Study Offers Possible Explanation for the Huge Gender Gap in Science and Math

June 25, 2012

Slate:

Schools have tried for years to encourage girls to explore careers in math and science, yet a stubborn gender gap in the STEM fields persists.

But new research might have an explanation: The messages we take in about our gender—like the old refrain that girls aren't as good as boys at science—can influence the way we perform.

Believing you have innate qualities that make you good or bad at something—called "entity theories"—can change the way you handle a difficult task, psychologists have theorized. Children who adopt entity theories about a skill, like math or science ability, are likely to perform worse when challenged at those activities because they think their skills are inborn and are therefore less likely to put in energy and hard, constructive work.

A study published recently in *Psychological Science*, led by a researcher from the University of Illinois at Urbana-Champaign, takes this idea a step further by suggesting that children can adopt these beliefs from information they hear about their gender (and, presumably, about other social categories, too). Telling a boy he's destined to be good at math might encourage him to coast; meanwhile, telling a girl that girls aren't good at math, the theory dictates, will not motivate her to work hard to overcome that adversity. A girl who hears that "girls are bad at math" can internalize that message, believe she is bad at math, and do worse at math because of it.

Read the whole story: Slate