

MALLEABLE *intelligence*

The Theory

Your brain is a muscle. Just like your arms, legs, and back, the more you use and exercise your brain, the stronger it gets. The stronger your brain is, the smarter you are. It's All About Practice.

Write the definition of Malleable Intelligence in your own words:

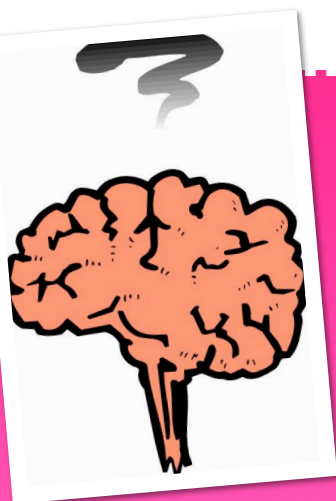
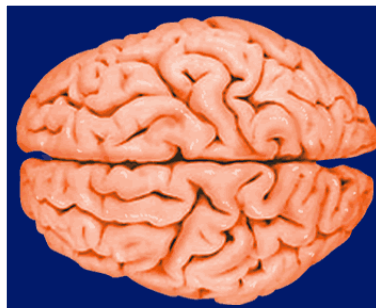
Believing You Can Get Smarter Makes You Smarter

Thinking about intelligence as changeable and malleable, rather than stable and fixed, results in greater academic achievement, especially for people whose groups bear the burden of negative stereotypes about their intelligence.

Findings

Can people get smarter? Are some racial or social groups smarter than others? Despite a lot of evidence to the contrary, many people believe that intelligence is

fixed, and, moreover, that some racial and social groups are inherently smarter than others. Merely

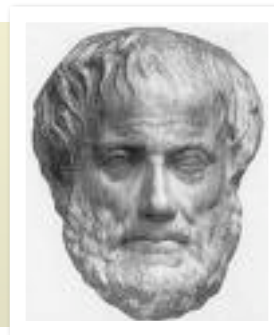


The Brain

The brain is the center of the nervous system in all vertebrate, and most invertebrate, animals. Brains can be extremely complex. The human brain contains roughly 100 billion neurons. Despite rapid scientific progress, much about how brains work remains a mystery.

"We are what we repeatedly do. Excellence, therefore, is not an act, but a habit."

Aristotle



evoking these stereotypes about the intellectual inferiority of these groups (such as women and Blacks) is enough to harm the academic performance of members of these groups. This is called "stereotype threat."

Have you heard stereotypes about certain groups being dumb or stupid or less smart?

But some researchers are fighting "stereotype threat." One teacher taught his students to think of intelligence as changeable, rather than fixed — which many, many studies proves TRUE. Sadly, another teacher did not tell her kids. Those students who learned about malleable intelligence improved their grades more than did students who did not receive this message, and also saw academics as more important than did students in the control group. Even more exciting was the finding that Black and Latina students benefited more from learning about the malleable nature of intelligence than did White students, showing that this intervention may successfully counteract stereotype threat.

Significance

This research showed a relatively easy way to narrow the Black-White academic achievement gap AND the word gap! Realizing that one's intelligence can be improved by practice actually DOES improve one's intelligence.

Wait. What did researchers find when they told students about the scientific theory of malleable intelligence?

Practical Application

Some scientists recently did the same study and applied this research with seventh-grade students in New York City (2002). During the first eight weeks of the spring term, these students learned about malleable intelligence by reading and discussing a science-based article that described how intelligence develops. A control group of seventh-grade students did not learn about malleable intelligence. As compared to the control group, students who learned about intelligence's malleability had higher academic motivation, better academic behavior, and

better grades in mathematics. On the other hand, the grades of the other group that didn't know anything about malleable intelligence. In fact, girls who knew about malleable intelligence matched and even slightly exceeded the boys in math grades, whereas girls in the group that didn't know about how practice helps intelligence performed well below the boys.

What happened to the group of seventh graders who knew about malleable intelligence?

What happened to the group of seventh graders who did not know about malleable intelligence?

What does this research mean to you? What are you going to do with this scientific knowledge?
