

Why do women fail?

By Carol Dweck and Rachel Simmons

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(CNN) -- Judith was an overachiever with a problem. A college freshman, she loved psychology but was determined to get straight A's. When she got only B's, she was despondent -- and left the field entirely.

As we wrestle with the question of how women achieve success, we've spilled more ink on whether women believe in themselves and not enough on what happens when women fail. Success is not just about taking a seat at the proverbial table. It requires adopting the belief that if you say the wrong thing, or do poorly initially, you will bounce back and try again. Confidence is impossible when you interpret failure as a pronouncement about your own potential.

To hear the headlines tell it, girls are the undisputed leaders in American classrooms. They have higher GPAs than boys and attend colleges and graduate schools in greater numbers. In part, this is because girls excel at the self-discipline required of students. Indeed, if life were one long grade-school, girls would rule the world.

But what seems to serve girls so well in the routinized world of school undermines them as they enter the unpredictable and challenge-ridden world of young adulthood.

Earlier this year, Harvard University professor Claudia Goldin found that women were dropping out of undergraduate economics courses when they failed to score As. They are missing out on a highly rewarding profession. Meanwhile, their male counterparts stuck with the major, apparently weathering lackluster GPAs for an anticipated payoff down the road.

One of us has studied the psychology of failure for over 30 years. One of us has studied girls and adolescents. We both observe that women are keenly sensitive to critical feedback and failure. Why?

People can adopt one of two mindsets about their abilities. Those with a "fixed mindset" believe their basic intelligence cannot be improved. They interpret a challenge -- like, say, an introductory economics course -- as a sign that they simply don't have the ability. They may then opt for a safer path.

By contrast, people with a "growth mindset" think their abilities can be improved with effort, strategy and mentoring. Drawn to challenge, they persist despite setbacks—or even because of setbacks.

Are girls and women more likely to have a fixed mindset? Maybe. In one study, fifth grade students were given a task to learn that intentionally confused them at first. It was the girls who were derailed by the confusion and unable to learn the material. Notably, the highest IQ girls struggled the most.

Mindset can be traced to the types of praise we receive from parents and teachers. Celebrating a child's intelligence can instill a fixed mindset: the child becomes determined to prove how smart she is rather than learn from a task that might initially involve failure.

Children praised for their effort or strategies -- what's called "process praise" -- develop a growth mindset and become more motivated to tinker with a problem than solve it right off the bat. Starting in infancy, parents tend to give boys more process praise, an advantage that results in a greater desire for challenge, and a growth mindset, later on. In the classroom, teachers give boys more process feedback, inviting them to try new strategies or work harder after a mistake. As a result, boys learn to see challenges and setbacks as things they can tackle with the right plan. Girls, perhaps seen as well-motivated already, are given fewer messages to try harder or again. They are left to wonder whether their challenges reflect something deeper about their ability.

Boys also learn to cope with criticism through sheer volume. Teachers call out boys eight times more often than girls. Boys are more likely to misbehave, be messy and speak out of turn. Girls, by contrast, are more compliant, so when they are criticized it feels more serious.

The story continues on the playground, where boys one-up each other during games, thickening their skin in the face of playful insults. When a conflict arises, boys debate the rules to reach a solution. By contrast, girls are much more genteel. We are prone to hiding negative feelings to preserve relationships -- and often abandon games altogether rather than work through a conflict. When adolescence strikes, girls face pressure not only to be nice and hard-working, but well-liked, thin, selfless and sexually desirable. Their self-esteem plummets. Teenage girls are less likely to identify as brave than boys, and say they are under significantly more pressure.

A study by Duke University found its female students struggling to achieve "effortless perfection": the overachieving girl's ruthless trifecta of being academically successful, well-rounded and physically beautiful at all times. Research has continued to find a clear gender gap in stress among college students: The 2013 National College Health Assessment reported that 89% of college women felt overwhelmed by their workload, a full 15% more than men. For these young women, any setback becomes a threat.

Ability is not the problem here. Multiple studies confirm that girls and boys are equally well suited to academic performance. Mindset may be another story.

Studies of seventh grade math students, as well as college students in calculus and computer science, revealed a gender gap in performance, but only for those females who believed math ability was a gift. These are the girls who drop out of the economics classes -- and who, as women, may avoid working in areas that require a strong growth mindset, like economics, math and computer science.

Parents and schools can teach girls that their ability is there to be developed, and that challenges and setbacks—and yes, even criticism—are precisely what make us smarter.