## **Teens and Planning Ahead: It Takes Time**

Researchers Find Risky Choices Tied to Still-Developing Capacity to Think Things Through

By Kathleen Doheny

WebMD Health News Reviewed by Louise Chang, MD http://teens.webmd.com/news/20110617/teens-and-planning-ahead-it-takes-time



June 17, 2011 -- Teens and risky behavior often go together, leaving parents frustrated when their adolescents make poor choices.

Now, new research shows that by late adolescence teens usually do have the ability to think ahead and make decisions as well as do most adults. However, the teens may not use those skills before

they decide to do something risky.

Blame impulsivity, says researcher Laurence Steinberg, PhD, professor of psychology at Temple University. "The main reason adolescents are not as good as adults in planning ahead is, adolescents are more impulsive."

"It's not just that teenagers are unwilling to think about the future consequences," he says. The new study "shows that they may be fundamentally unable to."

Experts used to blame teens' still developing working memory on their risky choices, Steinberg tells WebMD. They thought that teens were just not as adept as thinking through the sometimes multiple steps or facts involved in decisions.

"That's not the whole story," Steinberg tells WebMD, at least not when it comes to older teens. The still-developing working memory may help explain risky choices up until about ages 16, he says. After that, when teens make poor choices, it's often due to poor impulse control, he finds.

The study is published online in *Child Development*.

## Teens & Planning Ahead: Study

Steinberg evaluated 890 participants, ages 10 to 30. He gave them a computerized test of strategic planning and problem solving called the Tower of London.

The test requires people to rearrange a stack of three differently colored balls to match a picture of the new arrangement. They must use as few moves as possible. To finish, they must plan ahead.

Steinberg also tested the participants on reasoning, memory, and self-control tasks.

In the Tower of London test, he says, "there are easy ones you can solve in three moves. The harder ones require six or seven."

Those who were older did better on the tower test, a finding that wasn't unexpected. That reflected a greater ability to solve problems and plan ahead. These harder tests tax the brain's frontal lobes, which are still maturing in teens.

"If you look at the harder problems, they are not performing as well as adults until they are in their early 20s," he says.

When they looked further, they found the older participants in their late teens and early adult years did better on the tests due to their improved impulse control rather than getting smarter.

In other words, they settled down and thought things through before acting.

The findings might have important implications in legal debates that question whether adolescents should be held to the same standards of criminal responsibility as adults, he says.

For parents, what's the bottom line? "Just because your son or daughter has reached age 18 or so, it doesn't mean full maturity has kicked in," Steinberg says.

"There is no magic age at which the switch flips over and people turn from adolescents to adults," he says.

"New research shows ongoing maturity into the early 20s," he says. Steinberg extends this to 25 to reflect this new thinking.

Research is ongoing, he says, to see if the process of developing impulse control can be accelerated.

The study findings reflect clinical practice, says Allison Kress, PsyD, a psychologist in Laguna Niguel, Calif.

"Although teenagers may be as intelligent as adults, oftentimes their desire for risk taking and instant gratification dilutes their ability to use forward thinking in situations," she says. She reviewed the findings for WebMD.

Parents can help, she says, by telling their teens how they go about making decisions in their own life.

For teens, she suggests the 20-second rule. "Before making a decision that could impact your life, take a deep breath and think it through for a minimum of 20 seconds. Ask yourself, 'What are the positive and negative consequences of this decision? Is it really worth it in the long run? Is this the kind of person I am and want to be?"