion – Student A

- a) What do you think about what you read?
- b) How complex are human relationships?
- c) How bad is it to fall out of love?
- d) What kind of people are you romantically attracted to?
- e) How can we increase the amount of love in this world?
- f) Is it possible to fall in love at first sight?
- g) Why might women get over broken hearts quicker than men?
- h) What questions would you like to ask the researchers?

## Phrase Match

- |  |                              |
|--|------------------------------|
| 1. Writers of novels and songs have for    | a. feeling of reward         |
| 2. Scientists have now gone a step further | b. over a breakup            |
| 3. a craving                               | c. to prove this assertion   |
| 4. It can provide an intense               | d. with different people     |
| 5. parts of the voles' brains lit          | e. of human relationships    |
| 6. explain much about the complexities     | f. for addictive things      |
| 7. dopamine in our brains plays a key      | g. these bonds over time     |
| 8. desire to interact                      | h. centuries claimed that    |
| 9. our brain that drives us to maintain    | i. up like a glow stick      |
| 10. women get                              | j. part when falling in love |

## Discussion – Student B

- What do you think of love?
- How does love make us feel?
- What different kinds of love are there?
- Why do scientists think love is a drug?
- What things are you addicted to?
- What things in life give you the most pleasure?
- Do you think we should be able to get dopamine from the doctor?
- Is being in love the best feeling in the world?

## Spelling

- for csernitue
- gone a step further to prove this sresnaito
- romantic relationships among iaerpr voles
- a turteoamnesitrn that plays a role
- a craving for edditaivc things
- demmdi when with unknown voles
- the exmltcsioieip of human relationships
- pemnioda in our brains
- the grefi experienced when breaking up
- different degrees of eleivcset desire
- taernitc with different people
- a uueqin chemical imprint on our brain

### Answers – Synonym Match

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

## Role Play

### Role A – Love

You think love is the best addiction. Tell the others three reasons why. Tell them what is wrong with their addictions. Also, tell the others which is the least beneficial of these (and why): running, shopping or TV.

### Role B – Running

You think running is the best addiction. Tell the others three reasons why. Tell them what is wrong with their addictions. Also, tell the others which is the least beneficial of these (and why): love, shopping or TV.

### Role C – Shopping

You think shopping is the best addiction. Tell the others three reasons why. Tell them what is wrong with their addictions. Also, tell the others which is the least beneficial of these (and why): running, love or TV.

### Role D – TV

You think TV is the best addiction. Tell the others three reasons why. Tell them what is wrong with their addictions. Also, tell the others which is the least beneficial of these (and why): running, shopping or love.

## Speaking – Addictions

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

- |           |              |
|-----------|--------------|
| • Love    | • Shopping   |
| • Eating  | • Chocolate  |
| • Gaming  | • TV         |
| • Running | • Smartphone |

### Answers – True False

1	F	2	T	3	T	4	T	5	F	6	F	7	F	8	T
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Answers to Phrase Match and Spelling are in the text.