

Monta Vista Character Lab March 18, 2025

"Ever tried. Ever failed. No Matter. Try again. Fail again. Fail better." Samuel Beckett

Boston Marathon Standards and Entries

• 2012

- + Field size: 27,000
- + Open qualifying time: 3:10
- + Cut-off time: 1:14
- + Rejected applicants who met the qualifying time: 3,228
- 2025
 - + Field size: 30,000
 - + Open qualifying time: 3:00
 - + Cut-off time: 6:51
 - + Rejected applicants who met the qualifying time: 12,234

Standards get tougher...more people fail...yet more people aim for the goal.

SOURCE: BOSTON ATHLETIC ASSOCIATION WEB SITE

Why do some of us choose to persist towards a goal...or to give up?



What is the difference between failure and adversity?

Adversities Failures

Failure is an outcome—a lack of success in achieving a goal.

Adversity is a challenge—difficulties or obstacles that test resilience.

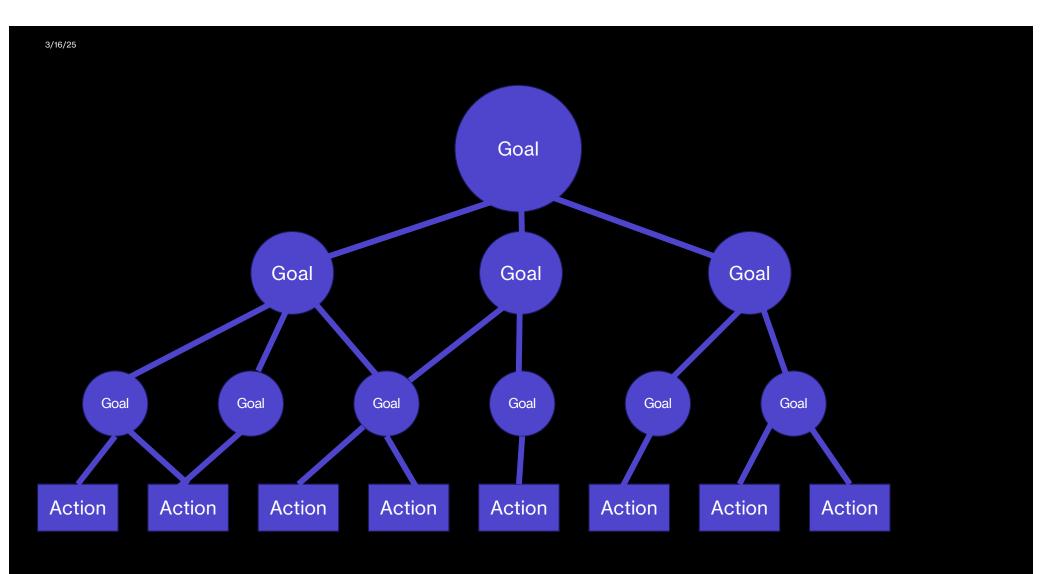
Failure is final only if you stop.

Adversity is what you overcome to succeed.

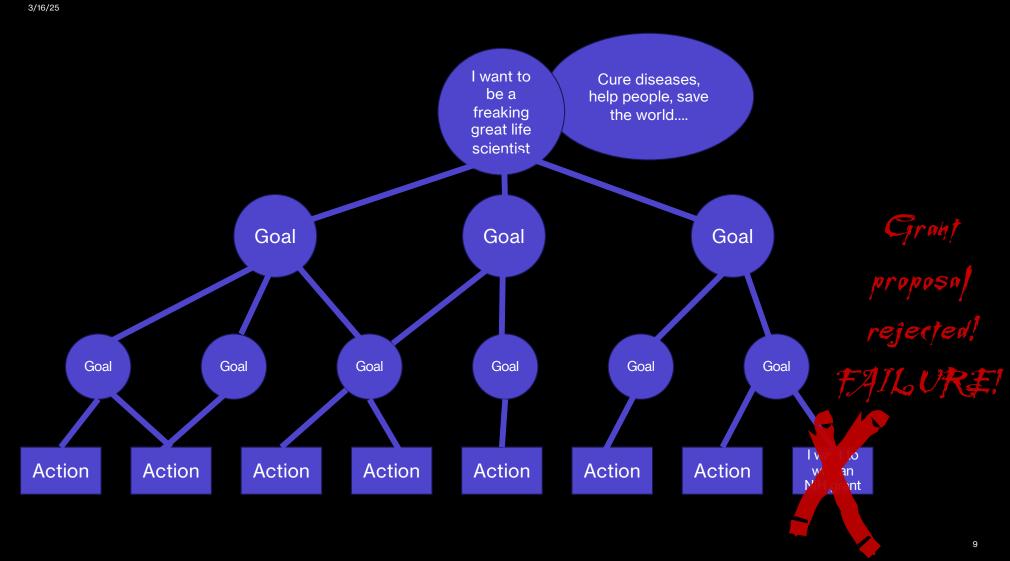
Adversities Failures

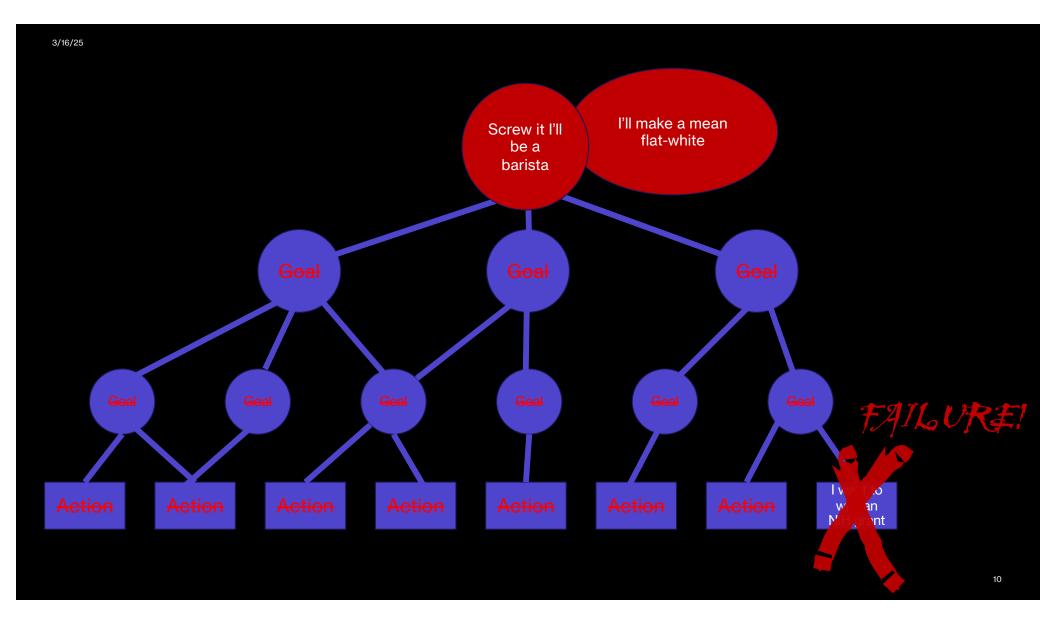
What do you think about this description?

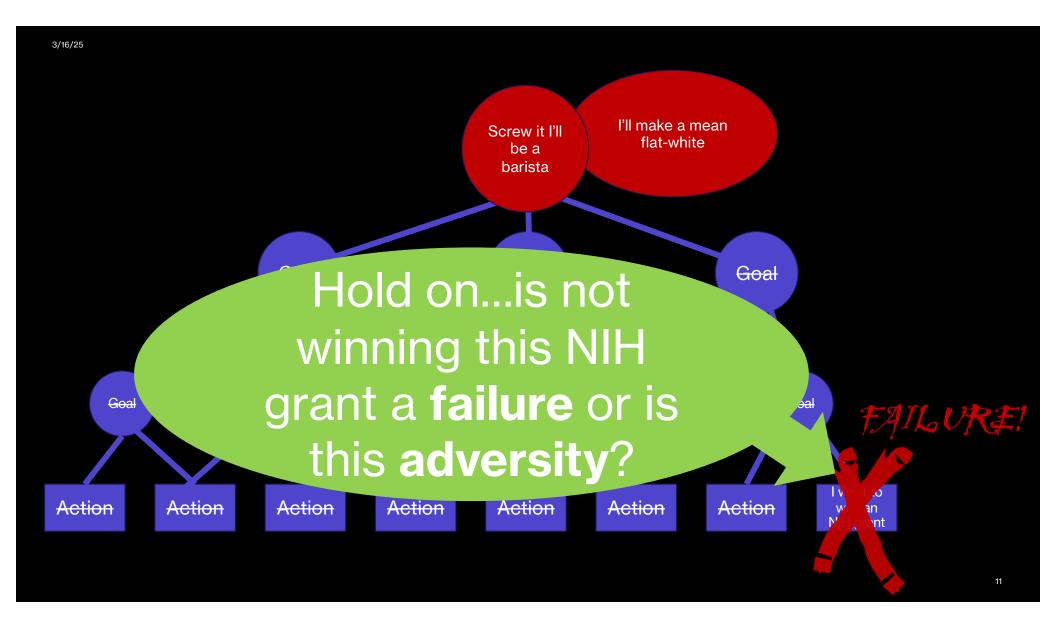
6











How does a failure effect our future?

nature

ARTICLE

https://doi.org/10.1038/s41467-019-12189-3

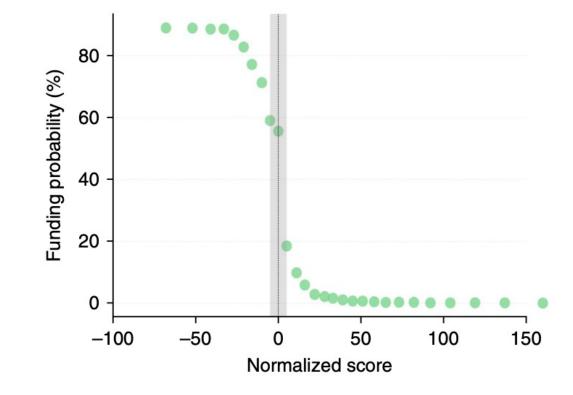
OPEN

Early-career setback and future career impa

Yang Wang 12,3,4, Benjamin F. Jones A. Bashun Wang 12,3,6

Setbacks are an integral part of a scientific career, yet little is known about their long-term effects. Here we examine junior scientists applying for National Institutes of Health R01 grants. By focusing on proposals fell just below and just above the funding threshold, we compare near-miss with narrow-win applicants, and find that an early-career setback has powerful, opposing effects. On the one hand, it significantly increases attrition, predicting more than a 10% chance of disappearing permanently from the NIH system. Yet, despite an early setback, individuals with near misses systematically outperform those with narrow wins in the longer run. Moreover, this performance advantage seems to go beyond a screening mechanism, suggesting early-career setback appears to cause a performance improvement among those who persevere. Overall, these findings are consistent with the concept that "what doesn't kill me makes me stronger," which may have broad implications for identifying, training and nurturing junior scientists.

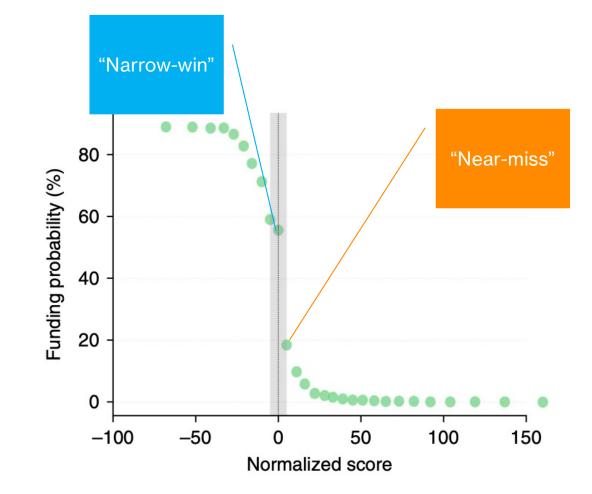
National Institute of Health R01 Grants



SAMPLE FOOTER TEXT 13

National Institute of Health R01 Grants

3/16/25

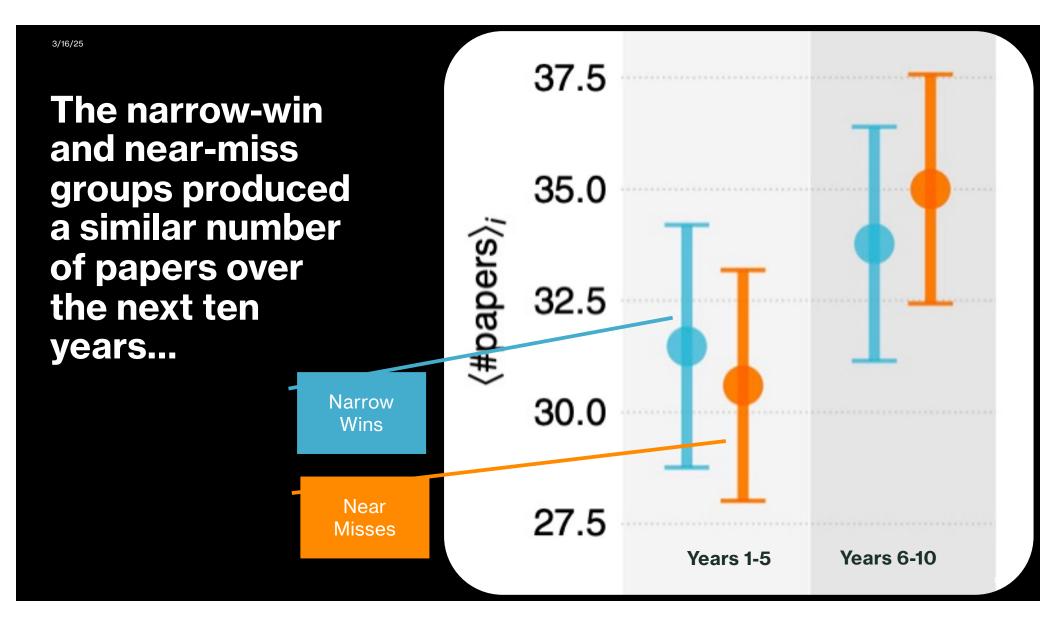


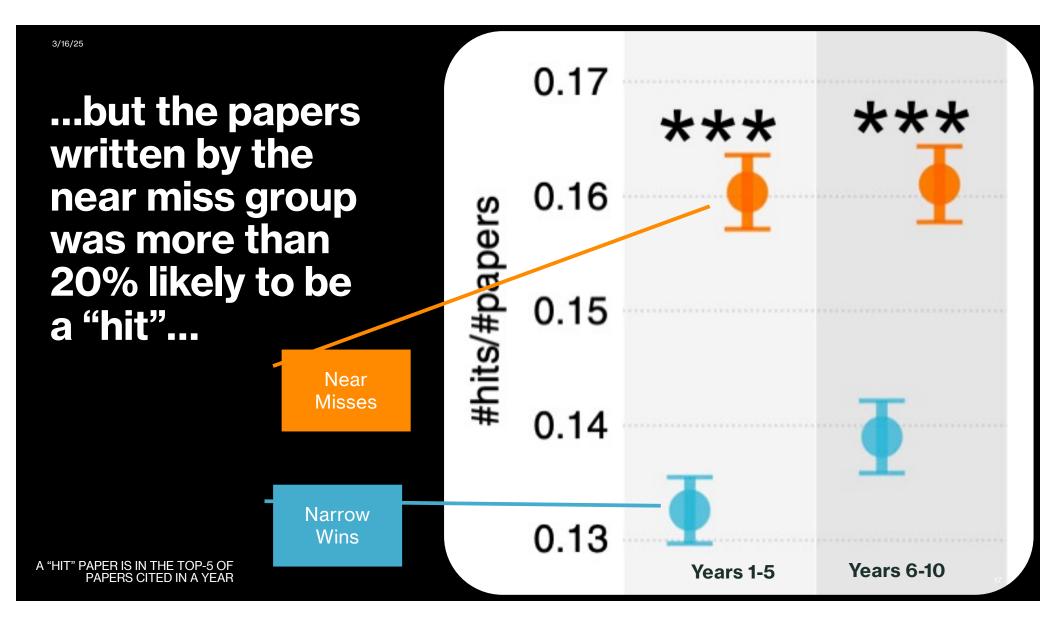
14

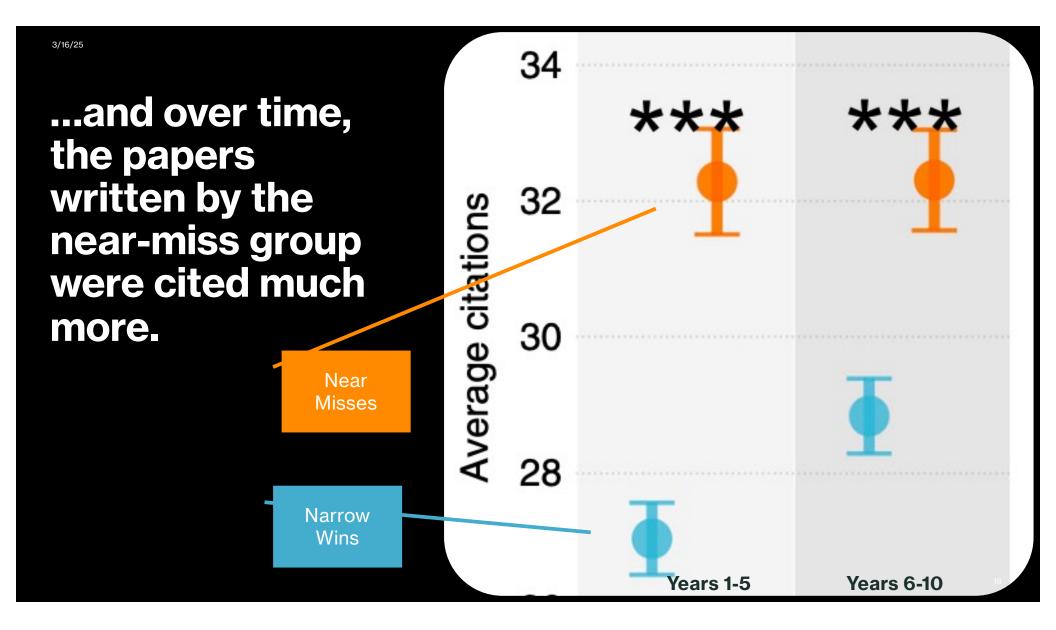
What do you think happened next for the "narrow-wins" and the "near-misses"?

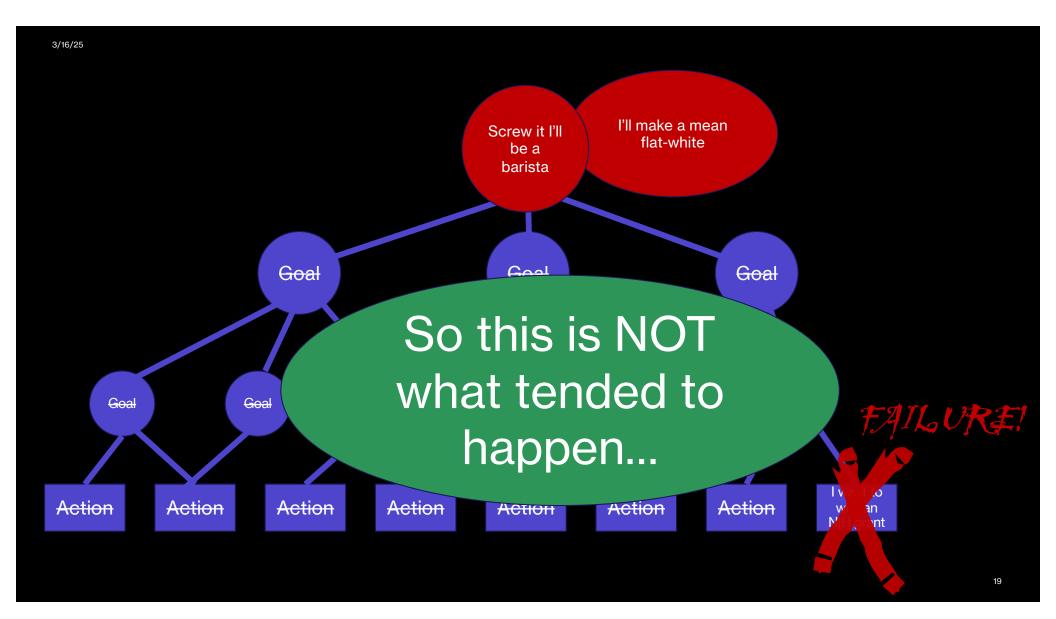
Think about implications, reactions and possibilities for what might happen next:

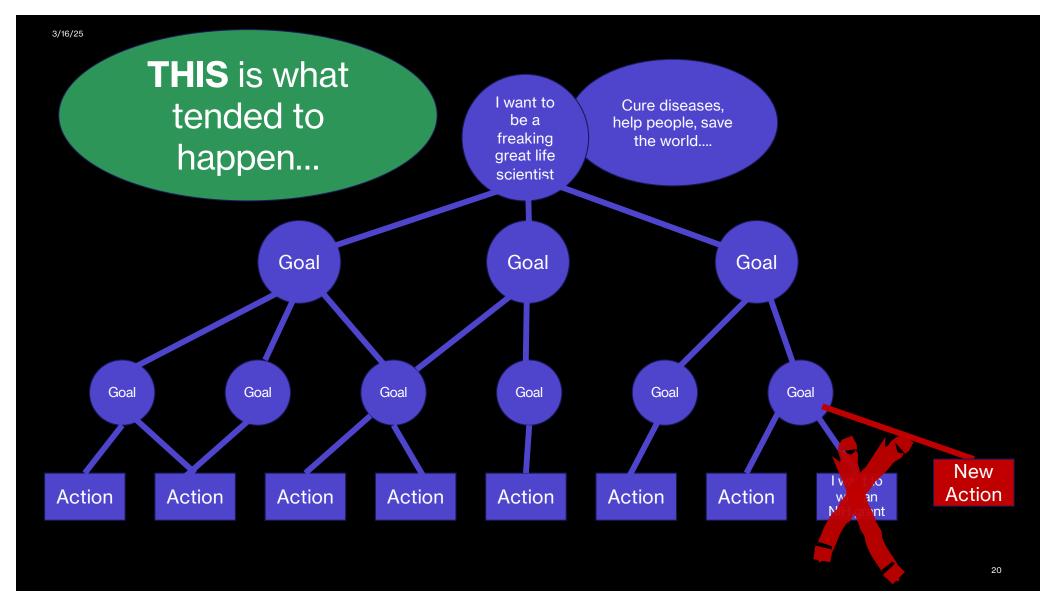
- Narrow winners had funding for as much as five years of research
- "Matthew Effect": Advantages accumulate for winners while disadvantages compound for losers ('the rich get richer")
- Emotional response to winning I am the MAN, I am <u>awesome</u>!
- Emotional response to losing man, I worked so hard on this proposal. I suck.











Researcher Discussion

"These results document that an early-career setback has powerful, opposing effects, hurting some careers, but also, quite surprisingly, strengthening outcomes for others ."

Unobservable dimensions:

• Effort

Grit

Who tends to be the most vulnerable, and who the most resilient?

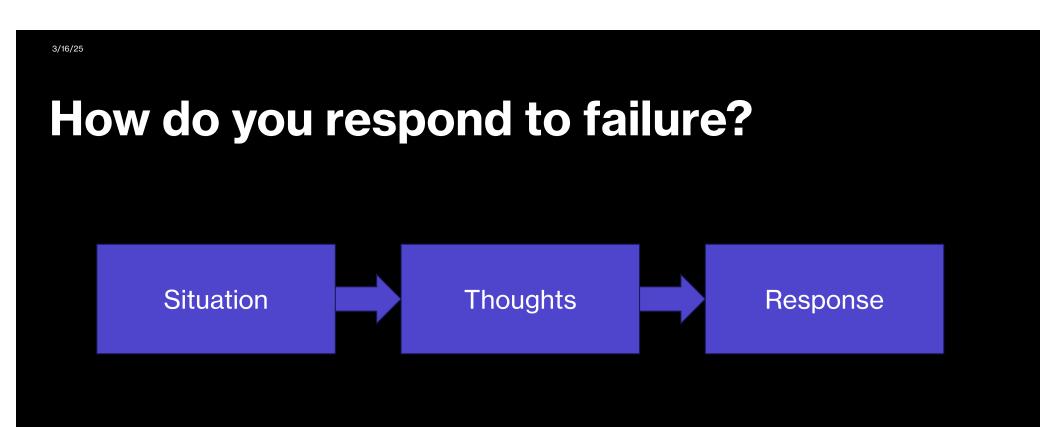
What might be going on: Growth Mindset

- **Fixed Mindset**
- Intelligence is static
- Desire to look smart
- Tendency to avoid challenges
- "Failure tells me my limits."
- "I am good at something, or I am not."

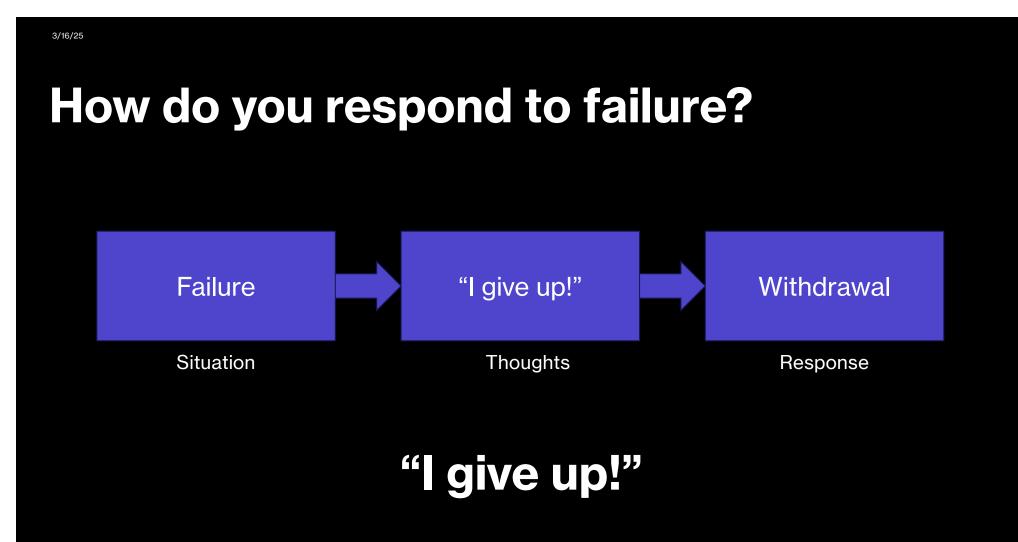
Growth Mindset

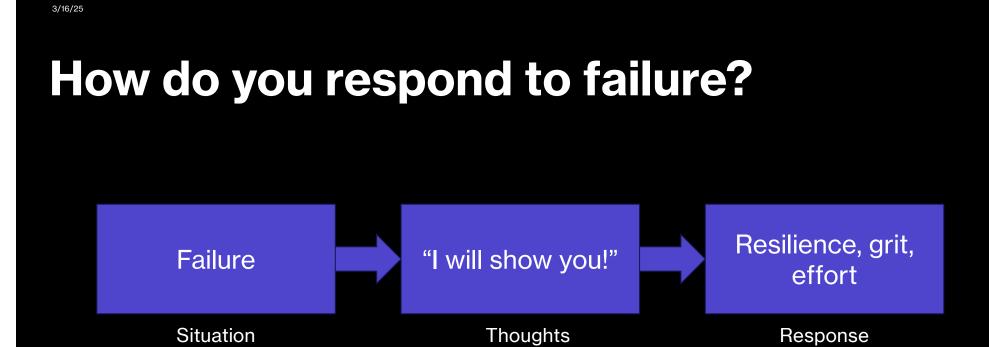
- Intelligence can be developed
- Desire to learn
- Tendency to embrace challenges
 "Challenges help me grow."
- "I can't do this...yet"."

Growth Mindset -> Optimism



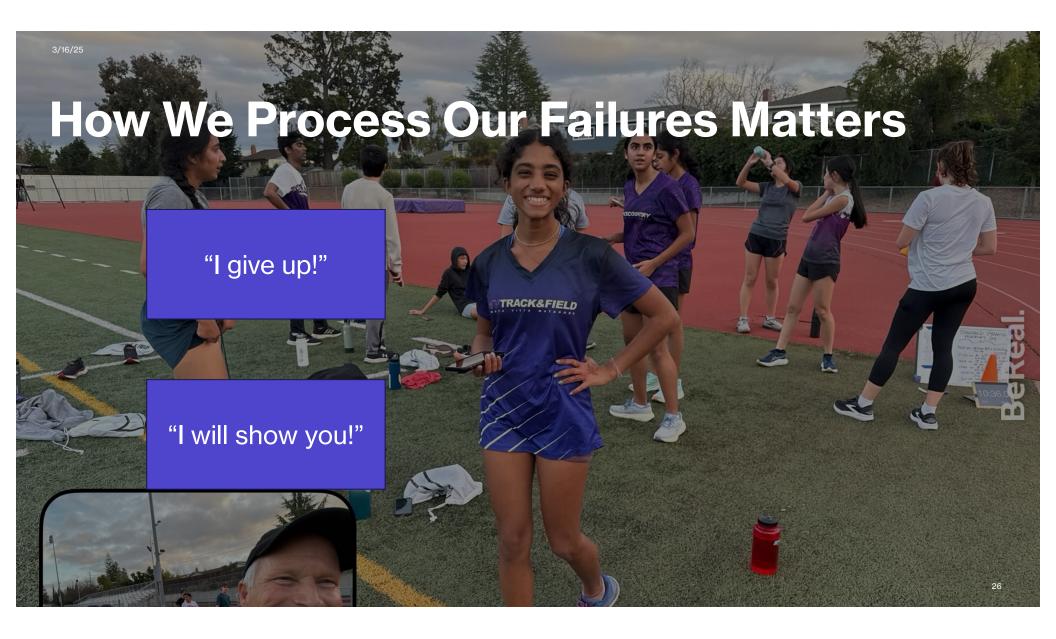
Duckworth, A. L., & Gross, J. J. (2020). Behavior change. Organizational behavior and human decision processes, 161, 39-49.

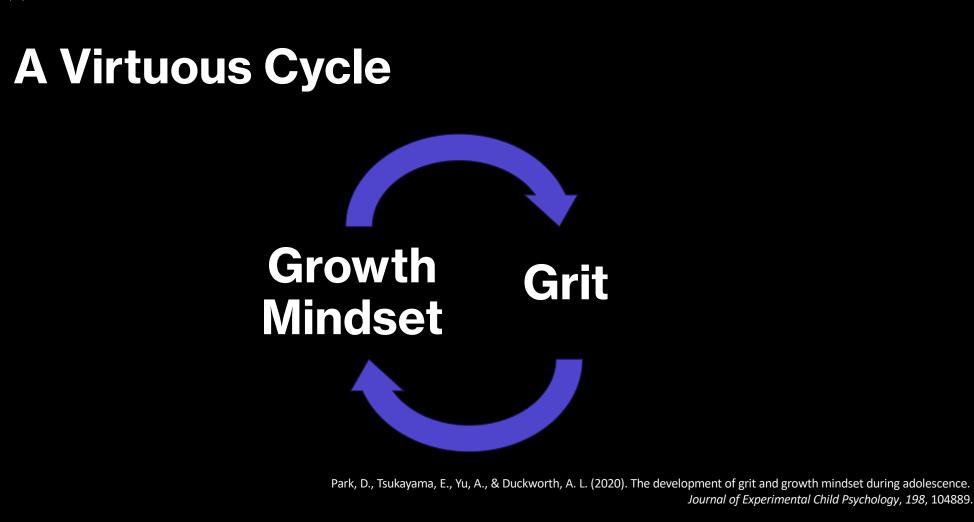




"I'll show you!"

25





A couple of caveats!

If Angela were here, she might have a couple pieces of advice for you...



Beating your head against a wall is not a noble thing! We don't need to seek out or provide roadblocks for the sake of a 'challenge.'

"Results do not imply that one should strategically put roadblocks in the way of junior scientists....the precondition of becoming stronger is to not be killed in the first place. The findings do suggest, however, that for those who persevere, early failure should not be taken as a negative signal – but rather the opposite, in line with Shinya Yamanaka's advice to young scientists, after winning the Nobel prize for the discovery of iPS cells, "I can see any failure as a chance." "

~Dashun Wang et al

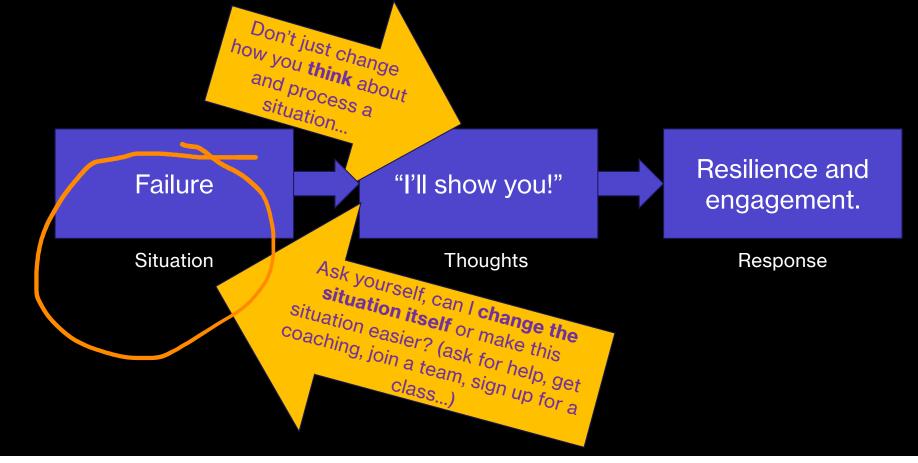
"No pain, no gain" is a misguided notion.



Can you change your situation?

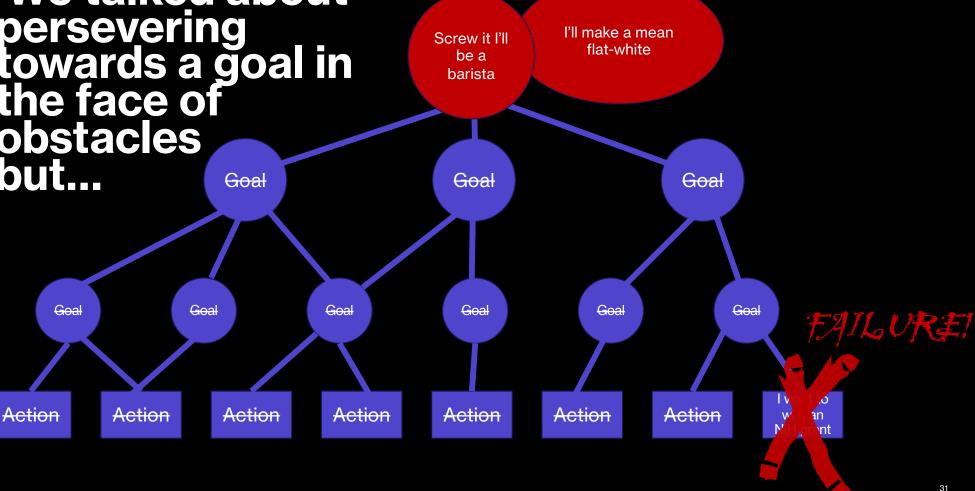
3/16/25

Go back and look at the prior box...that box is not always set in stone.









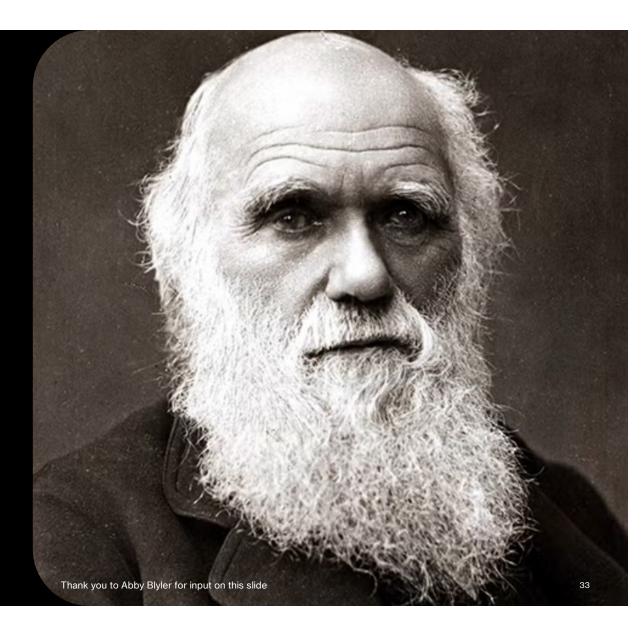
Grit is not slavish devotion to a goal.

Angela Duckworth, the Queen of Grit, would tell you it can be OK to change your goal – especially at your age.

Failure, or frustration, or just having a bad day

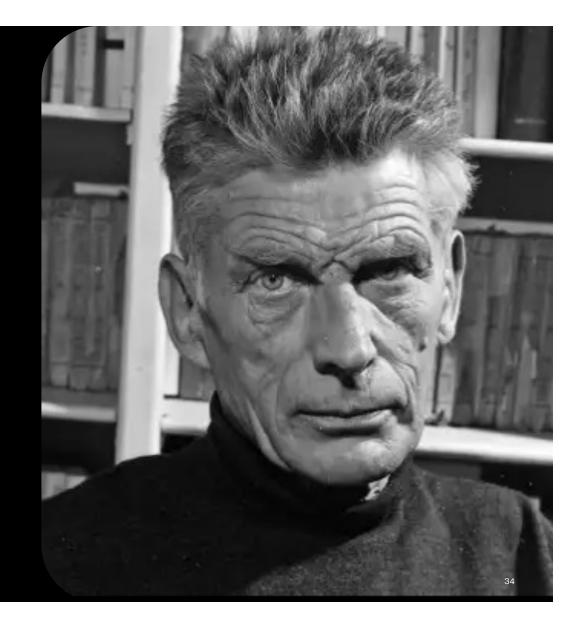
"But I am very poorly today and very stupid and hate everybody and everything." Charles Darwin

Maybe don't make life altering decisions when you are feeling at your worst; don't quit on a bad day. Ask yourself, "Am I also having a really bad day?" and if so, maybe delay the decision to pivot or quit.



"Ever tried. Ever failed. No Matter. Try again. Fail again. Fail better."

Samuel Beckett



Thank you to Angela Duckworth

3/16/25

This presentation was inspired by and heavily borrows from her class *Leading With Grit* at the Wharton School/University of Pennsylvania, February 18, 2025.

Thank you also to Abby Blyler and Jodi Wellman for comments on drafts of this slide deck.

WITH MUCH GRATITUDE, ANGELA, I COULD NOT DO THIS WITHOUT YOU! 35

HAID

Later:

I went through this quickly in the classroom. I encourage students to go back and carefully read the article abstract, think about it and discuss it. Parents too! I think this is interesting/thought provoking/worth discussing. This is interesting research that can help us all think about our situations.

-Coach Flatow

nature

ARTICLE

https://doi.org/10.1038/s41467-019-12189-3

OPEN

Early-career setback and future career impa

Yang Wang (12,3,4, Benjamin F. Jones^{1,2,3,5} & Dashun Wang (12,3,6)</sup>

Setbacks are an integral part of a scientific career, yet little is known about their long-term effects. Here we examine junior scientists applying for National Institutes of Health R01 grants. By focusing on proposals fell just below and just above the funding threshold, we compare near-miss with narrow-win applicants, and find that an early-career setback has powerful, opposing effects. On the one hand, it significantly increases attrition, predicting more than a 10% chance of disappearing permanently from the NIH system. Yet, despite an early setback, individuals with near misses systematically outperform those with narrow wins in the longer run. Moreover, this performance advantage seems to go beyond a screening mechanism, suggesting early-career setback appears to cause a performance improvement among those who persevere. Overall, these findings are consistent with the concept that "what doesn't kill me makes me stronger," which may have broad implications for identifying, training and nurturing junior scientists.