

## Editing Exercise

*Read the following excerpt from a student essay about brain function and romantic feelings. Circle the errors and write the corrections near the errors you have marked.*

Scientists at Rutgers's University have detected unique brain activity in the MRIs of students in love. Anthropologist Helen Fisher's group is analyzing more than 3,000 brain scans of 18 recently smitten college students. The scans were taken while students looked at a picture of their beloved. Fisher, as a well-known scientist and researcher who earned more than \$202,000 last year doing research on people's brains, expects that her scientific research results will kick butt, building upon the findings of English researchers who recently completed a simian study of young men and women in love.

When shown a picture of their romantic partner, the person's brain activity pattern was really and truly astoundingly different from when they looked at a picture of a closet friend, according to neurobiologists Andreas Bartels and Semir Zeki of University College London. The pictures showed that the experiment of romantic attraction activated places in the brain with a high concentration of receptors for dopamine, the chemical messenger closely tied to feelings of euphoria, craving and addiction.

Biologists have linked high levels of dopamine and a related agent, norepinephrine, to heightened attention and short-term memory, hyperactivity, sleeplessness and goal-oriented behavior. When they're first smitten, Fisher argues, couples in love often show all of the signs of sergical dopamine: increased energy, less need for sleep or food, focused attention and exquisite delight in the smallest details of this novel relationship. As a college student, I have been in love and I think Fisher is right.

Bartellis and Zeki compared their MRI images to brain scans taken from people in different emotional states, including sexual arousal, feelings of happiness and cocaine-induced euphoria. The pattern for romantically love was unique. But there was some overlap with other positive states. "This makes sense," said Zeki. "These were young people who were practically willing to die for their lover. You would expect that the images would reflect many strong emotions all at once."

"What we're seeing here is the biological drive to choose a mate, to focus on one person to the exclusion of all others," said Fisher, who spells out the biological basis for romantic attachment in a paper based on a lot of scientific research in the journal *Neuroendocrinology Letters*. "Let's say you walk into a party and there are several attractive women or men there. Your brain is registering this attraction for each one; then you talk to the third or fourth one, and whoosh -- you feel something extra."