

Tearing down the ‘myth’ of dopamine as the ‘pleasure chemical’

Dopamine is one of the most hyped brain chemicals, supposedly linked to everything from [sex](#) to [gambling](#). It’s common to read, as [Business Insider claimed ...](#) that dopamine is “the pleasure chemical” — but that’s not true, and the idea was overturned long ago.

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The Verge spoke to [researcher Arif] Hamid about the origins of the “pleasure chemical” myth, how it was overturned, and what dopamine actually does.

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So what does dopamine do?

Dopamine plays a lot of roles in the brain. If you kill off the cells that produce dopamine, the animal is not motivated to go out and do things. It’ll still enjoy something — like the sucrose solution you squeeze directly into its mouth — because the pleasure systems are fine. But they won’t pursue it.

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There are sort of two camps for how this works. One camp thinks that dopamine is a “prediction error,” meaning that you expected something from the environment, and you got something better.

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The other camp says that dopamine is a motivational signal. It invigorates and energizes you toward a distinct goal.

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[T]his is supported by people who take cocaine or amphetamines, which increase dopamine a lot. This motivates them to do things. Of course, later on, this can lead to the probability of repeating things and then lead to addiction and gambling and other negative behaviors.

Read full, original post: [Please stop calling dopamine the ‘pleasure chemical’](#)