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Why do teens do that? It's the brain

Article by: KATE SANTICH , Orlando Sentinel | Updated: October 4, 2014 - 5:50 PM

Still-developing brain explains risky behavior.

If you've ever tried to warn teenagers of the consequences of risky behavior — only to have them sigh and roll their eyes — don't blame them. Blame their brain anatomy.

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ORLANDO, FLA. – If you've ever tried to warn teenagers of the consequences of risky behavior — only to have them sigh and roll their eyes — don't blame them.

Blame their brain anatomy.

Sociologists and psychologists have long known that teen brains are predisposed to downplay risk, act impulsively and be undaunted by

the threat of punishment. But now scientists are beginning to understand why.

"I think teenage behavior is probably the most misunderstood of any age group — not only by parents but by teenagers themselves," says Pradeep Bhide, a Florida State University College of Medicine neuroscientist and director of the Center for Brain Repair.

"It's a critical time in life, and a very stressful one … The teen years are actually a very busy time for brain development."

During the past year, Bhide brought together some of the world's foremost brain researchers in a quest to explain why teenagers — and male teens in particular — often behave erratically. He and two Cornell University colleagues examined 20 of the leading research projects from brain experts around the world and recently published their findings in a special volume of the scientific journal Developmental Neuroscience.

What they found surprised them — not so much because of the behavior uncovered, but because of how much of it was explained by brain development, or lack thereof.

Teen health notes

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Best path to weight loss: aerobic, resistance training
Teenagers trying to lose weight should engage in an exercise program that includes aerobic and resistance training, a randomized trial has found. It also found that diet without exercise accomplishes little. Canadian researchers put 304 obese teenagers on a diet with a daily energy deficit of 250 calories. Then they assigned them randomly to one of four groups for 22 weeks: aerobic training on exercise machines, resistance exercise using weights, combined training, and a diet-only group with no exercise. Diet alone produced a 0.6 percent decline in body fat. It decreased 2.5 percent for aerobic exercise, 3.2 percent for resistance and 4.8 percent for the two combined. The study appeared in JAMA Pediatrics.

Unlike children or adults, for instance, teenage boys show enhanced activity in the part of the brain responsible for emotions when confronted with a threat, making the threat more difficult to ignore. In one study, even when the teens were specifically told not to respond to a threat, many could not stop themselves. Magnetic-resonance-scanner readings revealed their brain activity was strikingly different from that in adult men.

One study showed teens don't interpret facial expression as well as adults do. Shown a range of human faces with varying emotions — joy, surprise, anger, fear, contempt — most adults had little trouble distinguishing one from another. But teens had more difficulty. "Even when they perceive that 'this might be bad,' " Bhide said, " they are more likely to continue whatever they are doing."

Implants most effective pregnancy prevention

To prevent teen pregnancies, pediatricians should talk with their adolescent patients about birth control, starting with hormonal implants and IUDs, according to an updated policy statement from the American Academy of Pediatrics. Progestin implants and intrauterine devices are not widely used by teens, but they are the most effective methods of contraception available. Nearly half of all teens are sexually active during high school, and about 750,000 young women become pregnant each year, federal data show. Condoms, the most common form of birth control for teens, are important for preventing the spread of sexually transmitted infections, but they are not nearly as effective at preventing pregnancy. News services