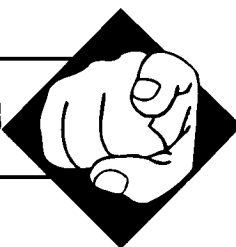


KEEPING CURRENT



Mindsets:

How Praise Is Harming Youth and What Can Be Done about It

by Carol S. Dweck

Today's companies are reporting that their young employees need constant praise. Without it, they become morose and disgruntled. Coaches are complaining that their athletes can no longer tolerate corrective feedback. The athletes claim it undermines their confidence. Parents say that their children don't want to work hard in school. The children feel it should just come naturally.

What has happened in this country that used to be known for a solid work ethic and rugged individualism? Now, young people have a disastrous combination of entitlement and fragility. How did this happen and what can be done about it?

Research conducted at Columbia and Stanford Universities suggests that it could be well-meaning parent and teacher practices that have brought this on—practices that were meant to boost children's self-esteem. In the 1990s, parents and teachers,

prompted by the self-esteem movement, decided that self-esteem was the most important thing in the world—that if a child had self-esteem everything else would follow.

The big problem came when they decided how to give children that self-esteem. In many cases, parents and teachers began telling children on a regular basis how smart and talented they were. In a survey done in the mid 1990s, over 80% of parents reported that they thought their children must be praised in order to give them confidence and motivation (Mueller and Dweck 1998). Most of them still seem to believe this. Recently, in an airport, the author observed a mother telling her 6-month-old son that he was brilliant.

Unfortunately, this commonly held belief of both teachers and parents isn't true. Research shows that children cannot be given self-esteem through this kind of praise (Mueller

and Dweck 1998; Kamins and Dweck 1999). But, even worse, it also shows that this type of praise actually makes their self-esteem fragile—and undermines their motivation to learn. How can this be? How can the effect be just the opposite of what intuition or common sense seem to indicate?



Understanding Mindsets

The mindsets of students must first be understood to appreciate why praise for intelligence or talent might backfire. For over 20 years research has explored these mindsets and shown their impact on students' confidence and motivation (Dweck 2006).

Research indicates that some students have a fixed mindset because they believe that their intelligence

Carol S. Dweck is the Lewis and Virginia Eaton Professor of Psychology at Stanford University, Stanford, CA, and the author of *Mindset* (Random House, 2006).

is simply a fixed trait. They have a certain amount, and there's nothing they can do to change it. Not surprisingly, they worry about how much they have. Other students, however, have a growth mindset. They believe that their intelligence is a quality that can be developed. They don't believe everyone is the same, but they do believe that everyone can increase their intelligence through effort and education. Therefore, they don't spend their time worrying about how smart they are and instead spend it trying to get smarter.

Which view is correct? Although the answer to such questions is typically that both views have merit, more and more research indicates the following:

- Important aspects of intelligence can be developed (Sternberg 2005).
- The brain has enormous capacity to grow and change throughout life (Doidge 2007).
- Motivation and self-regulation often have more impact on achievement and the growth of ability than does a person's initial ability (Blackwell et al. 2007; Duckworth and Seligman 2005; Ericsson et al. 2006).

These differing mindsets affect students' achievement by creating different psychological worlds. Here is how these worlds work.

What do students care about?

In the fixed-mindset world, students care more about looking smart than about learning. In their world, every performance holds their intelligence up for judgment, so that learning takes a back seat to looking smart. In fact, research by Dweck and her colleagues has shown that students in a fixed mindset will even sacrifice learning that is crucial to their future success if they have to admit ignorance or risk showing de-

ficiencies (Hong et al. 1999).

On the other hand, in the growth-mindset world, students care first and foremost about learning. They don't have to worry about discrediting their permanent intelligence, so they can devote themselves to the task of getting smarter.

What do mistakes and effort mean?

In the fixed-mindset world, students worry about making mistakes. They see making mistakes as a sign of low ability. They also worry about effort and view it in the same way—as a sign of low ability. They believe that if they have high ability they shouldn't need any effort. These are both terrible beliefs because mistakes and effort are integral parts of learning. Because students with fixed mindsets make them into things to be avoided, they actually stand in the way of learning. In fact, research in psychology indicates that the main thing that distinguishes people who go to the top of their fields and make great creative contribution from their equally able peers is the effort they put in (Ericsson et al. 2006). The fixed mindset cannot take people to that level.

Students with a growth mindset understand that mistakes and effort are critical to learning. They, therefore, welcome challenges and seek critical feedback to help them learn.

When students are asked, "When do you feel smart?" students with a fixed mindset reply that they feel smart when something is easy for them, when they do a task quickly without mistakes, or when other people look dumb. But students with a growth mindset state that they feel smart when they are struggling with something hard and make progress or when they are helping someone else to learn (Dweck 2006).

Thus, it is the growth mindset that

helps students adopt the values that lead to intellectual growth.

How do students react to setbacks?

Students with a fixed mindset lose heart in the face of setbacks. If setbacks mean they lack ability and ability is fixed—and effort is distasteful—what can they do? Compared to students with a growth mindset, students with a fixed mindset indicate that after one failure in a class they would withdraw their effort, avoid similar courses in the future, and consider cheating. The fixed mindset provides no good recipe for recovering from a failure.

Students with a growth mindset say that after a failure they would simply study more in the future or study in a different way. Their failure is a spur to learning. As a result, these students end up earning higher grades—whether it's during their transition to junior high or the challenging organic chemistry course at the beginning of the pre-med college curriculum.

In short, students with a fixed mindset, no matter how bright, often develop values and habits that stand in the way of developing their abilities and doing well in school. In contrast, students with a growth mindset embrace learning, mistakes, and effort in a way that promotes their achievement.

Praise: How Do Students Learn the Mindsets?

What effects do praise and other well-meaning practices of parents have on their children? Modern parents want to give their children everything possible to build them up and ensure their happiness and success. The self-esteem movement told them that the secret lay in praise, especially in praise of the child's essential qualities. This has great intuitive appeal—

tell children they're smart and they'll have faith in their intelligence.

However, studies conducted over many years involving vulnerable students indicated that it was these very children who were overly concerned with how smart they were (Dweck 2006). It appeared that parents who place too much emphasis on intelligence or talent could send the wrong message. By praising a child's intelligence or talent, they could be conveying to their child that intelligence or talent is something deep and permanent that can be judged and quantified—a fixed mindset. They could also be conveying that brains and talent are what they value the child for, so that children become afraid that if they're not successful, they won't be considered smart anymore and they won't be valued anymore.

Research put this issue to the test (Mueller and Dweck 1998). Several hundred children—from different regions of the country and of different ethnicities—were given problems from an IQ test. After the first set of problems, some of them were given praise for their intelligence: "That's a really good score. You must be smart at this." Others were given praise for their efforts: "That's a really good score. You must have worked really hard." This one line of praise had a cascade of striking effects. First, the intelligence praise instilled more of a fixed mindset, making students believe that their intelligence was a fixed trait, whereas the effort praise instilled more of a growth mindset. Next, the praise changed students' desire for challenge and learning. Students praised for their intelligence now wanted easy tasks so they wouldn't jeopardize their label "smart." Students praised for effort wanted challenging tasks they could learn from, even if they would make mistakes.

When given more difficult problems, the intelligence-praised

students crumbled. They lost confidence, they lost their enjoyment of the task, and their performance—even on subsequent easier problems—fell significantly. In the public view, intelligence praise was supposed to hand them the gift of confidence, but instead it made them fragile. They were initially puffed up by the intelligence praise, displaying proud little smiles on their faces that weren't seen in the effort-praised group. But their pride evaporated quickly at the first sign of difficulty.

Effort-praised students, however, maintained their faith in their abilities, kept on enjoying the task, and showed markedly improved performance over time. The effort praise kept them focused on what mattered for their motivation and performance. Rather than worry about their intelligence, they focused on their efforts and kept on striving. This is reminiscent of the children who are puffed up by their parents' praise, but then are unable or unwilling to work hard in school. It is also seemingly reflective of the young workers who need constant praise and encouragement to keep up their confidence.

In the studies of praise, there was one more finding that was troubling. Students were asked to write anonymously to a child in another school, and a space was left on the sheet of paper for them to write in their score. Almost 40% of the intelligence-praised students lied about their score. (Only 13% of the students in the effort-praised group reported an incorrect score.) This means that praising children's intelligence makes them so invested in their intelligence that they cannot admit their mistakes. If they cannot admit their mistakes, they cannot correct their mistakes.

In several other studies, students in a fixed mindset did not confront

and remedy deficiencies—even when given the opportunity—whereas students in a growth mindset did (Hong et al. 1999; Mangels et al. 2006; Nussbaum and Dweck 2008). It is absolutely critical for people of all ages to honestly consider their mistakes and failings because there will always be mistakes and failings no matter how proficient people become. Without this capacity, intellectual growth is stunted.

This may well be why coaches are suddenly finding their young players to be uncoachable. Because these players are part of the overpraised generation, they may, like the intelligence-praised students in the research studies, have gotten the message that mistakes are unacceptable. They, therefore, may not be able to take even constructive criticism from their coaches—feedback that is essential for their continued growth and success.

How to Promote a Growth Mindset

What are the ways in which educators and parents can foster a growth mindset in children?

Feedback

Following up on the praise research, the first way is through process praise. That is, adults should praise the process the child engaged in—the effort, the strategies, the perseverance, the choices—rather than the intelligence or talent they think the child showed. Here are some examples:

"I really like the way you did those hard problems. You stuck to them until you figured out how to do them."

"Those are really interesting colors you chose for your painting. Tell me about them."

"You practiced a lot and you really improved. That's exciting!"

An important role for parents and

teachers is helping children to enjoy challenges and struggles:

"Wow, that was challenging. That was fun!"

"You chose a really hard one.

You're going to learn a lot!"

"I like the way you struggled with that. I love a good struggle."

Parents and educators can also promote a growth mindset through process-focused criticism. Many adults are currently reluctant to criticize children, thinking that it will harm their self-esteem. But when this is taken too far, it deprives children of the helpful feedback that is essential to their learning and can make them unable to tolerate constructive feedback. Constructive, process-focused criticism is feedback that helps children understand how to do better the next time. Here are some examples:

"When you struck out your last time at bat I don't think you were keeping your eye on the ball. Let's try to make sure to do that next time."

"I really sympathize with you. I know you wanted to win a ribbon, but you're new at this and it looks like it will take a lot more hard work before it happens."

"Well, that didn't work—what are some strategies you could try now?"

Part of constructive feedback is helping children embrace and capitalize on mistakes. For example:

"That was a great mistake. It really helped us see what you don't understand yet."

"Class, who'd like to share an interesting mistake and tell us what they learned from it?"

"Let's go around the dinner table and each of us can tell about the best mistake we made today."

Brainology

As a part of the author's research,

workshops have been developed to teach students about the growth mindset. In one study, an eight-session program taught students many great study skills and also taught them the growth mindset. They read an article, "You Can Grow Your Intelligence," in which they learned that the brain is like a muscle that grows stronger with practice and that every time they apply themselves and learn something new their brain forms new connections. They also learned how to apply this lesson to their schoolwork. When compared to a control group that got eight sessions of only study skills, the students in the growth-mindset workshop showed an impressive increase in their engagement with school and in their math grades.

More recently, a computer-based workshop called "Brainology" is being developed. It teaches the growth mindset through six interactive computer modules and shows students how to engage with their schoolwork in ways that build new connections in their brains. When a pilot test of "Brainology" was conducted in twenty New York City schools, virtually every student reported noteworthy changes in motivation and behavior. The author and her colleagues are now working to make "Brainology" more widely available in the future.

Conclusion

Looking at mindsets has helped researchers understand how young people can become dependent on praise, fearful of challenges, allergic to effort, and demoralized by critical feedback. It has clarified why employers, coaches, and parents are having a hard time working effectively with these young people. Now that the power of mindsets can be understood, it is time to put this knowledge to work. It can help the next generation, not by trying to hand

them self-esteem, but by fostering in them a desire to stretch and, thereby, develop a capacity for resilience. This is the best gift anyone can give them.

References

- Blackwell, L., K. Trzesniewski, and C. S. Dweck. "Implicit Theories of Intelligence Predict Achievement across an Adolescent Transition: A Longitudinal Study and an Intervention." *Child Development* 78 (2007): 246-263.
- Doidge, N. *The Brain that Changes Itself*. Viking, 2007.
- Duckworth, A., and M. Seligman. "Self-discipline Outdoes IQ in Predicting Academic Performance of Adolescents." *Psychological Science* 16 (2005): 939-944.
- Dweck, C. S. *Mindset*. Random House, 2006.
- Ericsson, K.A., N. Charness, P. J. Feltovich, and R. R. Hoffman, eds. *The Cambridge Handbook of Expertise and Expert Performance*. Cambridge University Press, 2006.
- Hong, Y. Y., C. Chiu, C. S. Dweck, D. Lin, and W. Wan. "Implicit Theories, Attributions, and Coping: A Meaning System Approach." *Journal of Personality and Social Psychology* 77 (1999): 588-599.
- Kamins, M., and C. S. Dweck. "Person vs. Process Praise and Criticism: Implications for Contingent Self-worth and Coping." *Developmental Psychology* 35 (1999): 835-847.
- Mangels, J. A., B. Butterfield, J. Lamb, C. D. Good, and C. S. Dweck. "Why Do Beliefs about Intelligence Influence Learning Success? A Social-Cognitive-Neuroscience Model." *Social, Cognitive, and Affective Neuroscience* 1 (2006): 75-86.
- Mueller, C. M., and C. S. Dweck. "Intelligence Praise Can Undermine Motivation and Performance." *Journal of Personality and Social Psychology* 75 (1998): 33-52.
- Nussbaum, A.D., and C. S. Dweck. "Defensiveness vs. Remediation: Self-Theories and Modes of Self-Esteem Maintenance." *Personality and Social Psychology Bulletin* (2007, in press).
- Sternberg, R. "Intelligence, Competence, and Expertise. In *The Handbook of Competence and Motivation*, edited by A. Eliot and C. S. Dweck. Guilford Press, 2005. 🖐