

WHITE PAPER

Growth Mindset at Work

How beliefs about the nature of talents and abilities shape organizational success.



Mindsets – beliefs about the nature of personal attributes like intelligence, talents, and abilities – can influence people’s success in many areas of life, from relationships¹ and athletics² to parenting³ and work.⁴ This white paper focuses on the impact of mindsets in the workplace, and provides strategies for fostering a company culture that promotes individual and organizational growth and innovation.

THE TWO MINDSETS

Decades of social science, developmental science, and neuroscience research show that people have different beliefs about the nature of talents and abilities.⁵ Some people lean toward what’s called a “**fixed mindset**,” the belief that abilities and talents are fixed at birth. People with a fixed mindset think of these qualities like eye color. Just like you either have blue eyes or you don’t, people with this mindset believe that you’re born with certain talents and abilities, and not others, and there’s not much you can do about that. Other people lean toward a “**growth mindset**,” the belief that talents and abilities can be developed.



Fixed Mindset

VS



Growth Mindset

People with a growth mindset think of these qualities more like a muscle. Just like going to the gym makes your muscles stronger, people with this mindset believe that if you work hard to develop your talents and abilities, you can make your brain stronger. As discussed below, these two different beliefs can lead people to engage in very different behaviors, which ultimately impact performance.^{6,7,8,9,10} Decades of research show that when people have a growth mindset they tend to be more successful.¹¹

Notably, mindsets are not stable. They can change over time, and they are influenced by our environments.¹² People can also have different mindsets about different things.¹³ For example, you can have a growth mindset about your ability to become a better writer, but a fixed mindset about your technical skills.

Which mindset is accurate? It turns out that there is increasing evidence for a growth mindset – the brain is like a muscle. Neuroscience research shows that when people challenge themselves, it can actually strengthen the connections between neurons in the brain, leading people to become smarter and improve their talents and abilities.¹⁴

THE BENEFITS OF A GROWTH MINDSET TO ORGANIZATIONS

Because mindsets are shaped by our environments, organizations can do quite a bit to foster a growth mindset culture. But why should companies care? In this section, we review the research on the benefits of a growth mindset in organizations.



Better Performance



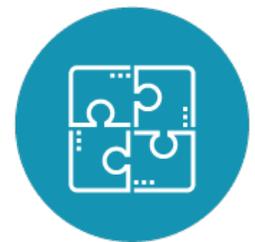
More Innovation



Better Managers



Greater Diversity



More Inclusion



Better Performance

A whole host of things follow from a person's mindset that ultimately influence their performance, and this is particularly true in really challenging environments.

Mindsets influence goals.¹⁵ In a fixed mindset, a person's main goal is to prove themselves. This makes sense - if you believe that some people "have it" (talent, ability, intelligence) and others don't, you want to prove that you have it. In the workplace, if a person's main goal is to prove themselves, that can influence what kind of work they choose to take on. They might be more likely to take on easier work where they know they will succeed. In a growth mindset, a person's main

goal is to learn and grow. Since they believe their abilities can be developed, they take on more difficult work that offers them the opportunity to learn and improve.

Mindsets influence how people interpret effort and struggle.¹⁶ In a fixed mindset, the need to work hard at something or struggle to accomplish a task is perceived as a lack of ability. In a growth mindset, effort and struggle are perceived as an indicator of learning.

Perhaps most importantly, mindsets influence how people respond to challenges and setbacks.¹⁷ In a fixed mindset, people give up in the face of setbacks. They believe they have discovered something they are not good at, and they would rather move on to something they are good at. In a growth mindset, people tackle challenges and setbacks head on. They see them as the best opportunity to learn and improve, so they stick with it, analyze what went wrong, and strategize what to do differently in the future. While setbacks don't always feel good with a growth mindset, they don't cause the same kind of anxiety and self-doubt that come with the fixed belief that setbacks mean you are a failure.

From these differences come differences in performance, especially in challenging work environments.¹⁸ A person with a fixed mindset might perform just fine in a work environment that is easy and constant, but in an environment that's challenging and dynamic, their performance suffers. This type of difficult, changing environment is exactly where people with a growth mindset are most likely to thrive.



More Innovation

If people are primarily focused on proving themselves, as they are in a fixed mindset, they will be more afraid of change. It's simply a chance to fail. And they won't want to take risks or try new things at work. Since trying new things and taking risks are key to innovation, a fixed mindset hinders innovation. In companies that foster a growth mindset, on the other hand, employees are more willing to try new things or take thoughtful risks that can lead to innovation.¹⁹ They are interested in the learning that will come from those things, even if the road to success requires prolonged persistence.



Better Managers

A growth mindset leads managers to run more successful teams.²⁰ Why?

Managers are better at listening and taking feedback from others when they are in a growth mindset.²¹ In a fixed mindset, feedback is interpreted as questioning the manager’s talent and leadership ability. In a growth mindset, managers are less threatened by feedback, and can use it to learn and improve.

Managers are better at coaching and mentoring when they approach leading others with a growth mindset.²² This makes a lot of sense. If you think people are mostly fixed, then what’s the point of devoting your time to coaching them? Research shows that managers with a growth mindset give more feedback, and the quality of their feedback is higher.

Managers with a growth mindset are more attuned to changes in their employees’ performance.²³ Managers with a fixed mindset remain anchored around first impressions. If an employee is seen as a “high performer,” even when that employee does objectively low quality work managers with a fixed mindset are less critical of that work. On the flip side, managers with a fixed mindset don’t notice when previously low performing employees begin to improve. Managers with a growth mindset, however, notice both positive and negative changes in employees’ performance.



Greater Diversity

It turns out that people and companies with a fixed mindset are more likely to rely on stereotypes.²⁴ This makes sense when you think about what stereotypes are – beliefs about groups’ “fixed abilities.” A growth mindset rejects the idea of fixed abilities, making stereotypes carry less weight.

And people from stereotyped groups pick up on the fact that a fixed mindset might lead to more stereotyping. In a recent study, women were less likely to trust companies that used fixed mindset phrases on their websites (e.g., talking about wanting to hire employees “who have the intelligence and abilities that we are looking for”).²⁵ They believed that management at those companies would be more likely to view them through the lens of a negative stereotype. In similar research done by Paradigm and Textio, we found that companies who used

growth mindset phrases in their job descriptions (e.g., “learn new things,” “highly determined”) were more likely to hire a woman for the role.²⁶

This dynamic also appears across entire academic disciplines. Fields whose practitioners believe that brilliance is required for success have fewer women and fewer African Americans earning PhDs than those that emphasize the importance of effort and dedication.²⁷ Of course this is not because of any difference in groups’ intelligence or abilities. Instead, a fear of being judged through the lens of a negative stereotype, and an increased likelihood of actually being stereotyped, can prevent women and African Americans from entering these fields.



More Inclusion

In fixed mindset companies, all employees feel more pressure to prove themselves. But this pressure can be amplified for people from underrepresented groups, who also have to contend with negative stereotypes about their groups. It can lead to stereotype threat – the fear of confirming a negative stereotype about one’s group.²⁸ Stereotype threat not only creates an unwelcoming feeling, but it also undermines performance, because the worry of being judged through the lens of a negative stereotype can deplete valuable cognitive resources. A growth mindset has been shown to reduce the effects of stereotype threat, so growth mindset companies are better able to benefit from diverse perspectives.²⁹

Growth mindset companies can also feel more inclusive because employees are more willing to collaborate with one another.³⁰ In a fixed mindset company, looking smart is often dependent on looking better than others. But in a growth mindset company, everyone is learning and improving, so it’s not threatening to seek out help from others and to provide help to others.

In summary, fostering a growth mindset culture helps people feel safe trying new things and learning from mistakes, and ultimately helps everyone perform to their full potential.

STRATEGIES TO FOSTER A GROWTH MINDSET

Given the many benefits of a growth mindset, what are strategies for developing a growth mindset? Whether you're trying to foster a growth mindset in yourself, in people you manage, or throughout the company, there are many ways to get started.



Strategies for individuals

- **Identify your fixed mindset triggers.**³¹ We are all a mixture of growth and fixed mindsets. In order to move to more of a growth mindset, start by noticing your fixed mindset triggers. When you see someone more skilled than you, does that make you feel jealous or demotivated? Instead, try thinking about how you can learn from that person. What strategies are they using that you could also try out to improve your own skills? When you get critical feedback, do you feel defensive? Instead, try thinking about how that feedback can help you grow.
- **Track your progress over time.** When you take the time to think about it, you'll probably notice that you're a lot better at things now than you used to be. Reflecting on how you're progressing can help foster more of a growth mindset. If you've improved in the past, you can certainly continue to improve in the future.
- **Don't compare yourself to others.** Instead of comparing yourself to others, focus on being better tomorrow than you are today. When you compare yourself to others, it can be easy to feel like someone else is just naturally more talented than you. But the truth is that you don't know what experiences might have led them to develop their skills. The goal shouldn't be to be better than someone else – it should be to continue to grow your own skills over time.



Strategies for managers

- **Focus feedback on the process, not the person.**³² It might feel good to tell an employee, "You're so talented at X." And they might feel good hearing this, at least in the moment. But when they face a setback later, they might conclude, "If my past success made me talented, does my current struggle mean I lack ability?" If you focus on the process, you can foster a growth mindset

by helping employees see that hard work, the right strategies, and good coaching are what lead to success. Here are some phrases to try:

Instead of this



Great job! You are such a brilliant data scientist/leader/engineer!



You aren't technical enough.

Try this



Great job! I know you worked really hard to find the right solution, and the strategy you used works really well.



You have an opportunity to develop your technical skills. Your role requires X skills. To improve your performance, here are the learning goals I have for you.

- **Reward people when they try new things, even when it doesn't lead to success.** In order to innovate, employees need to try new things. Some of those things will lead to success, and some won't. If employees are only rewarded for outcomes, they'll continue to take the familiar route, leading to less innovation. Some companies have even created awards for clever risks that didn't necessarily pan out as hoped.³³
- **Talk openly about mistakes and celebrate what can be learned from them.** On growth mindset teams, mistakes are seen as a normal part of the learning process. When mistakes are made, people are not shamed. Mistakes are also not ignored to avoid making people feel bad – this is less of a concern when mistakes aren't an indication of someone's ability. Instead, mistakes are discussed openly, and analyzed in order to help individuals, teams, and the organization grow. In turn, this actually leads to fewer mistakes and better team performance.³⁴ To get people comfortable talking about mistakes, start by talking about your own. Send out an email the next time you make a mistake, describing what it was, why it happened, and what you learned. Or share a mistake in your next team meeting.



Strategies for organizations

- **When communicating about abilities, talk about them as malleable.** When communicating, both internally and externally, talk about abilities as malleable. For example, in job descriptions, talk about opportunities to grow, develop, and learn rather than seeking the best and brightest. In interviews

and performance management, talk about skills rather than traits. And when talking about why people succeeded or failed, talk about the strategies they used, not who they are as individuals.

- **Provide opportunities for employees to grow.** Development opportunities show that you believe people can grow and change. Provide these opportunities, coach employees on how to take advantage of them, and recognize them when they do. When employees try something new (e.g., a new approach to their work, or a particularly challenging project), acknowledge or reward this, regardless of whether it leads to success.
- **In performance management, focus on improvement and avoid comparisons.** Instead of dividing employees into top performers and bottom performers, compare individuals to expectations for the job, and then give each employee the tools they need to improve. It should be clear that where they are now is not necessarily indicative of where the organization believes they'll be forever.



Paradigm's growth mindset work is led by Dr. Carissa Romero. Carissa is one of the world's leading experts on growth mindset, has given hundreds of presentations on the topic, co-founded a center at Stanford (PERTS) to apply growth mindset research, and is a member of the Mindset Scholars Network.

REFERENCES

1. **Howe, L. C., & Dweck, C. S. (2016).** Changes in self-definition impede recovery from rejection. *Personality and Social Psychology Bulletin*, **42**, 54-71. Available at <http://bit.ly/2v9sDza>
2. **Dweck, C. S. (2009).** *Olympic Coach Magazine*, **21**. Available at <http://bit.ly/2ilJahD>
3. **Gunderson, E. A., Gripshover, S. J., Romero, C., Dweck, C. S., Goldin-Meadow, S., & Levine, S. C. (2013).** Parent praise to 1-to 3-year-olds predicts children's motivational frameworks 5 years later. *Child Development*, **84**, 1526-1541. Available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3655123/>
4. **Heslin, P. A., & VandeWalle, D. (2008).** Managers' implicit assumptions about personnel. *Current Directions in Psychological Science*, **17**, 219-223. Available at <http://bit.ly/2wYcn2P>
5. **Dweck, C. S. (2006).** *Mindset: The new psychology of success*. New York: Random House.
6. **Blackwell, L., Trzesniewski, K., & Dweck, C. S. (2007).** Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child Development*, **78**, 246-263. Available at <https://pdfs.semanticscholar.org/e1e8/a58633ba21bbc42d6a58ac088481dca378d9.pdf>
7. **Kray, L. J., & Haselhuhn, M. P. (2007).** Implicit negotiation beliefs and performance: experimental and longitudinal evidence. *Journal of Personality and Social Psychology*, **93**, 49-64. Available at <https://pdfs.semanticscholar.org/e4ad/02976c66d9718f97e4599620858bf5468c54.pdf>
8. **Paunesku, D., Walton, G. M., Romero, C., Smith, E. N., Yeager, D. S., & Dweck, C. S. (2015).** Mind-set interventions are a scalable treatment for academic underachievement. *Psychological Science*, **26**, 784-793. Available at https://p3.perts.net/static/documents/paunesku_2015.pdf
9. **Yeager, D. S., Romero, C., Paunesku, D., Hulleman, C. S., Schneider, B., Hinojosa, C., ... & Trott, J. (2016).** Using design thinking to improve psychological interventions: The case of the growth mindset during the transition to high school. *Journal of Educational Psychology*, **108**, 374-391. Available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4981081/>
10. **Romero, C., Master, A., Paunesku, D., Dweck, C. S., & Gross, J. J. (2014).** Academic and emotional functioning in middle school: The role of implicit theories. *Emotion*, **14**, 227-234. Available at <https://pdfs.semanticscholar.org/990f/29b2d12dff307990f82772e1d9eb74781490.pdf>
11. **Rae-Dupree, J. (July 6, 2008).** If you're open to growth, you tend to grow. *The New York Times*. Available at http://www.nytimes.com/2008/07/06/business/06unbox.html?_r=0
12. **Ibid Gunderson et al., 2013.**
13. **Tamir, M., John, O. P., Srivastava, S., & Gross, J. J. (2007).** Implicit theories of emotion: Affective and social outcomes across a major life transition. *Journal of Personality and Social Psychology*, **92**, 731-744. Available at <http://bit.ly/2vOFdGM>
14. **Maguire, E. A., Woollett, K., & Spiers, H. J. (2006).** London taxi drivers and bus drivers: a structural MRI and neuropsychological analysis. *Hippocampus*, **16**, 1091-1101. Available at <http://bit.ly/2wlb8A5>
15. **Ibid Kray & Haselhuhn, 2007.**
16. **Hong, Y. Y., Chiu, C. Y., Dweck, C. S., Lin, D. M. S., & Wan, W. (1999).** Implicit theories, attributions, and coping: A meaning system approach. *Journal of Personality and Social Psychology*, **77**, 588-599. Available at <http://bit.ly/2vEVB83>
17. **Nussbaum, A. D., & Dweck, C. S. (2008).** Defensiveness versus remediation: Self-theories and modes of self-esteem maintenance. *Personality and Social Psychology Bulletin*, **34**, 599-612. Available at <http://bit.ly/2xf1mMg>
18. **Ibid Blackwell et al., 2007.**

19. **Harvard Business Review Staff (November 2014). How companies can profit from a “growth mindset.” Harvard Business Review.** Available at <https://hbr.org/2014/11/how-companies-can-profit-from-a-growth-mindset>
20. **Wood, R., & Bandura, A. (1989). Impact of conceptions of ability on self-regulatory mechanisms and complex decision making. Journal of Personality and Social Psychology, 56, 407-415.** Available at <http://bit.ly/2v2GTtx>
21. **Ibid Wood & Bandura, 1989.**
22. **Heslin, P. A., Vandewalle, D., & Latham, G. P. (2006). Keen to help? Managers’ implicit person theories and their subsequent employee coaching. Personnel Psychology, 59, 871-902.** Available at <http://bit.ly/2wk3inC>
23. **Heslin, P. A., Latham, G. P., & VandeWalle, D. (2005). The effect of implicit person theory on performance appraisals. Journal of Applied Psychology, 90, 842-856.** Available at <http://bit.ly/2vODn8S>
24. **Xu, X., & Plaks, J. E. (2015). The neural correlates of implicit theory violation. Social neuroscience, 10, 431-447.** Available at <http://bit.ly/2fVxMYP>
25. **Emerson, K. T., & Murphy, M. C. (2015). A company I can trust? Organizational lay theories moderate stereotype threat for women. Personality and Social Psychology Bulletin, 41, 295-307.** Available at <http://journals.sagepub.com/doi/abs/10.1177/0146167214564969>
26. **Romero, C. (November 11, 2016). Want to hire faster? Write about “learning,” not “brilliance.” Inclusion Insights.** Available at <https://medium.com/inclusion-insights/want-to-hire-faster-write-about-learning-not-brilliance-3a87f700d533>
27. **Leslie, S. J., Cimpian, A., Meyer, M., & Freeland, E. (2015). Expectations of brilliance underlie gender distributions across academic disciplines. Science, 347, 262-265.** Available at <http://bit.ly/2vODyB4>
28. **Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. American psychologist, 52, 613-629.** Available at <http://psycnet.apa.org/record/1997-04591-001>
29. **Aronson, J., Fried, C. B., & Good, C. (2002). Reducing the effects of stereotype threat on African American college students by shaping theories of intelligence. Journal of Experimental Social Psychology, 38, 113-125.** Available at <https://pdfs.semanticscholar.org/76a7/6b126d006a6a03b1547b0160dd8485bcf679.pdf>
30. **Ibid Harvard Business Review Staff, 2014.**
31. **Gross-Loh, C. (December 16, 2016). How praise became a consolation prize. The Atlantic.** Available at <https://www.theatlantic.com/education/archive/2016/12/how-praise-became-a-consolation-prize/510845/>
32. **Mueller, C. M., & Dweck, C. S. (1998). Praise for intelligence can undermine children’s motivation and performance. Journal of Personality and Social Psychology, 75, 33-52.** Available at <https://pdfs.semanticscholar.org/25ab/297c17a87c8a0f79e109be531fe9c7da97b8.pdf>
33. **Shellenbarger, S. (September 27, 2011). Better ideas through failure: Companies reward employee mistakes to spur innovation, get back their edge. The Wall Street Journal.** Available at <https://www.wsj.com/articles/SB10001424052970204010604576594671572584158>
34. **Ely, R., & Meyerson, D. E. (2010). Research in Organizational Behavior, 30, 3-34.** Available at https://people.stanford.edu/debram/sites/default/files/undoing_gender.pdf