

THE SCIENCE OF DECISION MAKING AND PEER PRESSURE

Imagine you're with classmates when a friend from another school approaches. Your classmates start making fun of her. You know it's hurtful, but you want to fit in. You laugh along . . . regretting it later.

Or suppose a friend wants you both to audition for a play, but you feel too shy. He pleads with you to do it, so you agree. Later, you're thrilled to see your name on the cast list.

Both of these scenarios are examples of how peers can influence a person's actions—both positively and negatively. As a teen, you can be especially sensitive to *peer influence*, better known as *peer pressure*. Science helps explain why.

THE BASICS OF DECISION MAKING

When a person makes a decision, different parts of the brain spring into action. The brain's *limbic system* generates an emotional response, and the *prefrontal cortex* produces rational thinking. In situations like the two above,

“what we are doing is very quickly, and often unconsciously, calculating the rewards and costs of different actions,” says psychologist Laurence Steinberg, a leading expert on adolescent peer influence. “When we do this calculation and come to the conclusion that the potential rewards of a particular action outweigh the potential costs, we act in that way.”

TEEN DECISION MAKING

This decision-making process occurs naturally in humans throughout our lives. But during our teen years, our brains have unique characteristics that impact this calculation.

One reason for the difference in teen decision making involves

a chemical called *dopamine* in the brain's reward center. Dopamine helps transmit signals in the brain that make people feel happy. The number of brain receptors interacting with dopamine is higher in adolescence than at any other time of life. This means that when a teen is exposed to a reward—such as a compliment—the reward center reacts more strongly than it would for an adult or a child.

In addition, being with friends increases adolescents' sensitivity to rewards. Thus, the presence of peers makes the already sensitive reward system *even more* sensitive to potential rewards. At the same time, says Steinberg, “when adolescents are criticized or rejected by friends,





there is a bigger response in parts of the brain that control negative emotions.”

Feeling rewards more strongly and responding more intensely to what peers may think means that there are biological reasons for why teens sometimes decide to do things with their friends that they would never do on their own. This can be positive, by encouraging peers to take on new challenges. But it can also lead to dangerous decisions—such as using alcohol or drugs, or getting into other high-risk situations.

DRIVING UNDER PEER PRESSURE

One way to understand how peer influence can lead teens to make poor decisions is to look at teens

TEEN DRIVERS AND RISK TAKING ¹			
Number of Teen Passengers	0	1	2 or more
Driving Risk	Normal	2.5x more likely to take risks	3x more likely to take risks

and driving. In a study conducted by Steinberg, teens and adults played a driving video game in which they would make more money the faster they arrived at the end of a road. Driving through yellow lights could speed up their time, but could also cause an accident.

Alone, teens took no more risks than adults. But when their friends were with them, teens took more risks and ran more yellow lights. They did this even though their friends weren’t allowed to talk. The presence of peers made the reward of earning more money by driving faster feel “more intense,” observed Steinberg.

Real life is not much different. Statistics show that teenage drivers are 2.5 times more likely to take risks while driving when another teen is in the car, and 3 times more likely with multiple teens in the car.¹

THE POWER OF PEER PRESSURE

So why do teens sometimes take more risks when their friends are with them? According to Steinberg, when the reward center “is activated by one kind of reward, it also makes us seek other kinds of rewards.”

For teens, friends are both a reward *and* the fuel that

encourages them to seek more rewards. “Being around peers makes people more sensitive to the potential rewards,” says Steinberg, “and less sensitive to the downsides.”

But not all risk taking is bad. As explained by Steinberg, “Risk taking is normal during adolescence.” For instance, trying a new activity when you don’t know that you’ll succeed is a type of risk that helps a person develop into an independent adult. “The solution is not to eliminate risk taking, rather it is to facilitate *good* risk taking.”



WHAT'S A TEEN TO DO? AN EXPERT'S ADVICE

To avoid letting peer pressure lead you to make risky choices that have negative consequences, Steinberg recommends preparing a plan before heading into peer pressure-packed situations. His advice: “Have a script in your head about what you are going to say and do. Be aware that your brain works differently in groups than when you are alone. Pause and exercise a little extra caution in those situations.”