Mindset que nos permite viver em incerteza extrema e mudança constante?

Paula Marques
Porto, 21 de fevereiro de 2024

2º Princípio da Termodinâmica

1ª Lei de Newton


Mundo
Líquido
Zygmunt Bauman


”aparentemente”
sólido


Território Conhecido


Território Desconhecido

Viver no Desconhecido

“Os currículos do futuro terão de refletir competências que preparem os alunos para um futuro desconhecido.
É isso que os torna futuristas ".

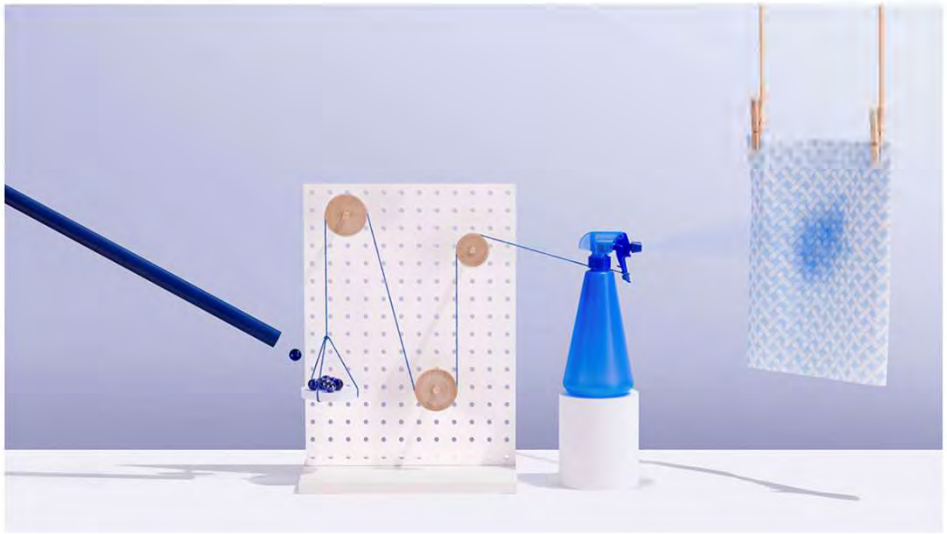
UNESCO, 2019, Future Competences and the Future of Curriculum: A Global Reference for Curriculum Transformation

Strategy

Your Strategy Should Be a Hypothesis You Constantly Adjust

by Amy C. Edmondson and Paul J. Verdin

November 09, 2017



Jonathan Knowles/Getty Images

Strategy as Learning

Amy Edmnonson, Paul Verdin, 2017


Plano

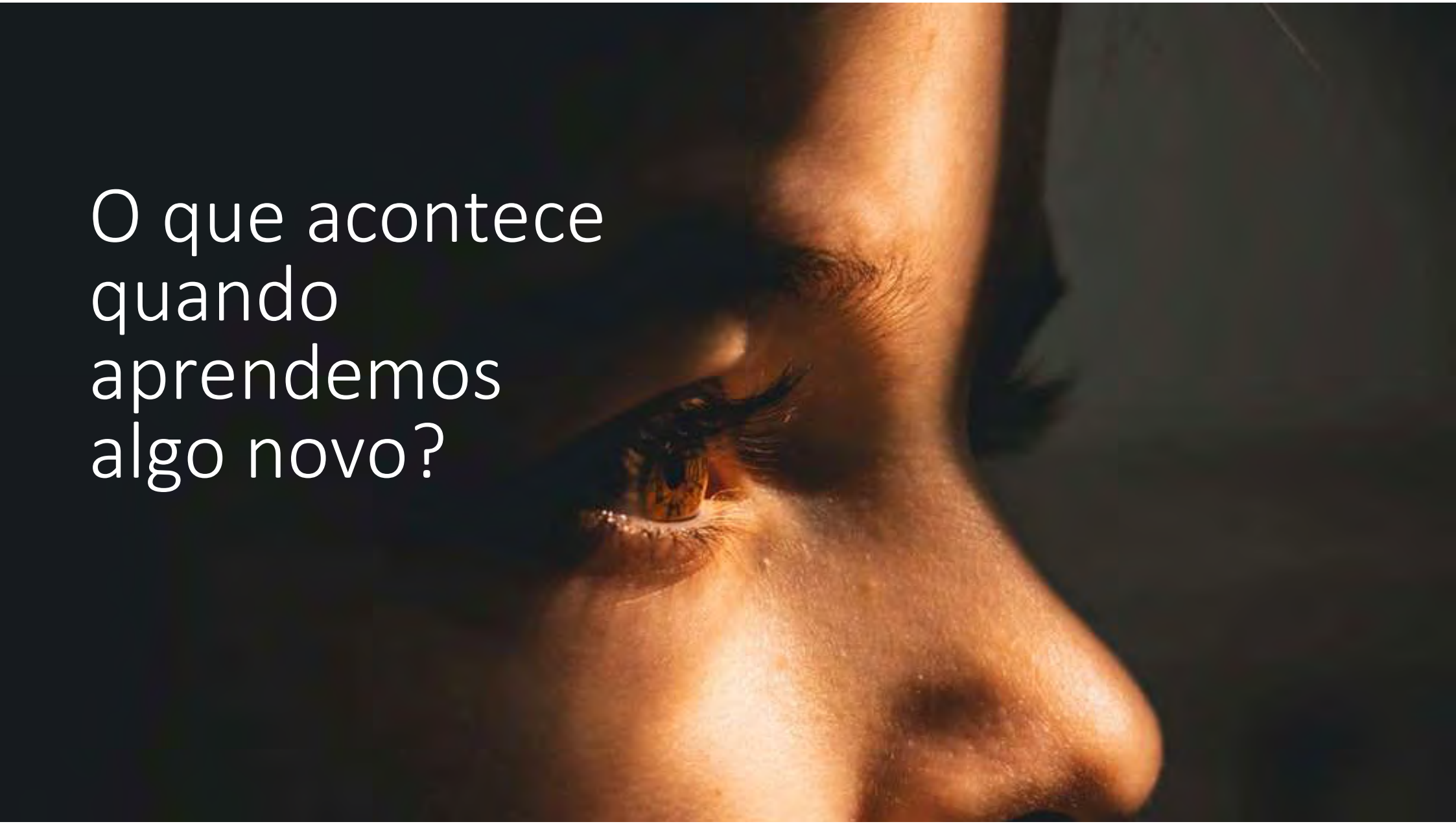

Hipóteses

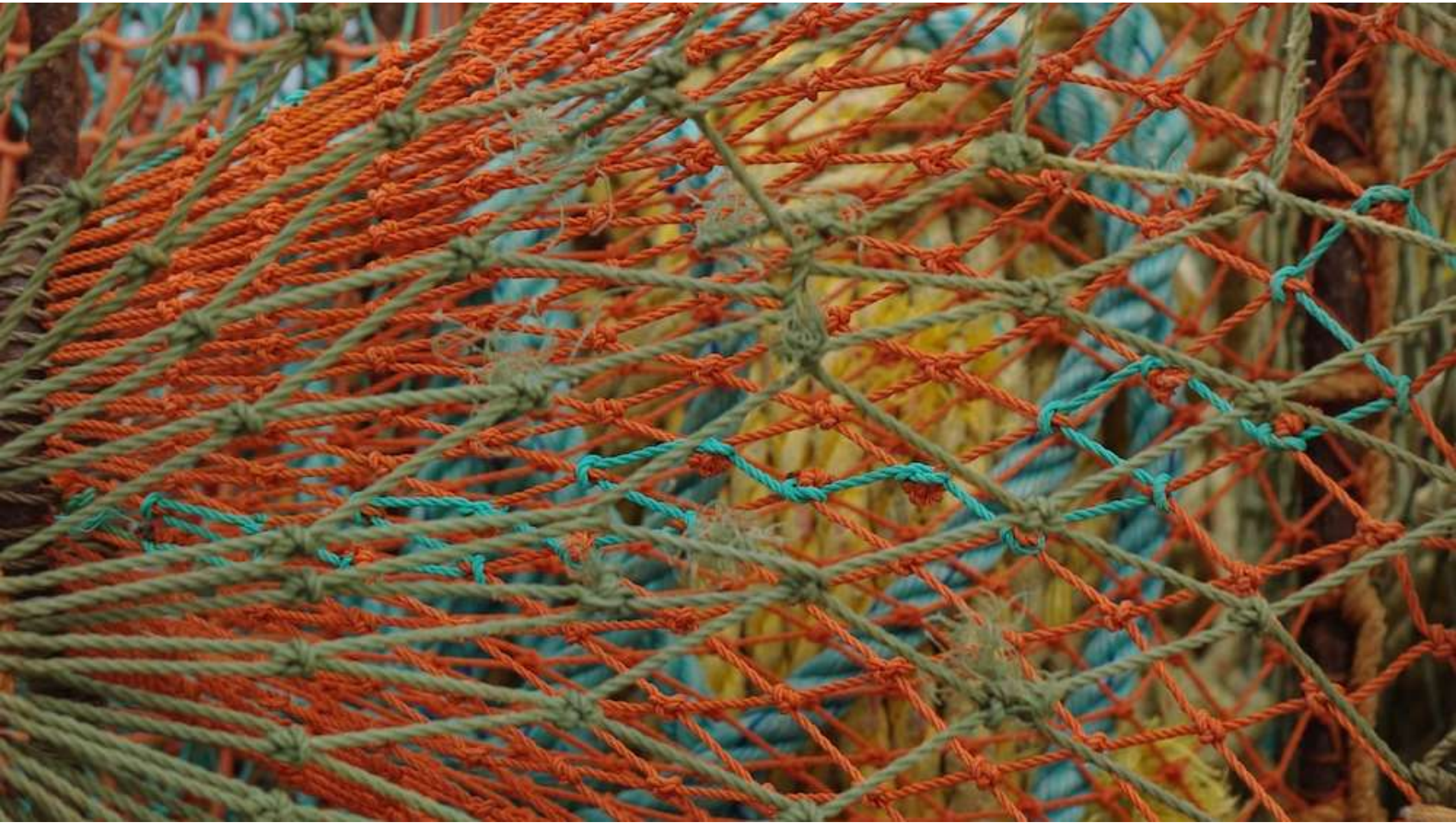

Conhecimento


Aprendizagem

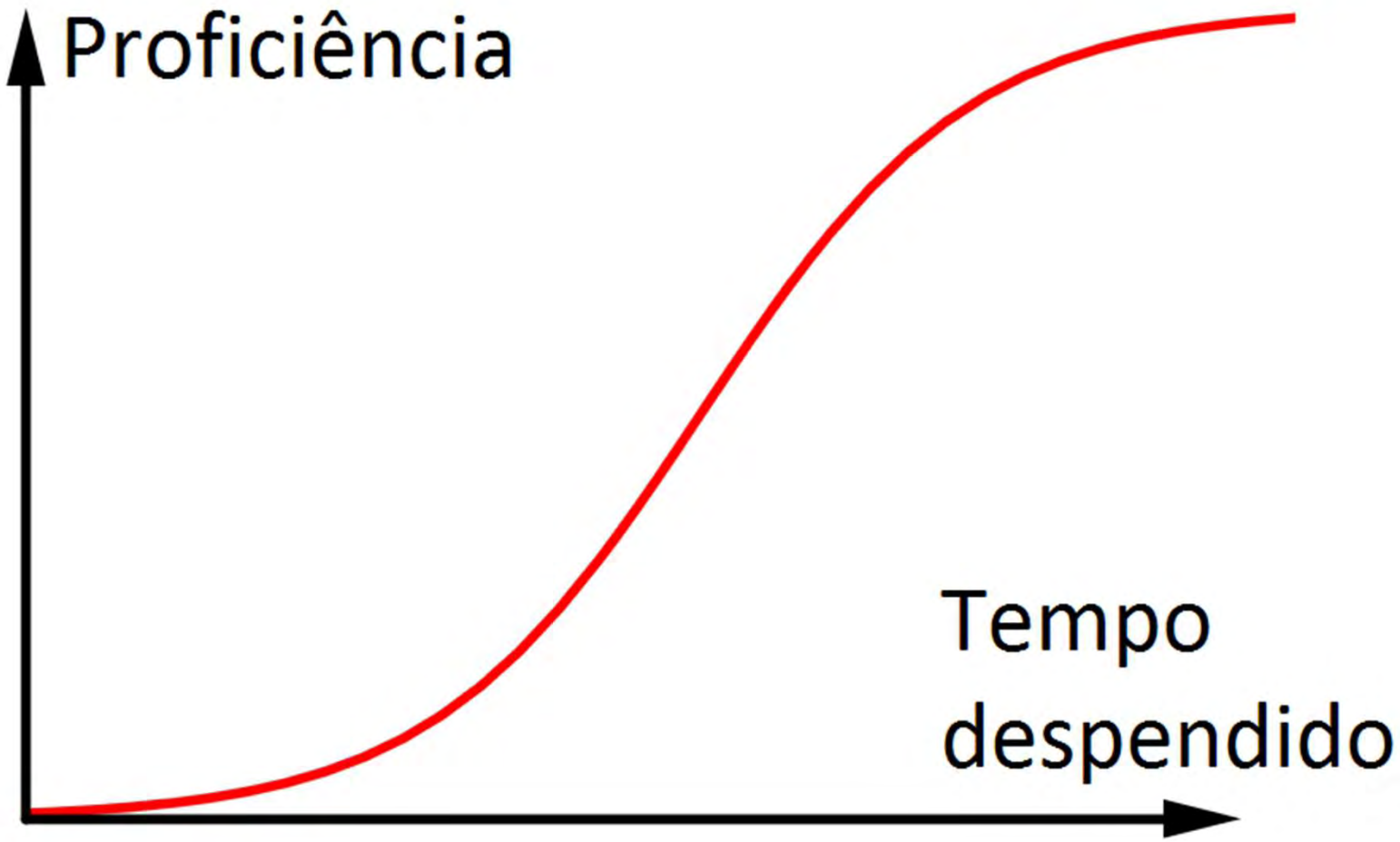

Escalar a Eficiência


Escalar a Aprendizagem

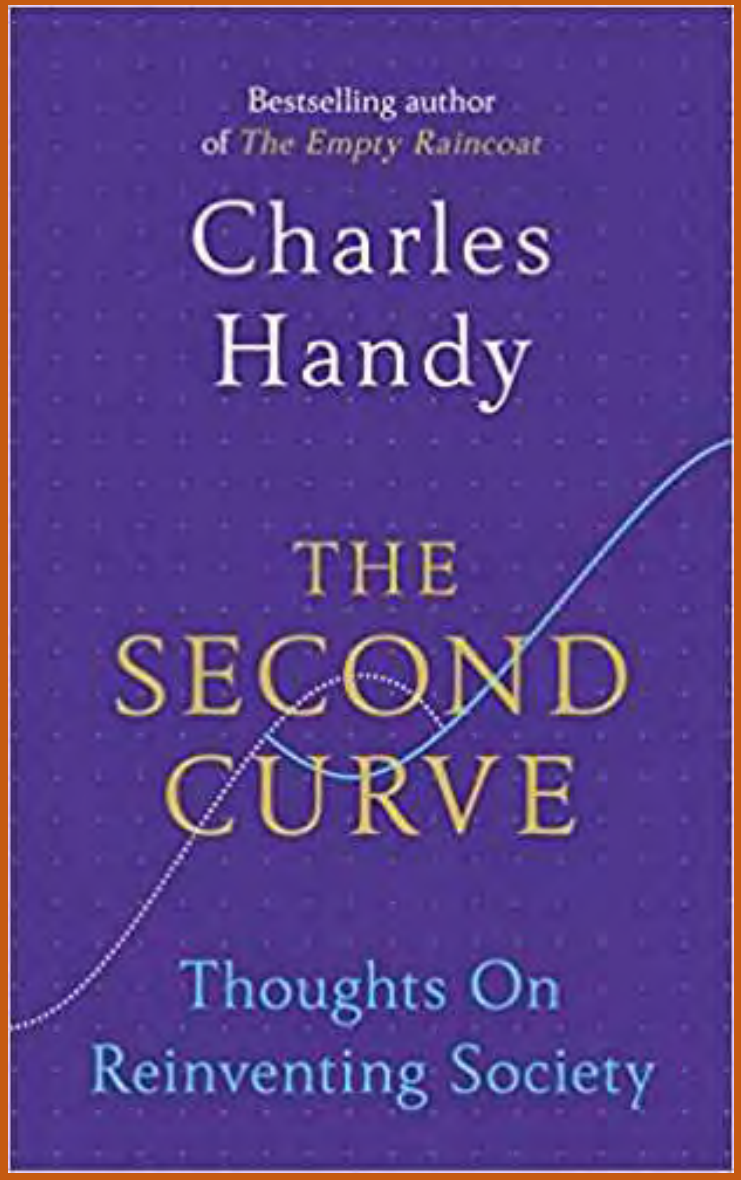

O que acontece
quando
aprendemos
algo novo?

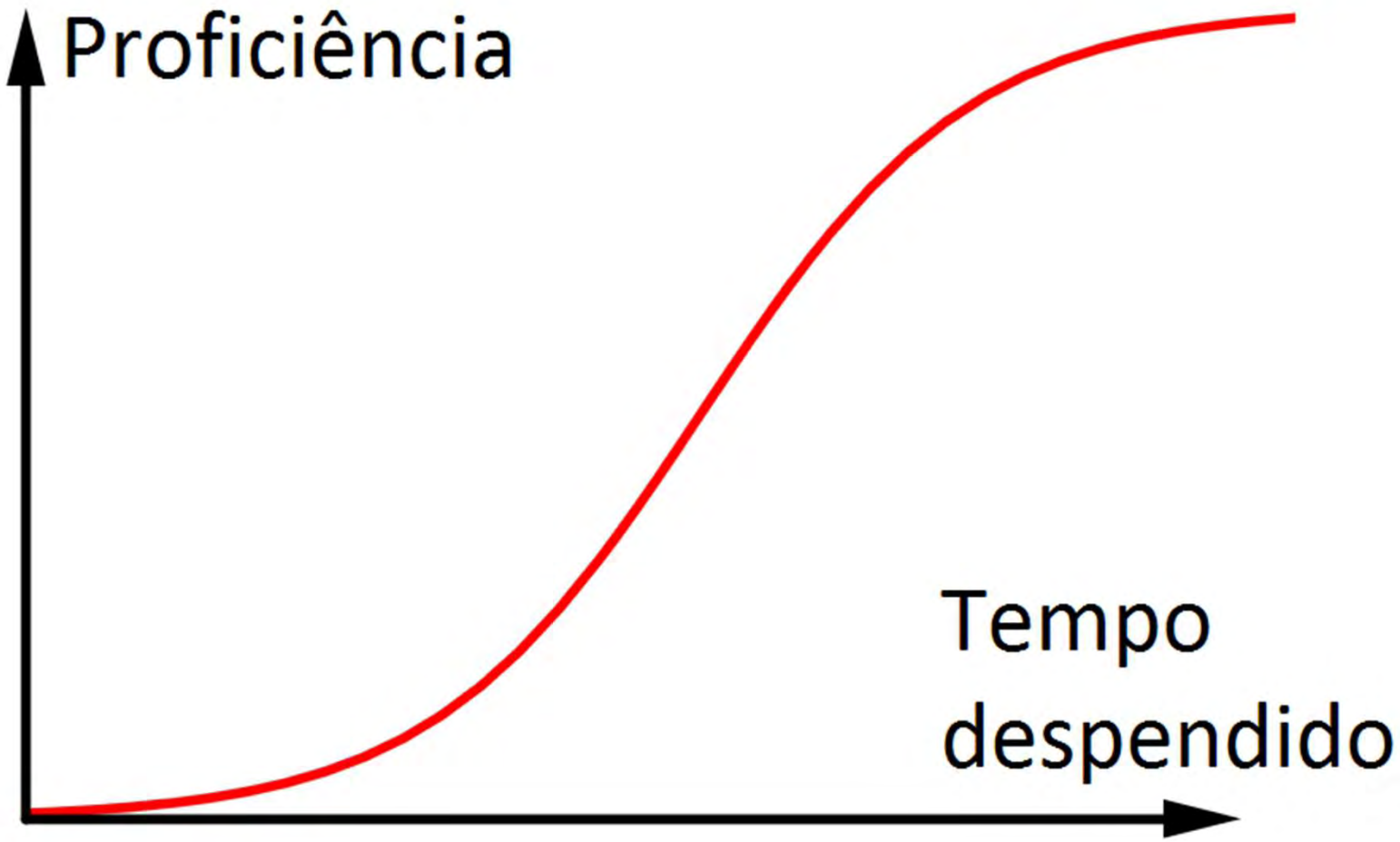


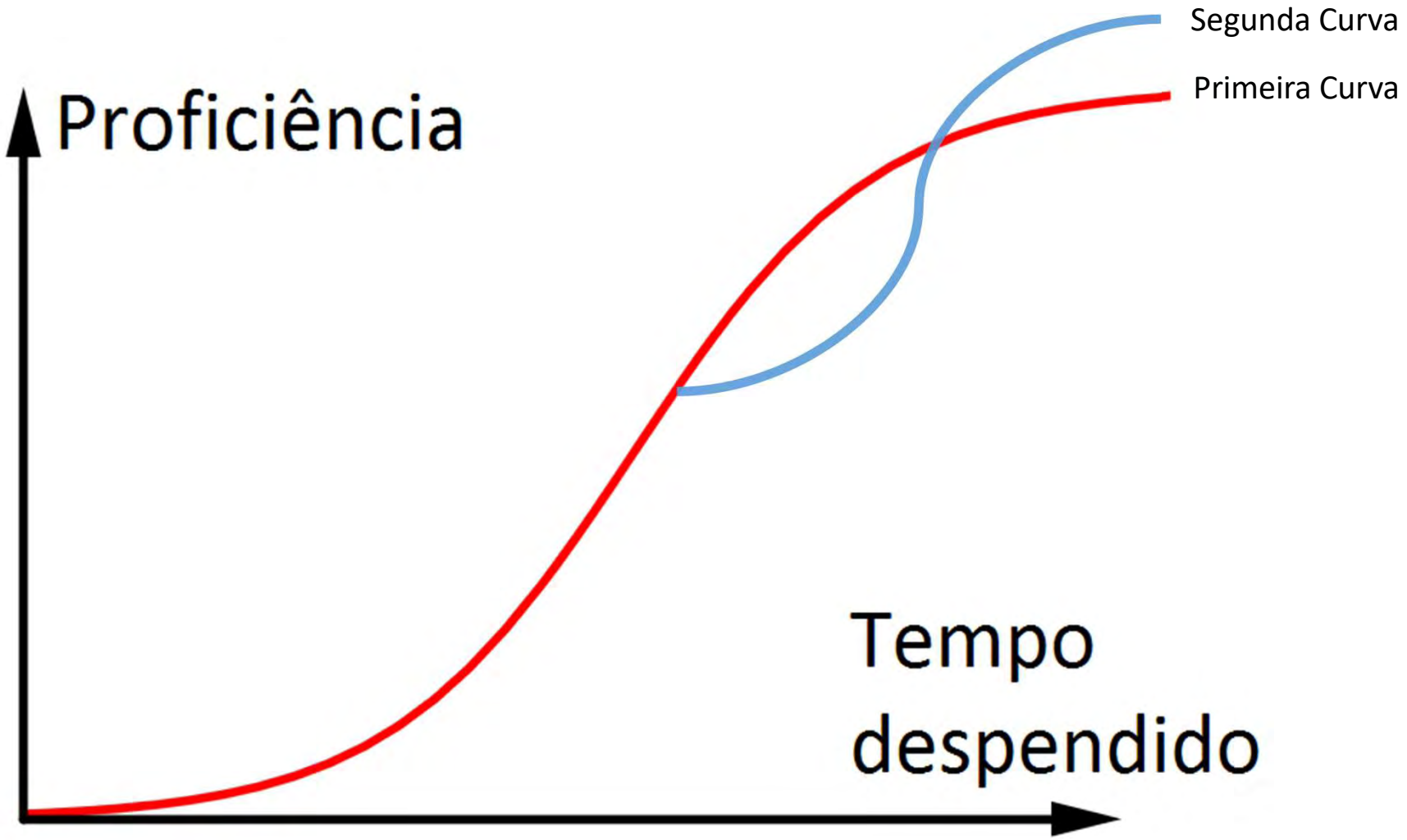
Como é que aprendemos?


Proficiência
Tempo
despendido


Charles Handy

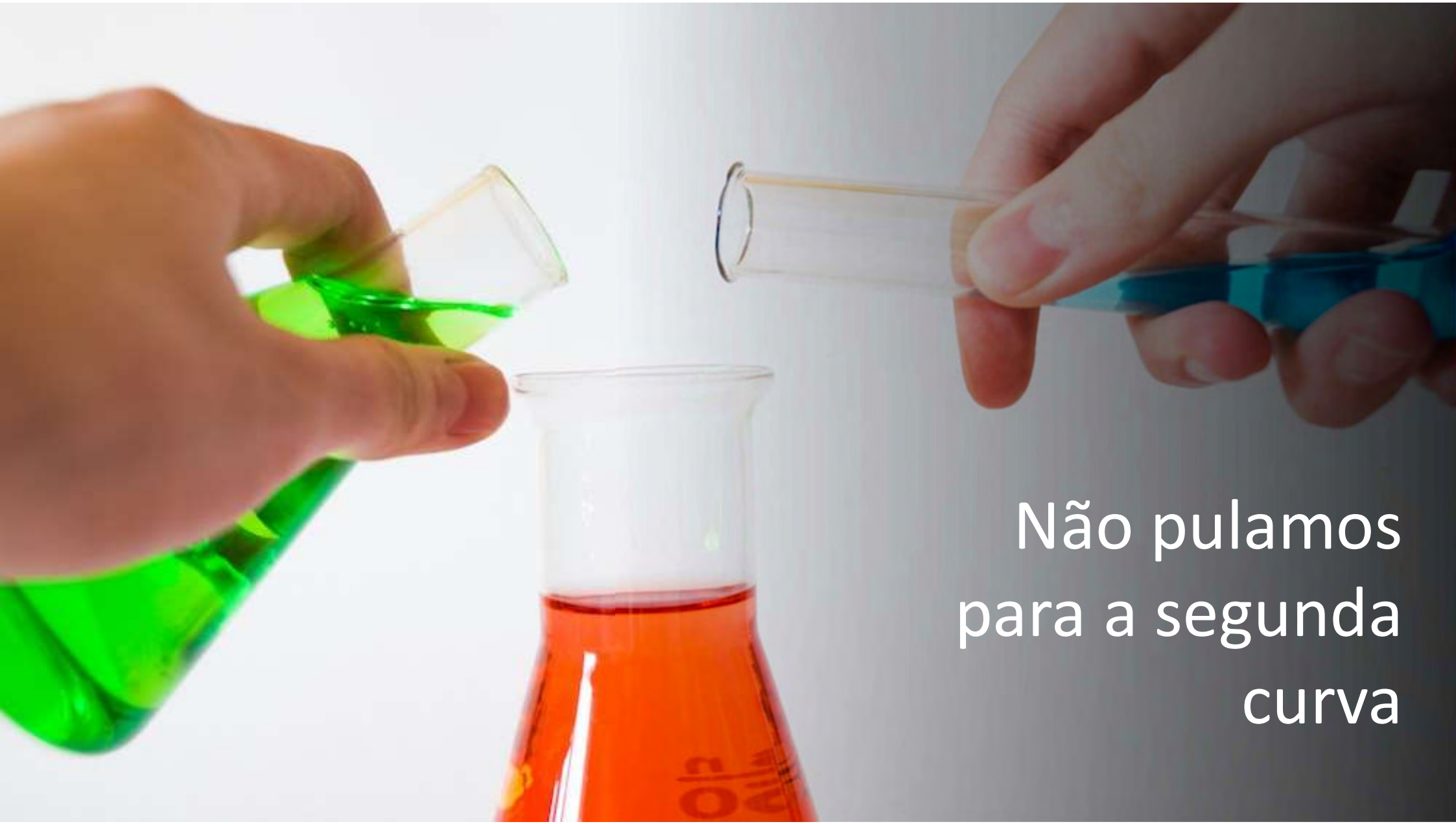

Bestselling author
of The Empty Raincoat
Charles
Handy
THE
SECOND
CURVE
Thoughts On
Reinventing Society

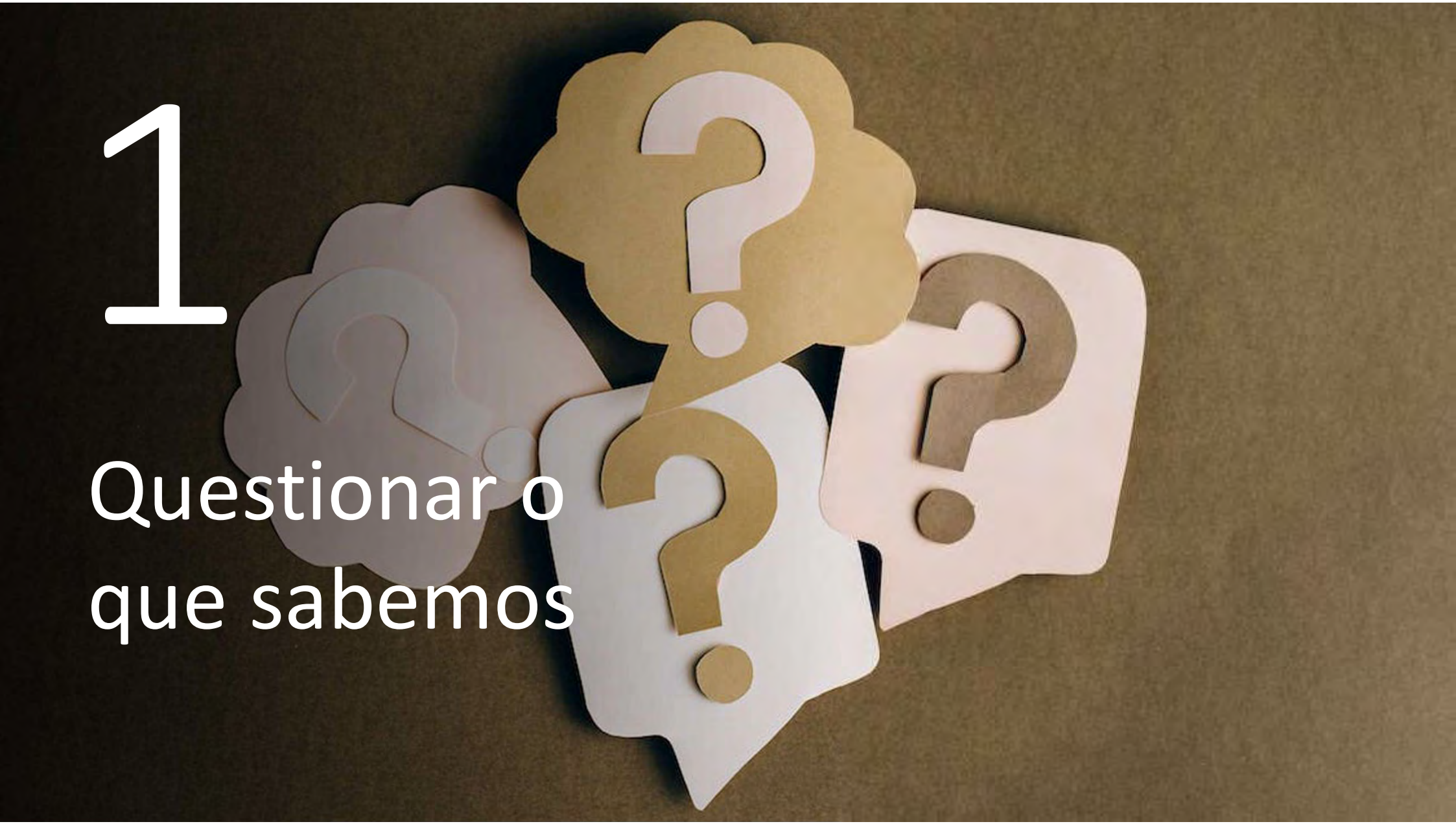

Proficiência
Tempo
despendido


Segunda Curva
Primeira Curva
Proficiência
Tempo
despendido


Lado negro…
Cognitive Entrenchment


Ficamos
atolados no
nosso
pensamento


Não pulamos
para a segunda
curva



1

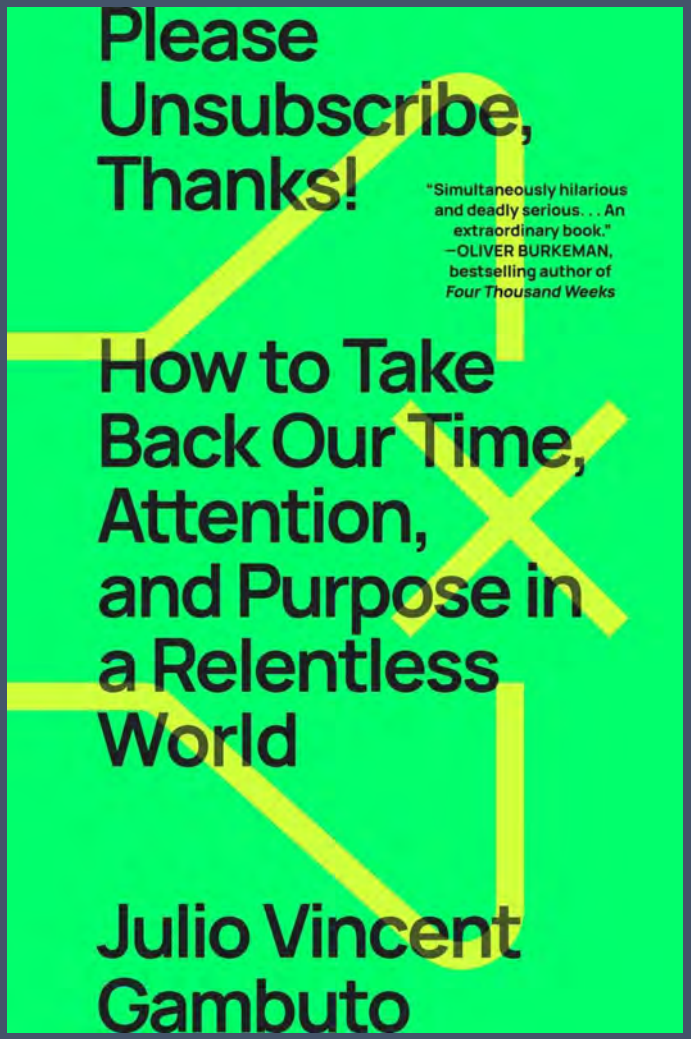
Questionar o que sabemos

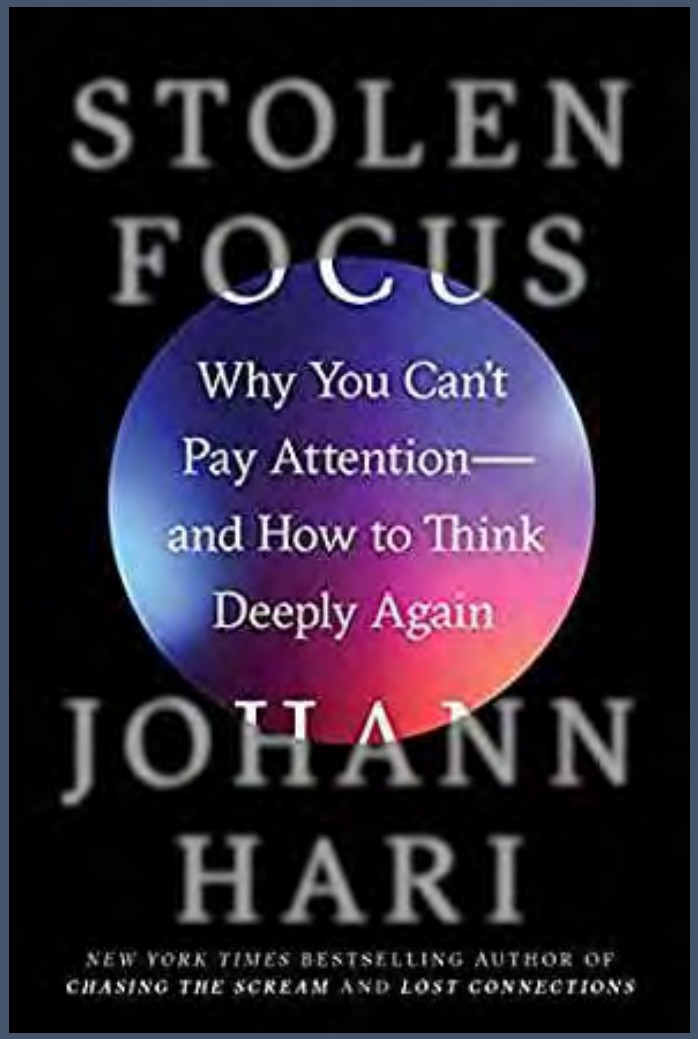

2
Foco

O que é a atenção?

Os seres humanos são biologicamente distraídos...

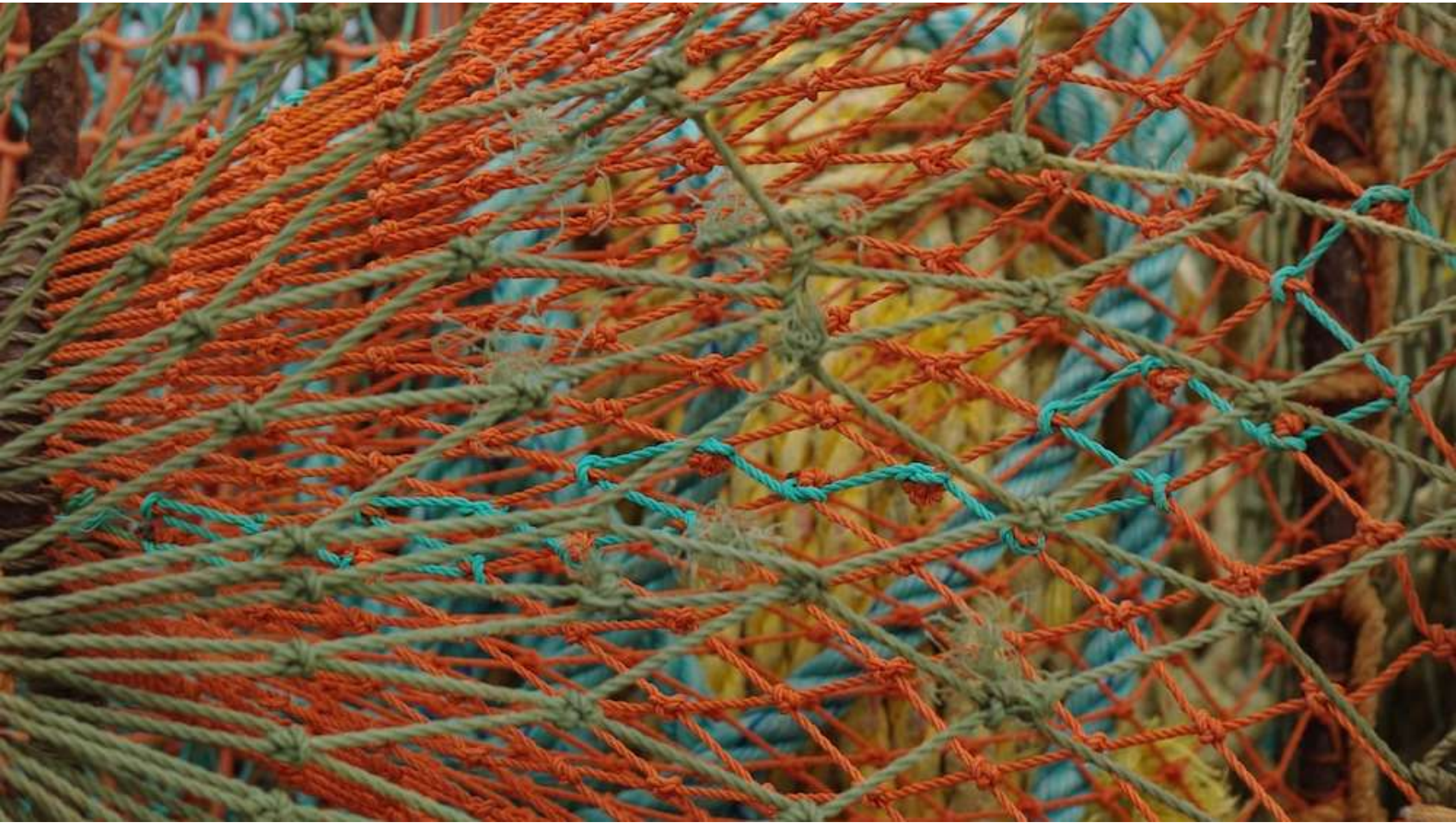

Ferramentas
mais
poderosas...


Please Unsubscribe, Thanks!
"Simultaneously hilarious and deadly serious. . . An extraordinary book."
—OLIVER BURKEMAN, bestselling author of *Four Thousand Weeks*
How to Take Back Our Time, Attention, and Purpose in a Relentless World
Julio Vincent Gambuto


STOLEN FOCUS
Why You Can't Pay Attention— and How to Think Deeply Again
JOHANN HARI
NEW YORK TIMES BESTSELLING AUTHOR OF CHASING THE SCREAM AND LOST CONNECTIONS

3 Mindset

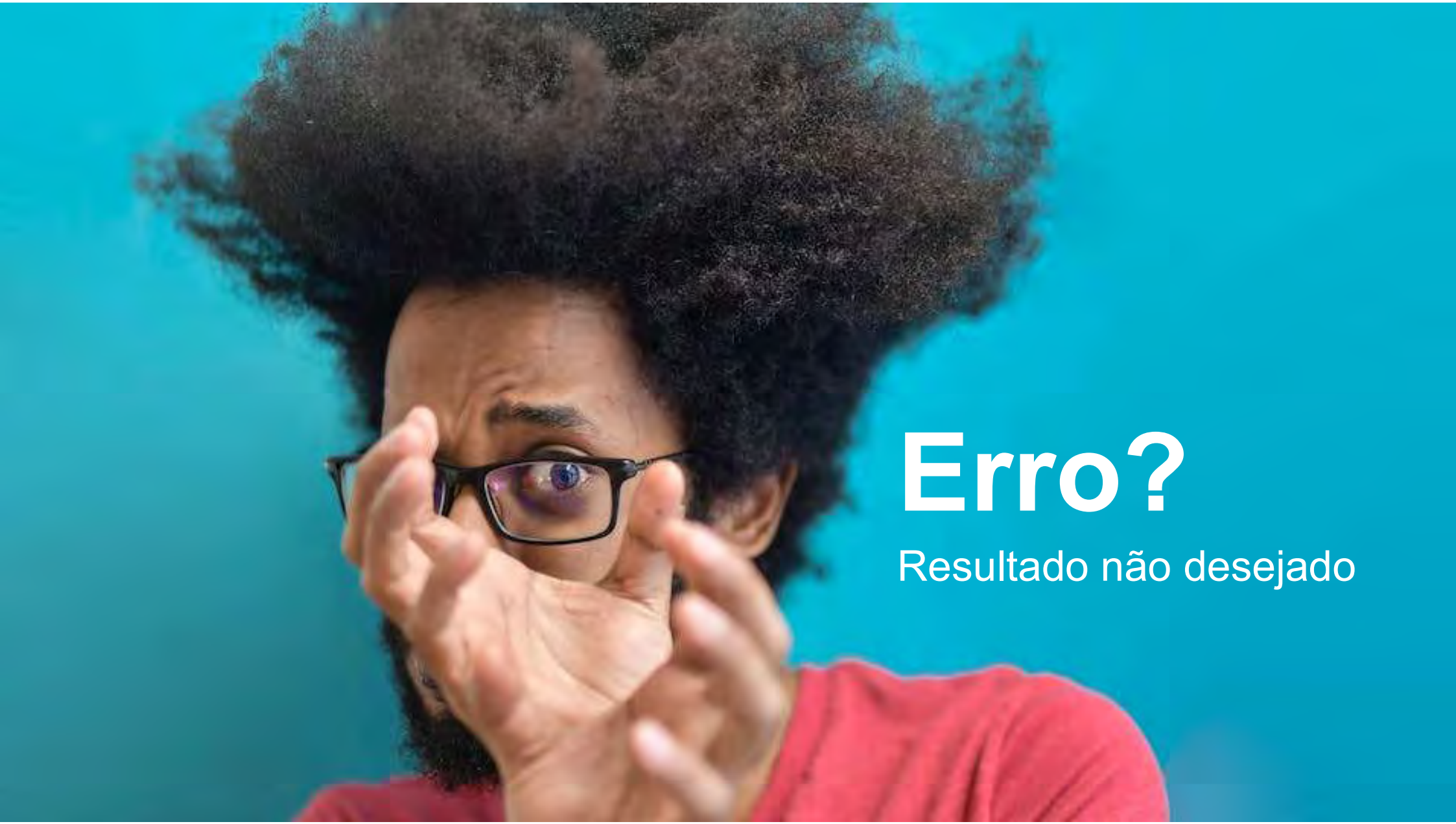

Quando me
esforço...




पाहरुको रेडिमेड पोशाक
* कस्मेटिक तथा लगनका सामान
* लेडिज अण्डर गार्मेन्टस
पोते तथा पोतेमा तिलहरी हाल्नेकाम


Como é que o Mindset se transformou num acelerador da aprendizagem e da mudança?


Erros


Erro?
Resultado não desejado


O cérebro humano aprende
através dos erros...

O cérebro toma decisões mais acertadas após um erro, diz investigação da Fundação Champalimaud

Leitura: 5 min 10 agosto, 2023 às 21:47

O investigador e neurocientista da Fundação Champalimaud, Alfonso Renart
Reinaldo Rodrigues/Arquivo Global Imagens

Response outcome gates the effect of spontaneous cortical state fluctuations on perceptual decisions

Davide Reato*†, Raphael Steinfeld†, André Tacão-Monteiro, Alfonso Renart*

Champalimaud Research, Champalimaud Foundation, Lisbon, Portugal

Abstract Sensory responses of cortical neurons are more discriminable when evoked on a baseline of desynchronized spontaneous activity, but cortical desynchronization has not generally been associated with more accurate perceptual decisions. Here, we show that mice perform more accurate auditory judgments when activity in the auditory cortex is elevated and desynchronized before stimulus onset, but only if the previous trial was an error, and that this relationship is occluded if previous outcome is ignored. We confirmed that the outcome-dependent effect of brain state on performance is neither due to idiosyncratic associations between the slow components of either signal, nor to the existence of specific cortical states evident only after errors. Instead, errors appear to gate the effect of cortical state fluctuations on discrimination accuracy. Neither facial movements nor pupil size during the baseline were associated with accuracy, but they were predictive of measures of responsivity, such as the probability of not responding to the stimulus or of responding prematurely. These results suggest that the functional role of cortical state on behavior is dynamic and constantly regulated by performance monitoring systems.

Depois de cometer um erro, o cérebro humano muda...
Para evitar cometer os mesmos erros.

Aprendemos sempre quando cometemos erros?

How Your Brain Reacts To Mistakes Depends On Your Mindset

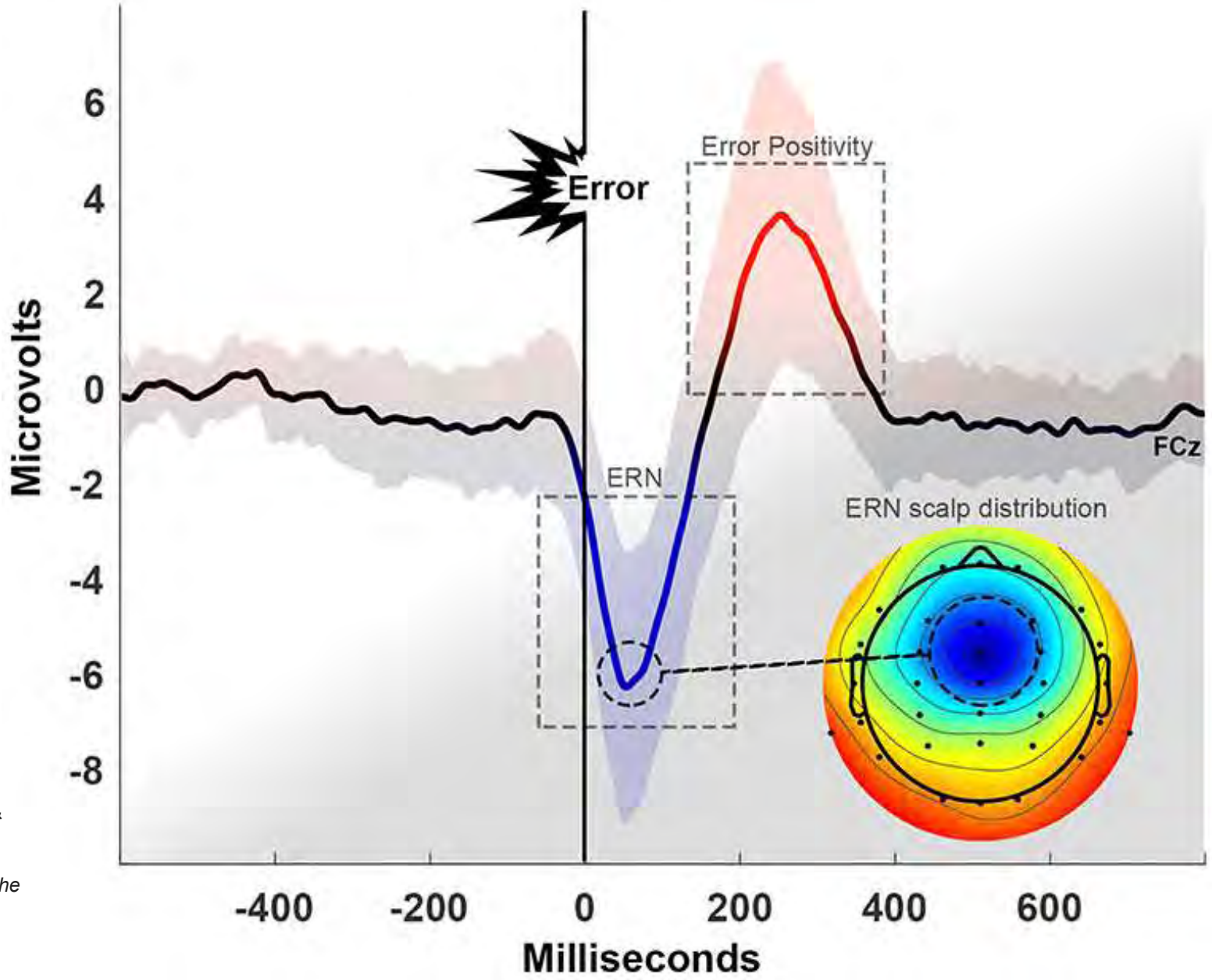
September 29, 2011

TAGS: ATTENTION | BRAIN | INTELLIGENCE | NEUROSCIENCE | PSYCHOLOGICAL SCIENCE | SOCIAL BEHAVIOR

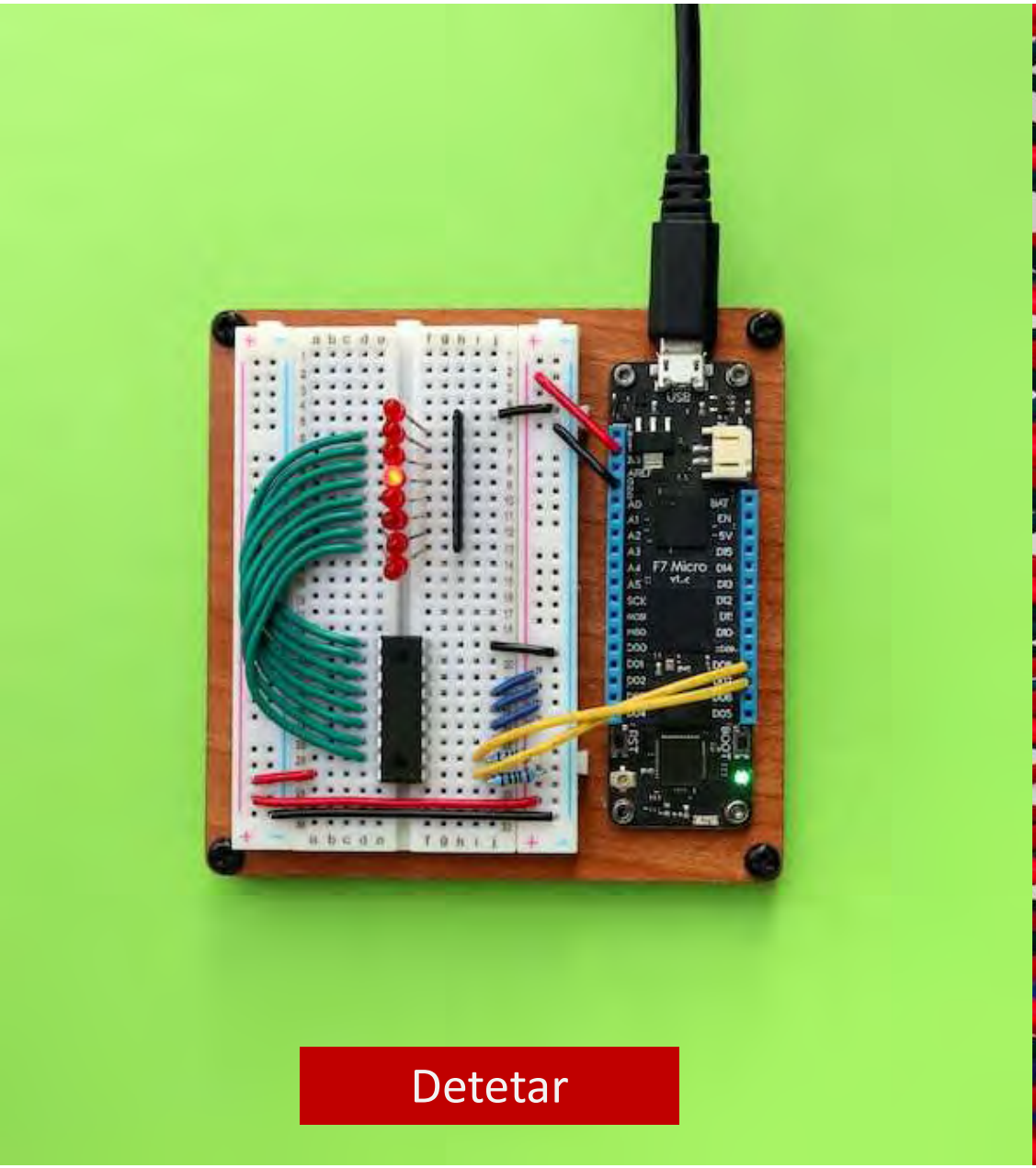
"Whether you think you can or think you can't—you're right," said Henry Ford. A new study, to be published in an upcoming issue of *Psychological Science*, a journal of the Association for Psychological Science, finds that people who think they can learn from their mistakes have a different brain reaction to mistakes than people who think intelligence is fixed.

"One big difference between people who think intelligence is malleable and those who think intelligence is fixed is how they respond to mistakes," says Jason S. Moser, of Michigan State University, who collaborated on the new study with Hans S. Schroder, Carrie Heeter, Tim P. Moran, and Yu-Hao Lee. Studies have found that people who think intelligence is malleable say things like, "When the going gets tough, I put in more effort" or "If I make a mistake, I try to learn and figure it out." On the other hand, people who think that they can't get smarter will not take opportunities to learn from their mistakes. This can be a problem in school, for example; a student who thinks her intelligence is fixed will think it's not worth bothering to try harder after she fails a test.

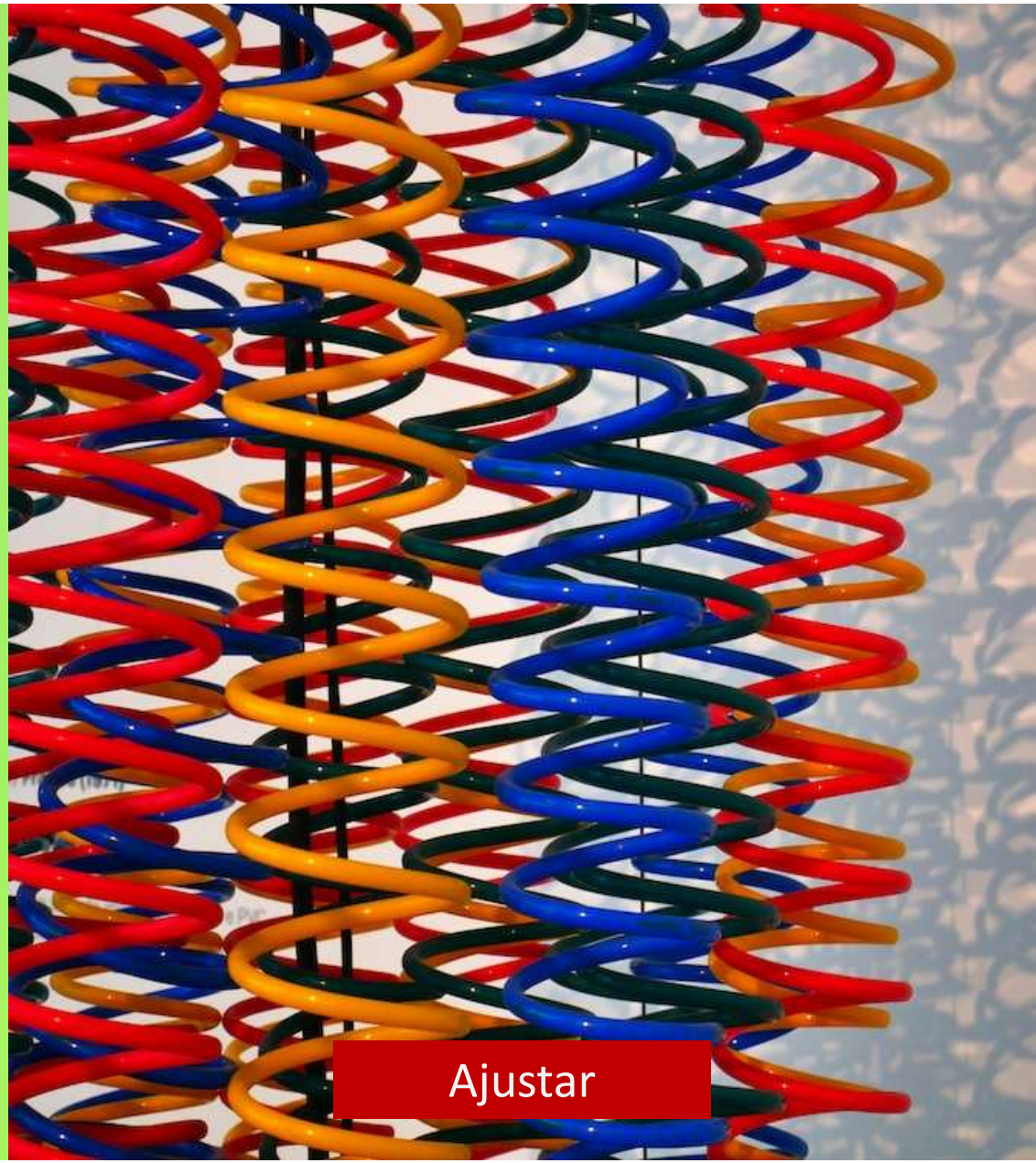
Eletroencefalograma (EEG)



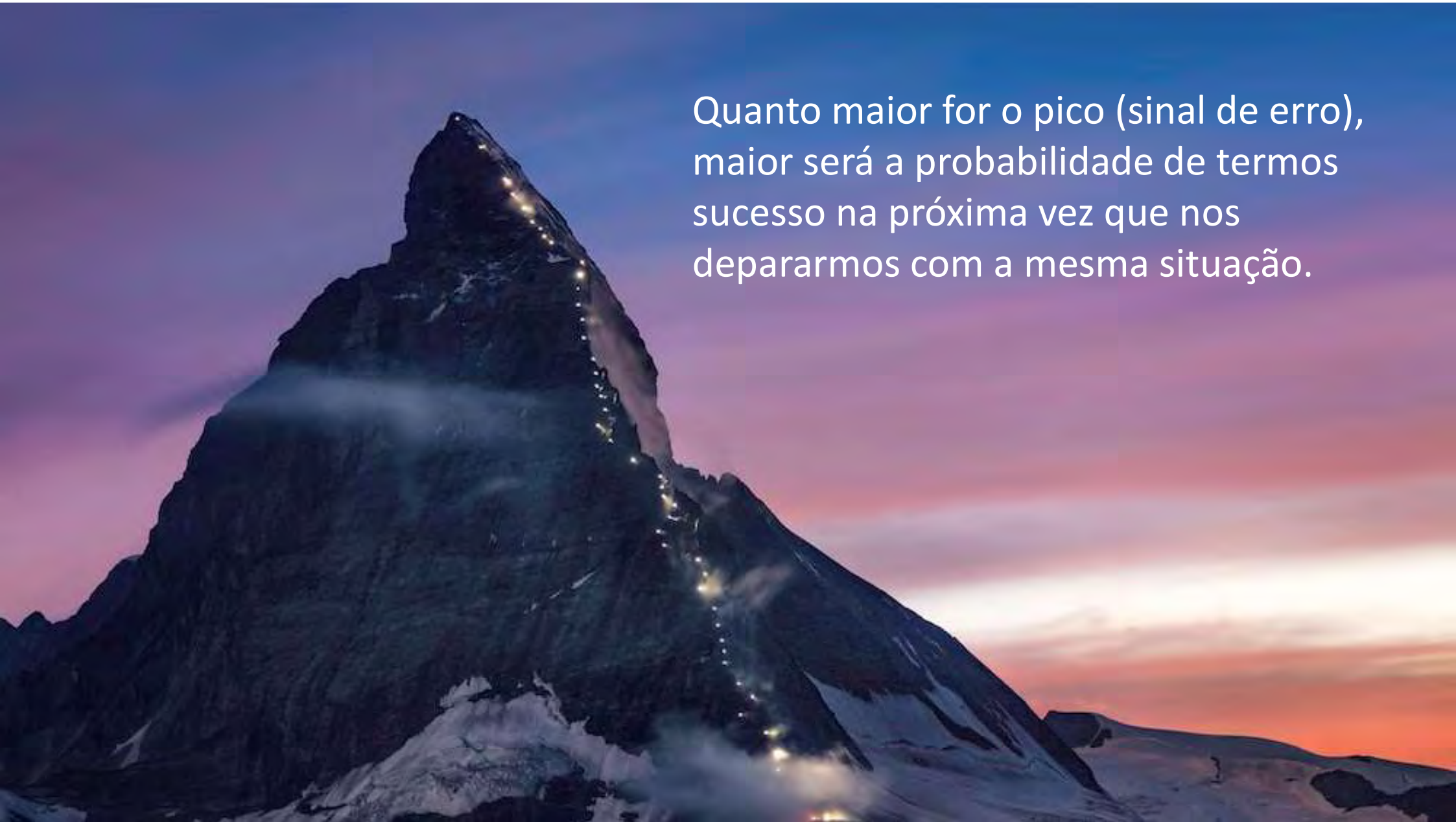
Source: Overbye, K., Bøen, R., Huster, R. J., & Tamnes, C. K. (2020). Learning from mistakes: How does the brain handle errors?. *Everything You and Your Teachers Need to Know About the Learning Brain*, 20.



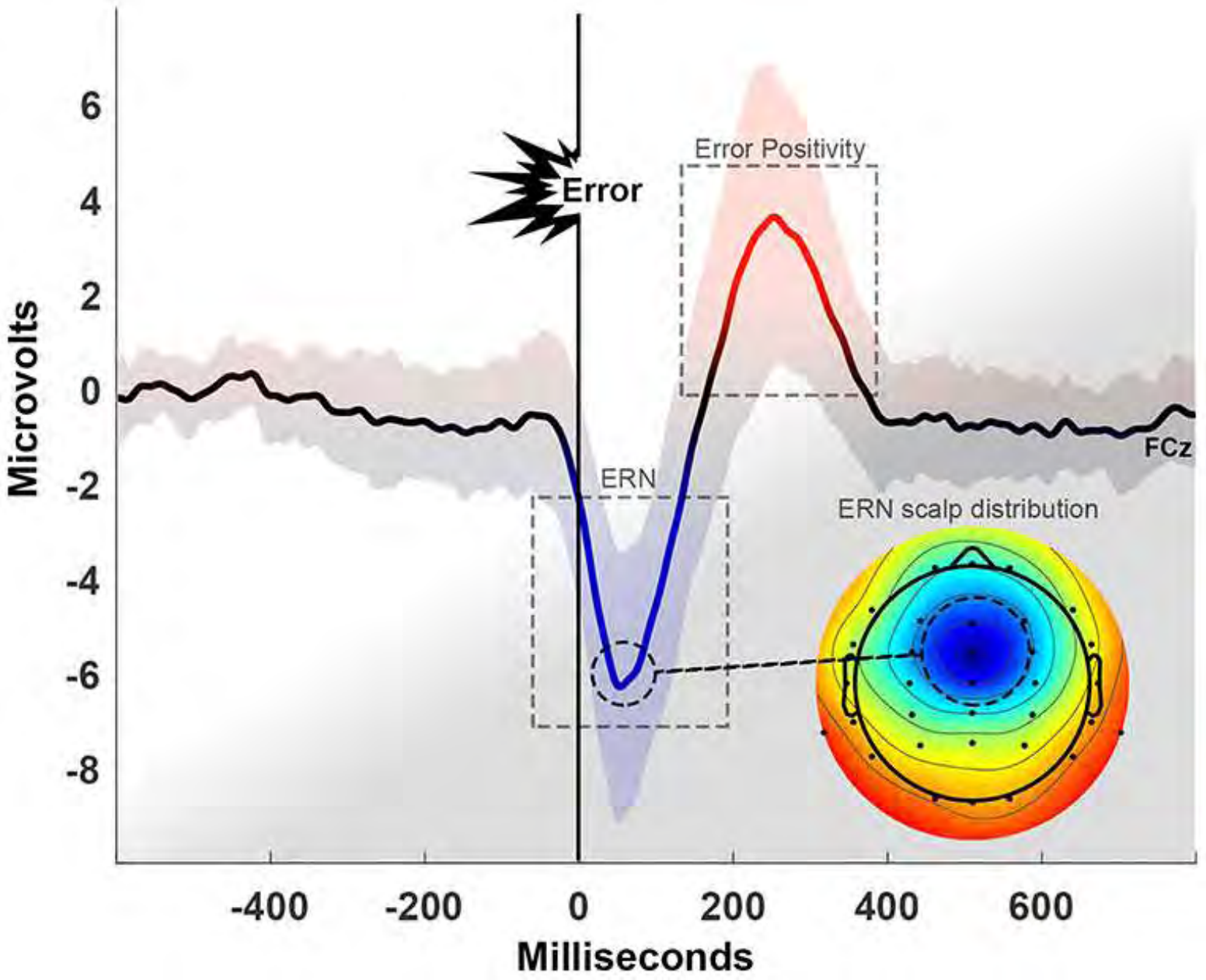
Detetar



Ajustar


Quanto maior for o pico (sinal de erro), maior será a probabilidade de termos sucesso na próxima vez que nos depararmos com a mesma situação.

Depois de cometermos um erro, ficamos mais lentos.



Source: Overbye, K., Bøen, R., Huster, R. J., & Tamnes, C. K. (2020). Learning from mistakes: How does the brain handle errors?. *Everything You and Your Teachers Need to Know About the Learning Brain*, 20.

Research Report

Psychological Scien
22(12) 1484–1489
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DOI: 10.1177/0956
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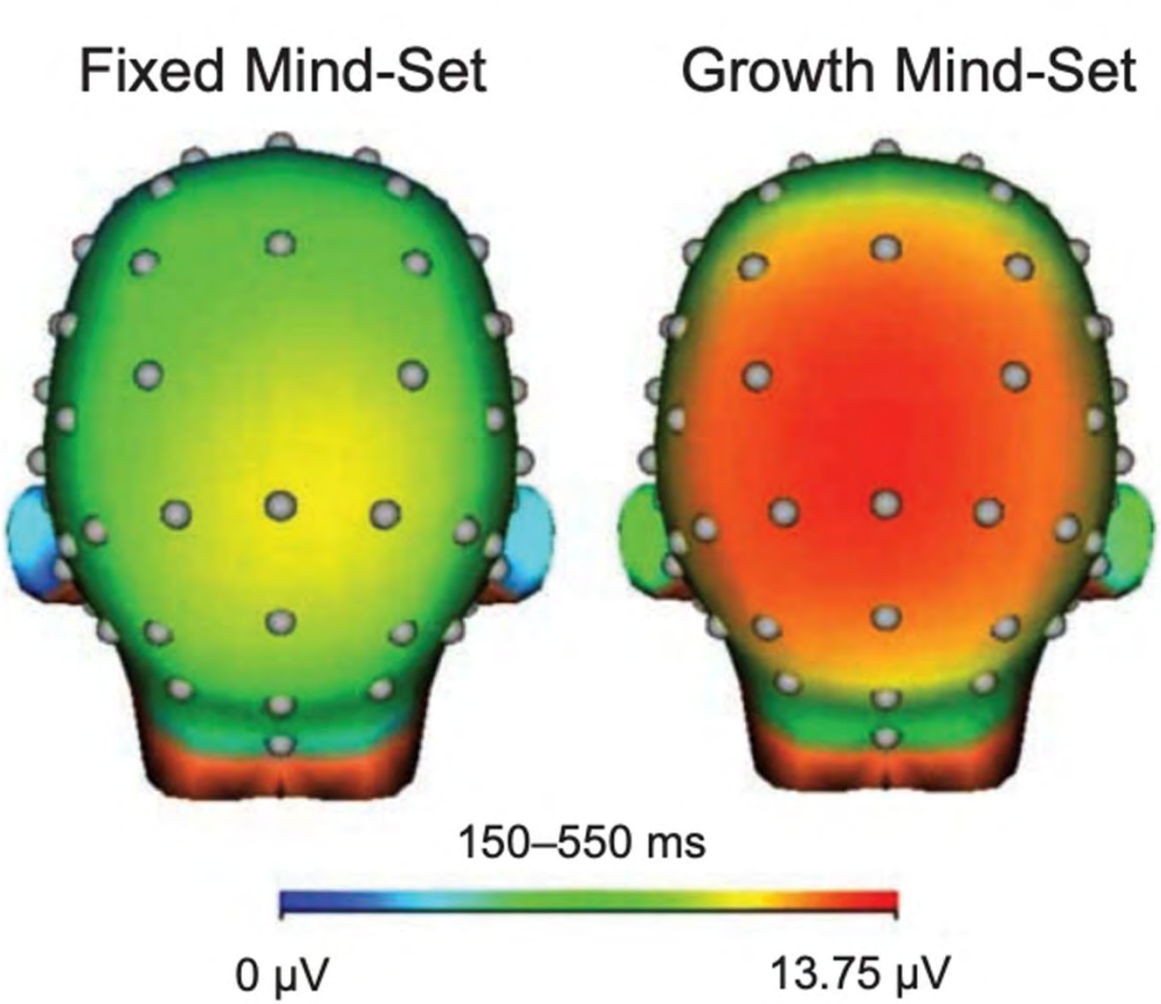
Mind Your Errors: Evidence for a Neural Mechanism Linking Growth Mind-Set to Adaptive Posterror Adjustments

Jason S. Moser[1], Hans S. Schroder[1], Carrie Heeter[2], Tim P. Moran[1], and Yu-Hao Lee[2]

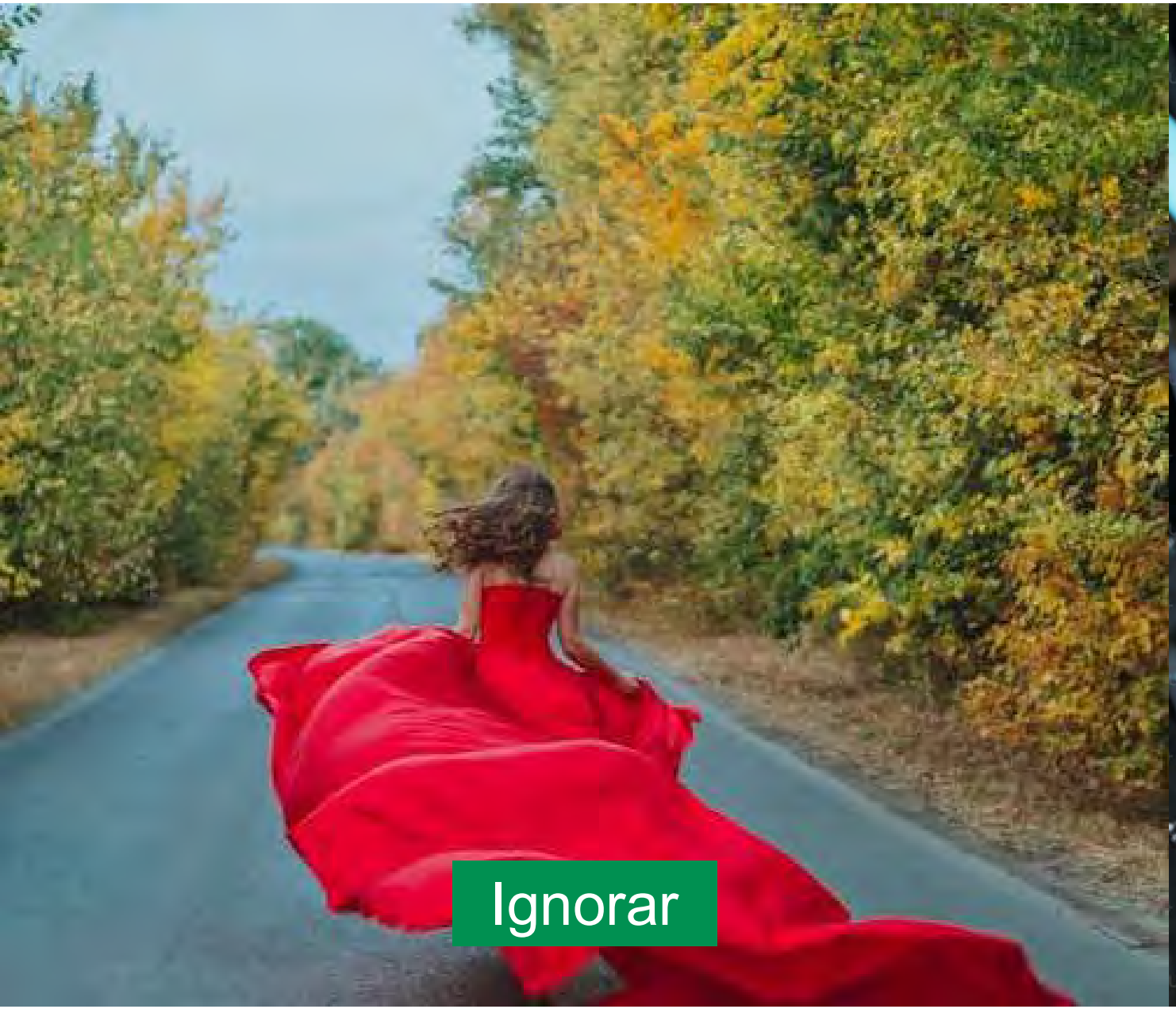
[1]Department of Psychology and [2]Department of Telecommunications, Information Studies, and Media, Michigan State University

Abstract

How well people bounce back from mistakes depends on their beliefs about learning and intelligence. For indiv growth mind-set, who believe intelligence develops through effort, mistakes are seen as opportunities to learn and individuals with a fixed mind-set, who believe intelligence is a stable characteristic, mistakes indicate lack of ability. V performance-monitoring event-related potentials (ERPs) to probe the neural mechanisms underlying these differen mistakes. Findings revealed that a growth mind-set was associated with enhancement of the error positivity compone reflects awareness of and allocation of attention to mistakes. More growth-minded individuals also showed supe after mistakes compared with individuals endorsing a more fixed mind-set. It is critical to note that Pe amplitude relationship between mind-set and posterror accuracy. These results suggest that neural mechanisms indexing on-li of and attention to mistakes are intimately involved in growth-minded individuals' ability to rebound from mistakes.



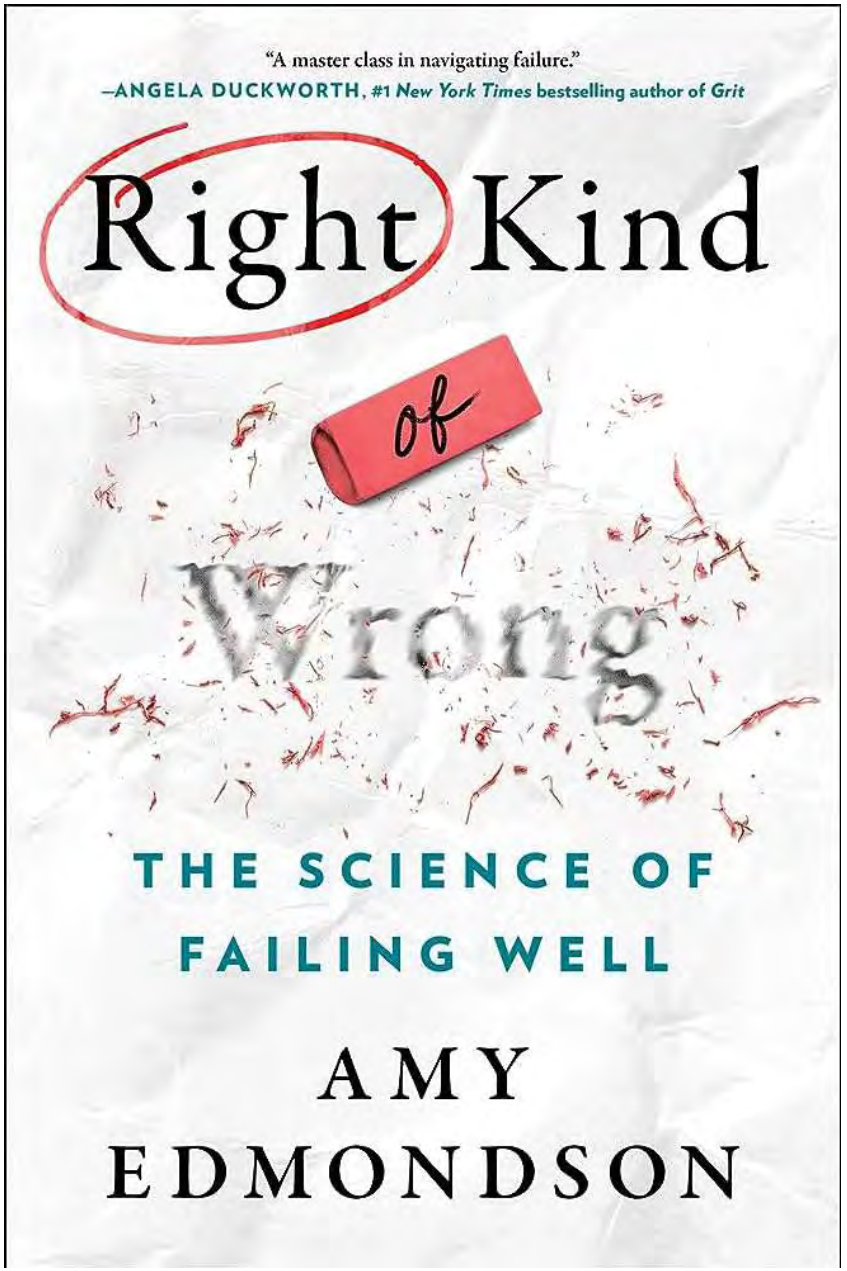
Source: Moser, J. S., Schroder, H. S., Heeter, C., Moran, T. P., & Lee, Y. H. (2011). Mind your errors: Evidence for a neural mechanism linking growth mind-set to adaptive posterror adjustments. *Psychological science*, *22*(12), 1484-1489.


Ignorar

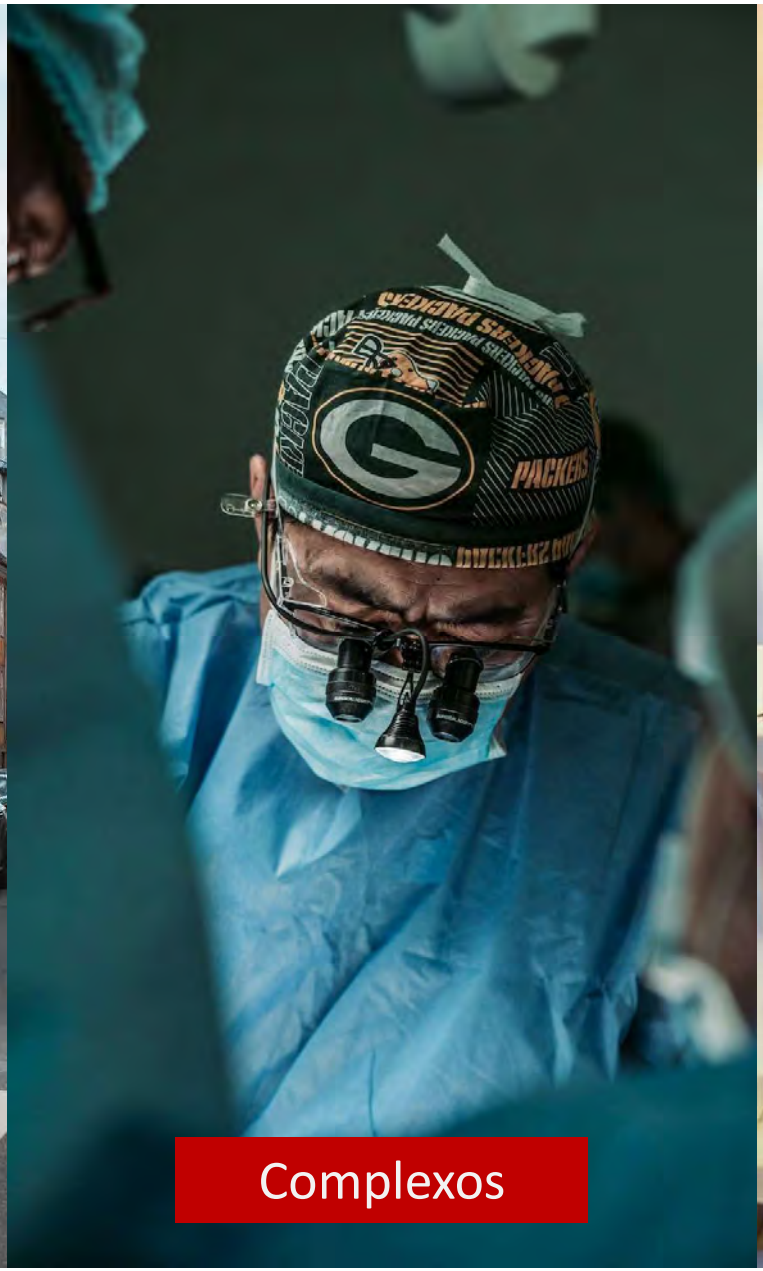

Corrigir

4

Dominar a arte de errar bem


"A master class in navigating failure."
–ANGELA DUCKWORTH, #1 New York Times bestselling author of Grit
Right Kind
of
Wrong
THE SCIENCE OF
FAILING WELL
AMY
EDMONDSON

Básicos



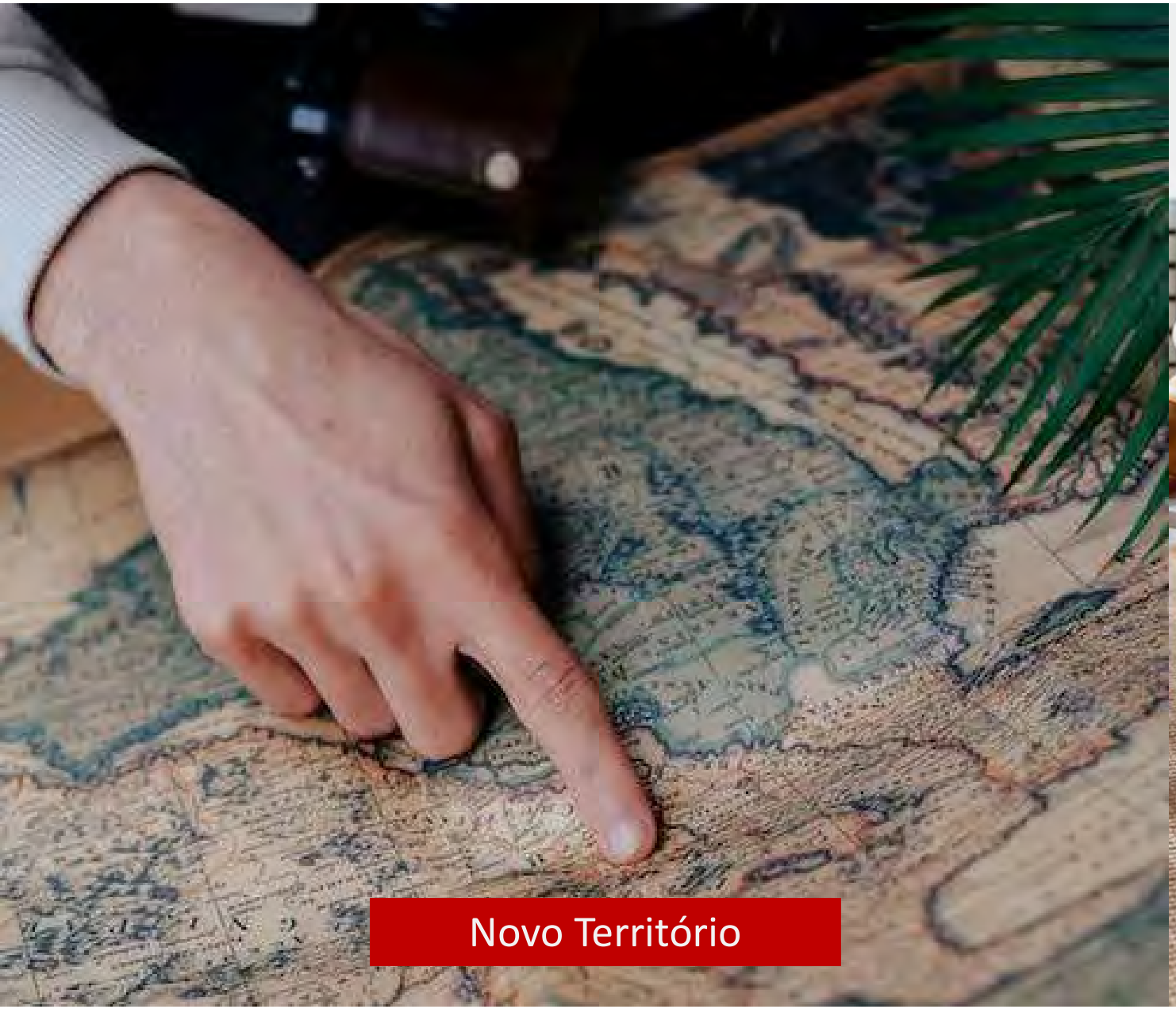
Complexos

Inteligentes

4 criterios


Perseguir um objetivo


Hipótese

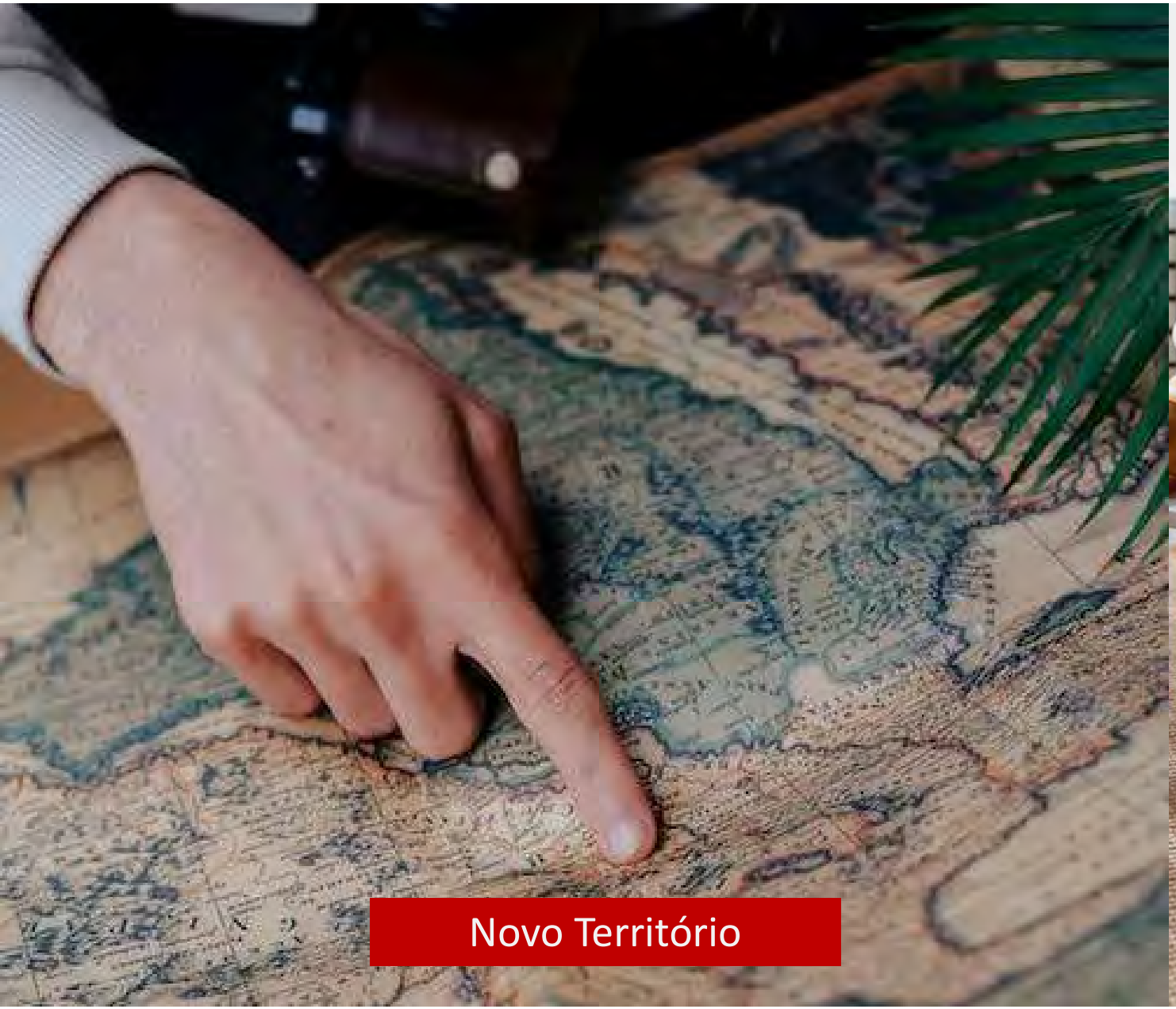

Novo Território


Custo e âmbito, o menor possível


Cristóvão Colombo?


Perseguir um objetivo


Hipótese

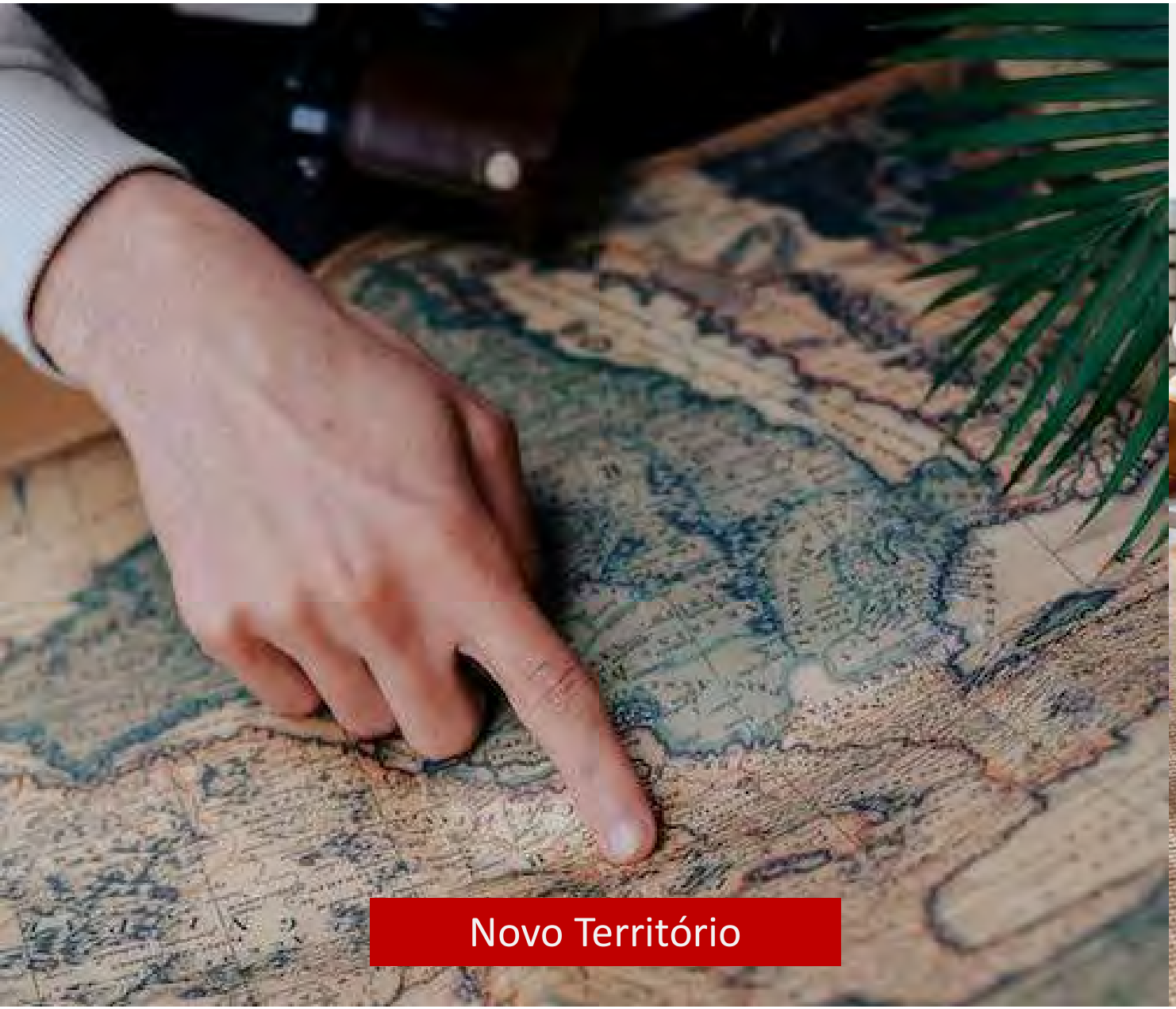

Novo Território


Custo e âmbito, o menor possível


Blind Date que corre mal?


Perseguir um objetivo


Hipótese


Novo Território


Custo e âmbito, o menor possível

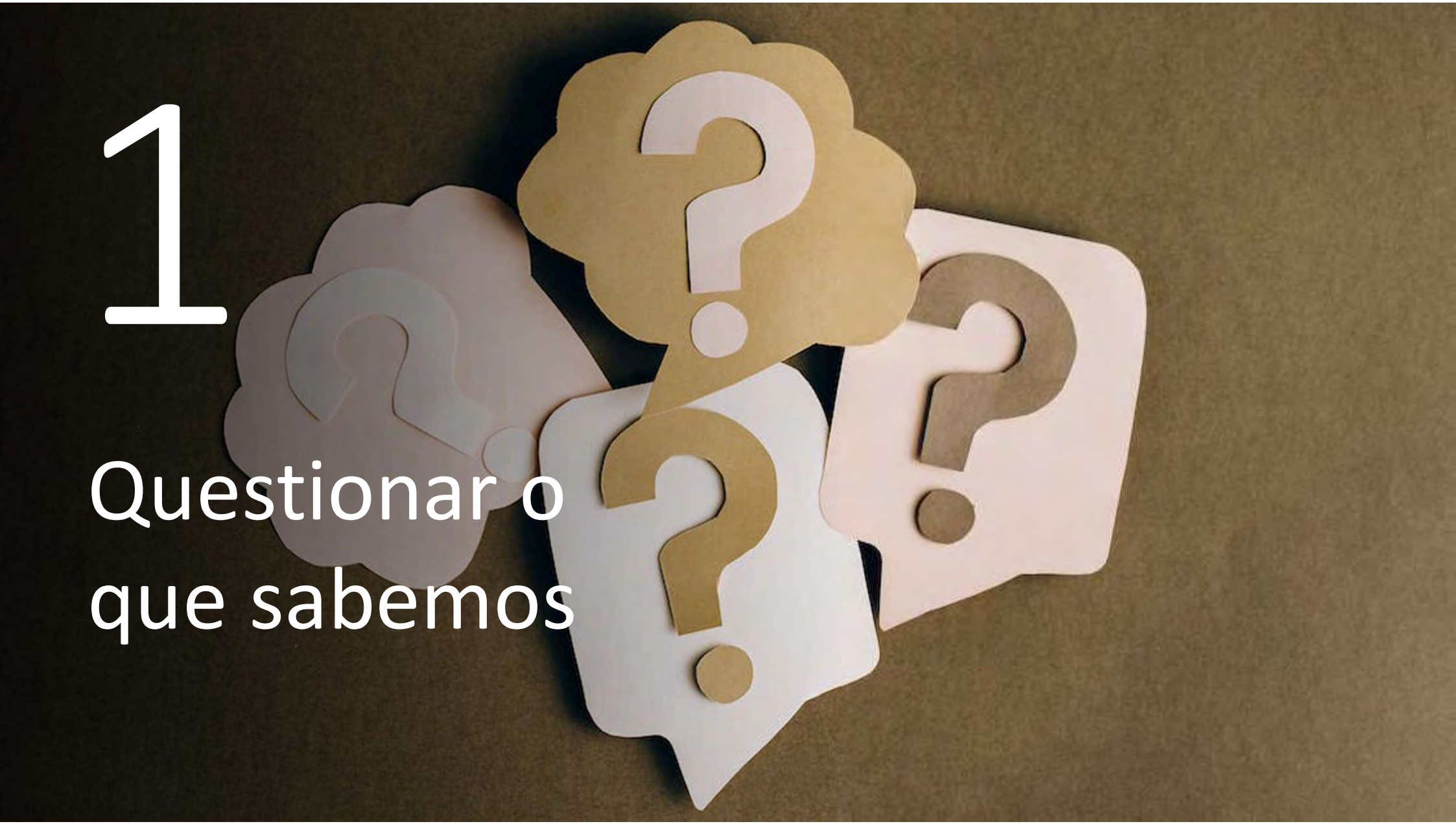

Queda de um Avião?

Estratégia de decisão (CRM)
“Cockpit Resource Management”

Estudo da NASA de 1970.
“GOD Like certainty” do piloto.

Segurança psicológica nasceu de um erro

HIP: Melhores equipas = cometem menos erros médicos



1

Questionar o que sabemos


2
Foco

3 Mindset

4

Dominar a arte de errar bem


Obrigada.