What New Love Does to Your Brain

Dana G. Smith | Feb. 13, 2024 | The New York Times

New love can consume our thoughts, supercharge our emotions and, on occasion, cause us to act out of character.

"People pine for love, they live for love, they kill for love and they die for love," said Helen Fisher, a senior research fellow at the Kinsey Institute at Indiana University. "It's one of the most powerful brain systems the human animal has ever evolved."

Scientists have studied what is happening in our brains when we are in those early, heady days of infatuation, and whether it can actually alter how we think and what we do. Their findings suggest that song lyrics and dramatic plotlines don't overstate it: New love can mess with our heads.

Experts define "romantic love" as a connection deeper than lust, but distinct from the attachment associated with a long-term partnership. In a few of the small studies that have examined this googly-eyed state, researchers put people in the early stages of a romantic relationship (typically less than a year) in M.R.I. scanners to see what was happening in their brains while they looked at pictures of their paramours. They found that the participants showed increased activity in areas of the brain that are rich in the neurochemical dopamine and control feelings of wanting and desire. These regions are also activated by drugs like cocaine, leading some experts to liken love to a sort of "natural addiction." [...]

"Romantic love does not emanate from your cerebral cortex, where you do your thinking; it does not emanate from the brain regions [...] linked with emotions. [...] It's based in the brain regions linked with drive, with focus, with motivation."

This type of dopamine activity may explain why, in the early stages of love, you have the irresistible urge to be with your beloved constantly — what the addiction literature calls "craving." Indeed, preliminary research conducted by Sandra Langeslag, an associate professor in behavioral

neuroscience at the University of Missouri, St. Louis, suggests that some people crave their lover like they crave a drug. [...]

Other research by Dr. Langeslag's lab looked at the single-mindedness of love — of being unable to think about anything besides your paramour. In a series of small studies on people in the throes of new love, Dr. Langeslag found that participants reported thinking about the object of their desire roughly 65 percent of their waking hours and said they had trouble focusing on unrelated topics. [...]



There is also some evidence that love can render people oblivious to a new partner's faults — the "love is blind" phenomenon. [...] The findings suggest that we might "suspend negative judgments of the person we're in love with," she said.

If love can alter our motivation and attention, perhaps it's no surprise that people sometimes go to extremes when they're in its thrall. But giving into your obsession with your lover isn't necessarily "irrational" behavior, at least from an evolutionary perspective, Dr. Langeslag said.

Scientists believe humans evolved to have these types of responses — which seem to be consistent across age, gender and culture — because bonding and mating are essential for the survival of the species.

"Romantic love is a drive," Dr. Fisher said. "It's a basic mating drive that evolved millions of years ago to send your DNA onto tomorrow. And it can overlook just about anything."