



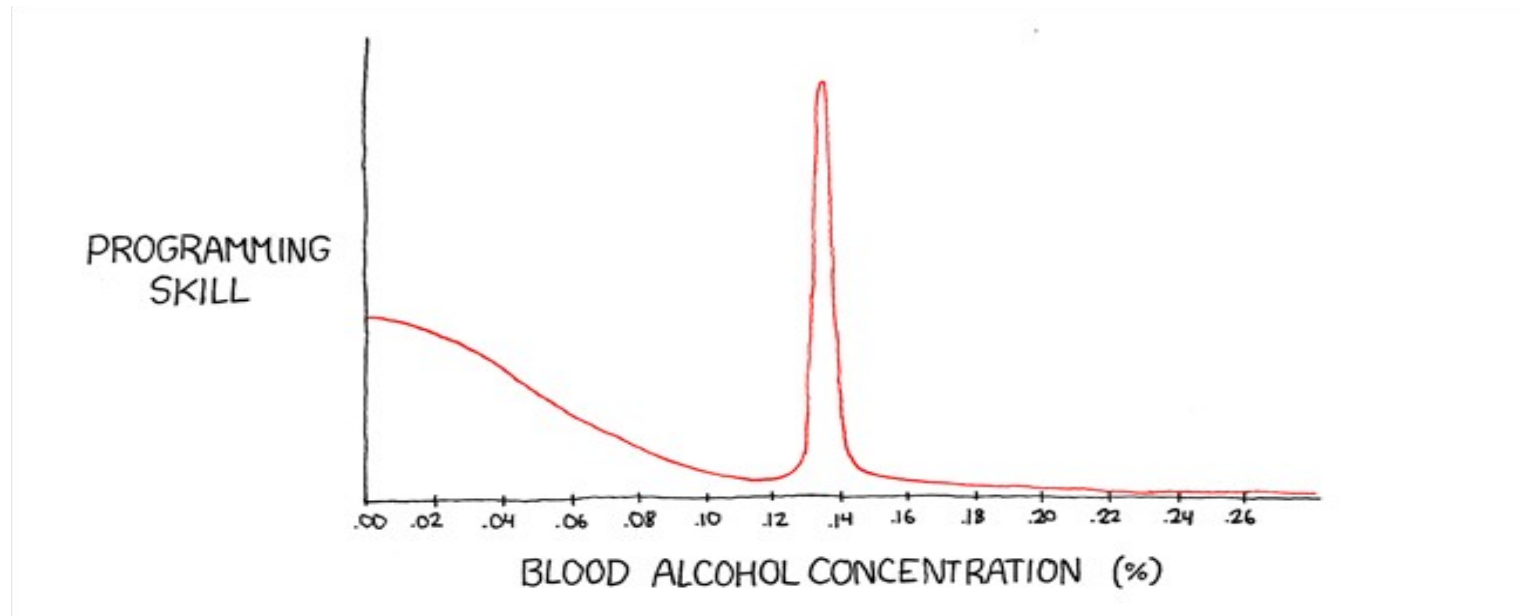
BDR:

Deeper Insight Into the Philosophy

Marián Šimko

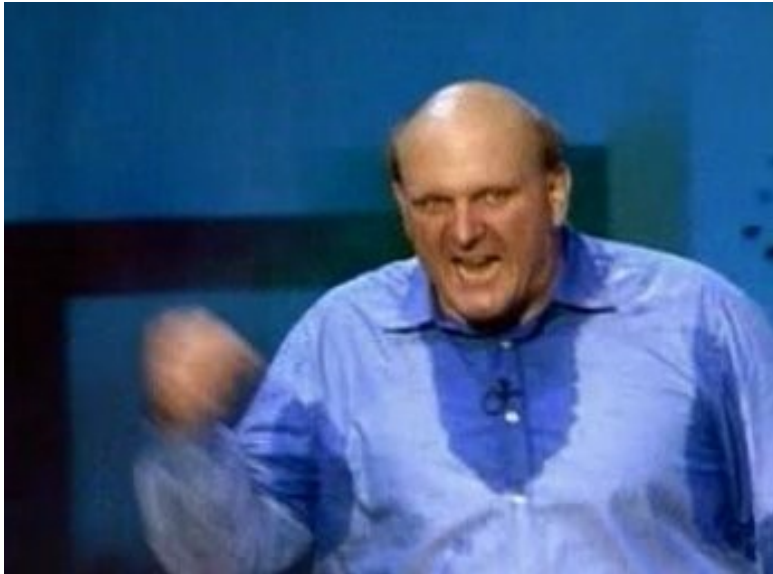
OntoParty, 20. 10. 2012

Roots of BDR



so called „Ballmer's Peak“

Credit to this guy?



Credit to this guy?



Are you serious!?



Robert Yerkes



- 1876 – 1956
- American
 - psychologist
 - ethologist
 - primatologist
- intelligence testing
- comparative psychology

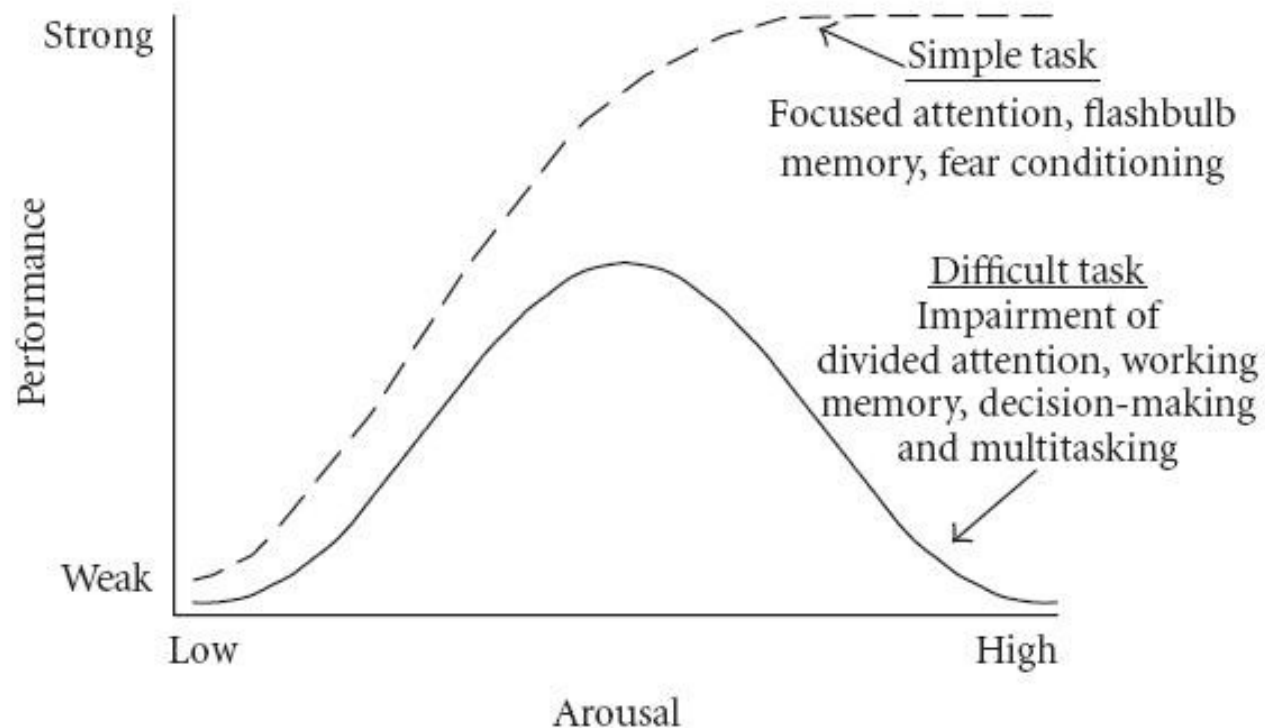
John Dillingham Dodson

- active 1911 – 1989
- Harvard University
- University of Minnesota

?

Yerkes–Dodson law (1908)

- a relationship between arousal and performance



Hebbian view

- based on a basic mechanism for synaptic plasticity wherein an increase in synaptic efficacy arises from the presynaptic cell's repeated and persistent stimulation of the postsynaptic cell

Hebbian view

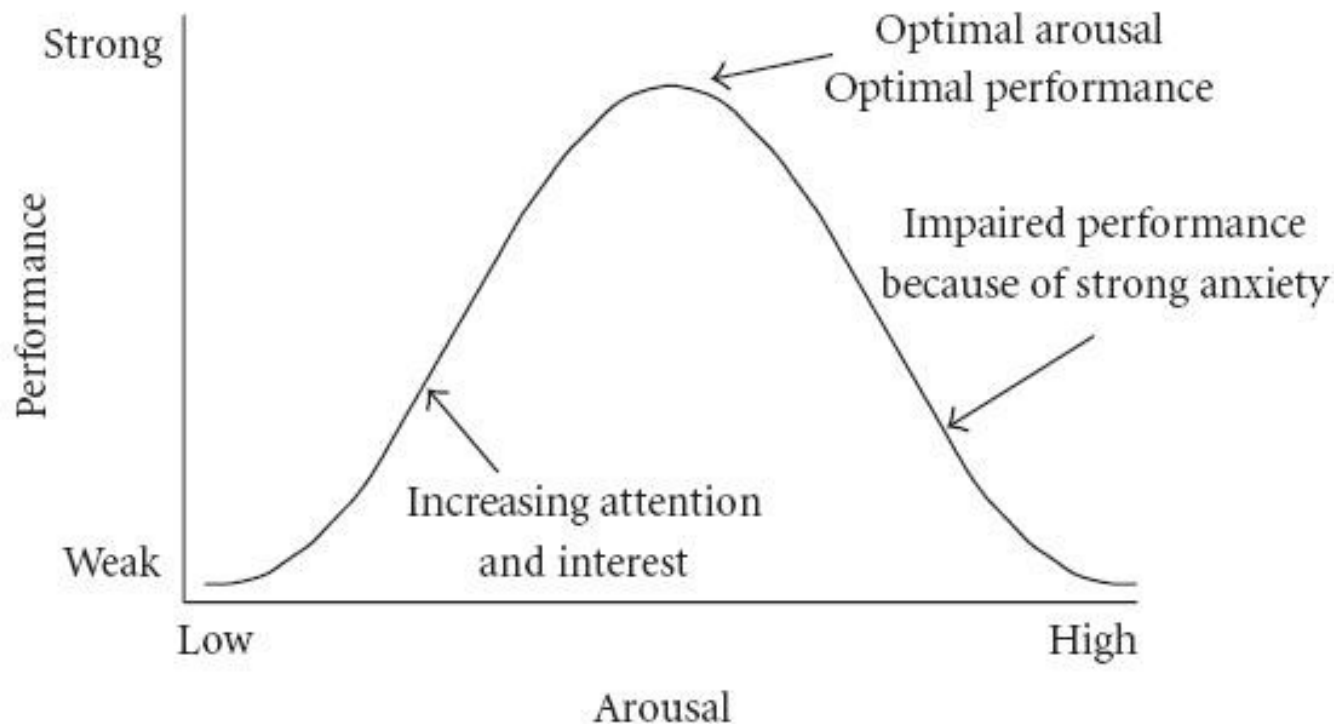
- based on a basic mechanism for synaptic plasticity wherein an increase in synaptic efficacy arises from the presynaptic cell's repeated and persistent stimulation of the postsynaptic cell

Hebb's rule

Hebbian view

- based on a basic mechanism for synaptic plasticity wherein an increase in synaptic efficacy arises from the presynaptic cell's repeated and persistent stimulation of the postsynaptic cell

Hebb's rule



Glucocorticoids

- stress hormones
- in relation with memory performance/cognition
- long-term potentiation (the process of forming long-term memories) is optimal when glucocorticoid levels are **mildly elevated**

Beer Driven Research

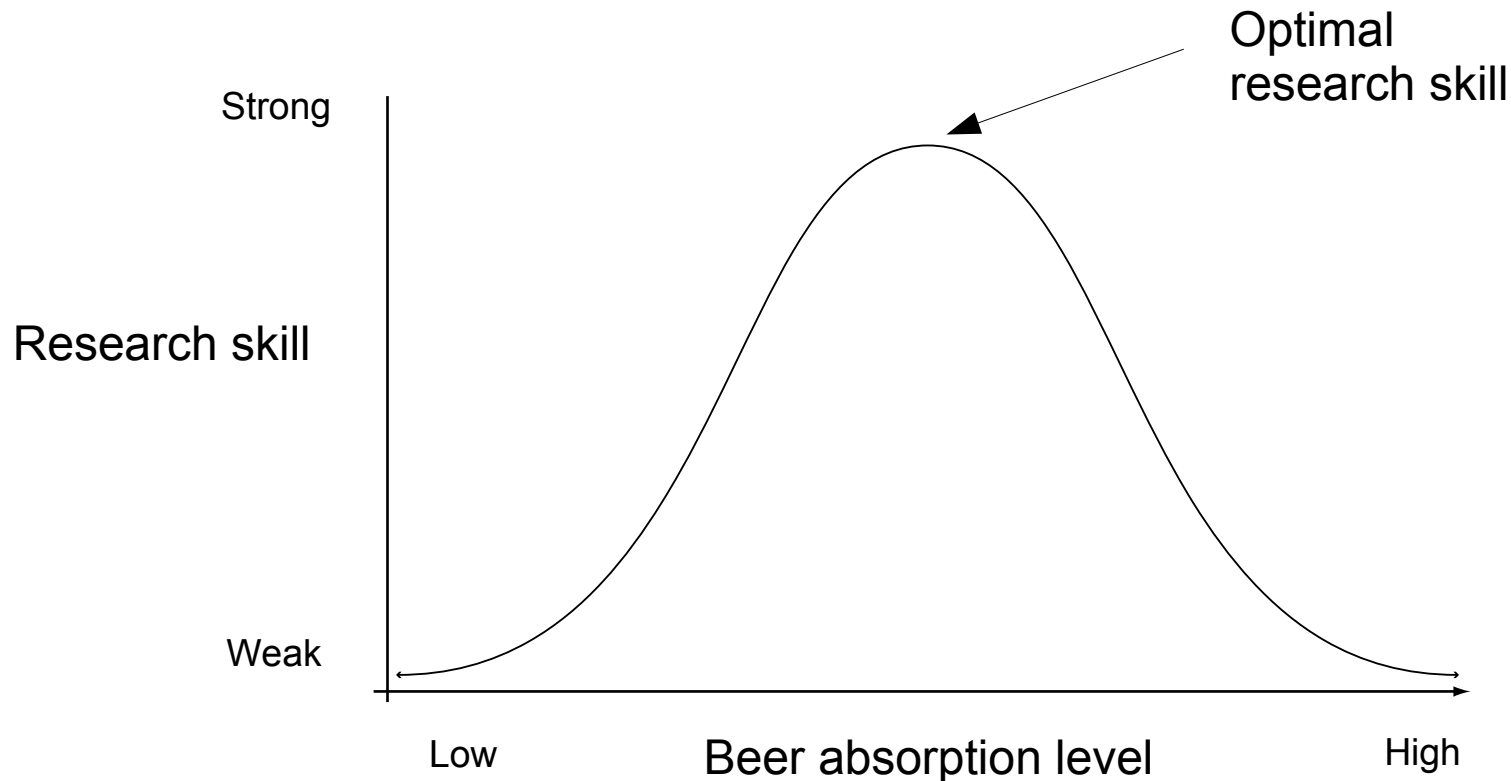
- BDR Theory = application of Yerkes-Dodson law

Beer Driven Research

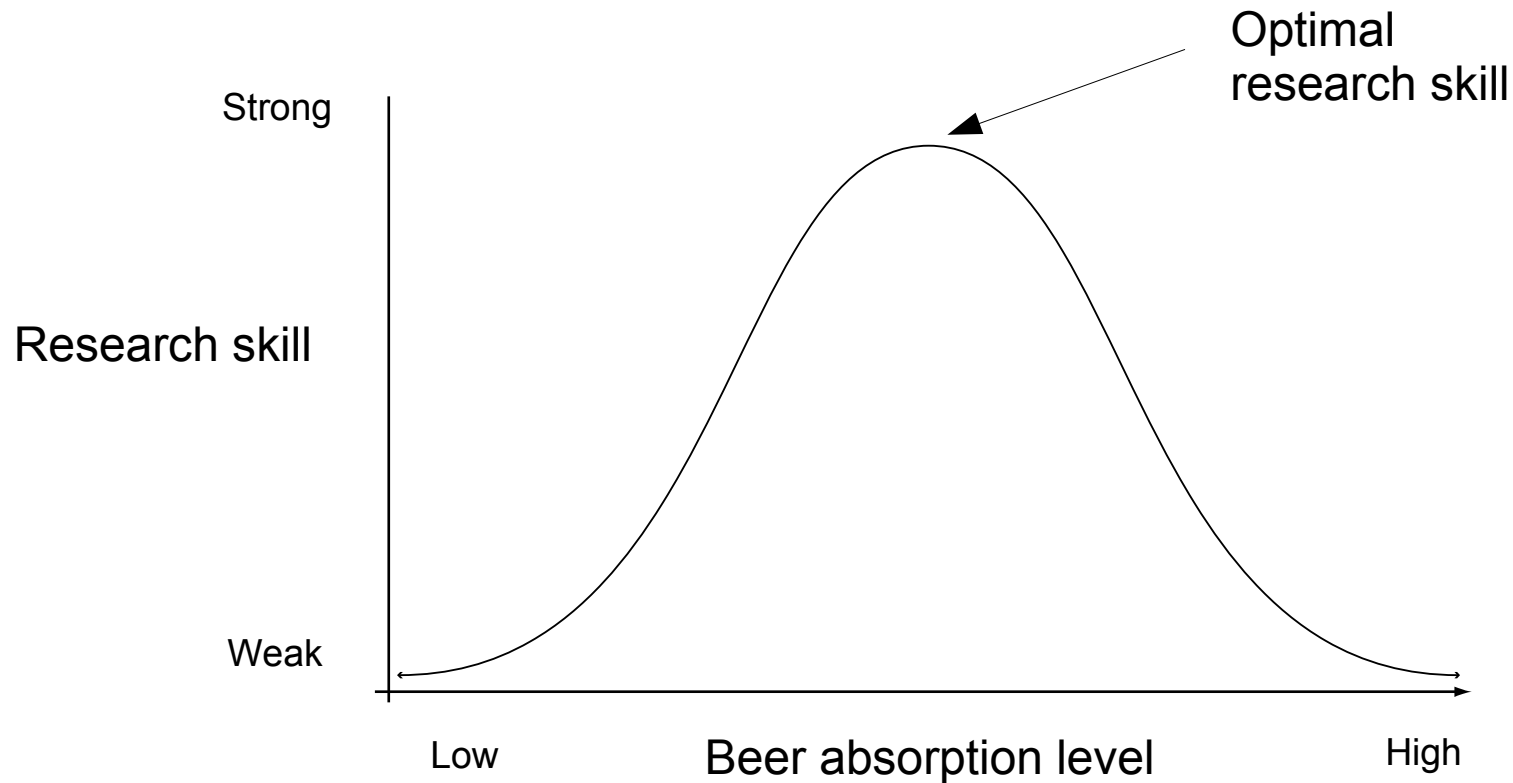
- BDR Theory = application of Yerkes-Dodson law
 - Performance = Research skill
 - Arousal = Beer

Beer Driven Research

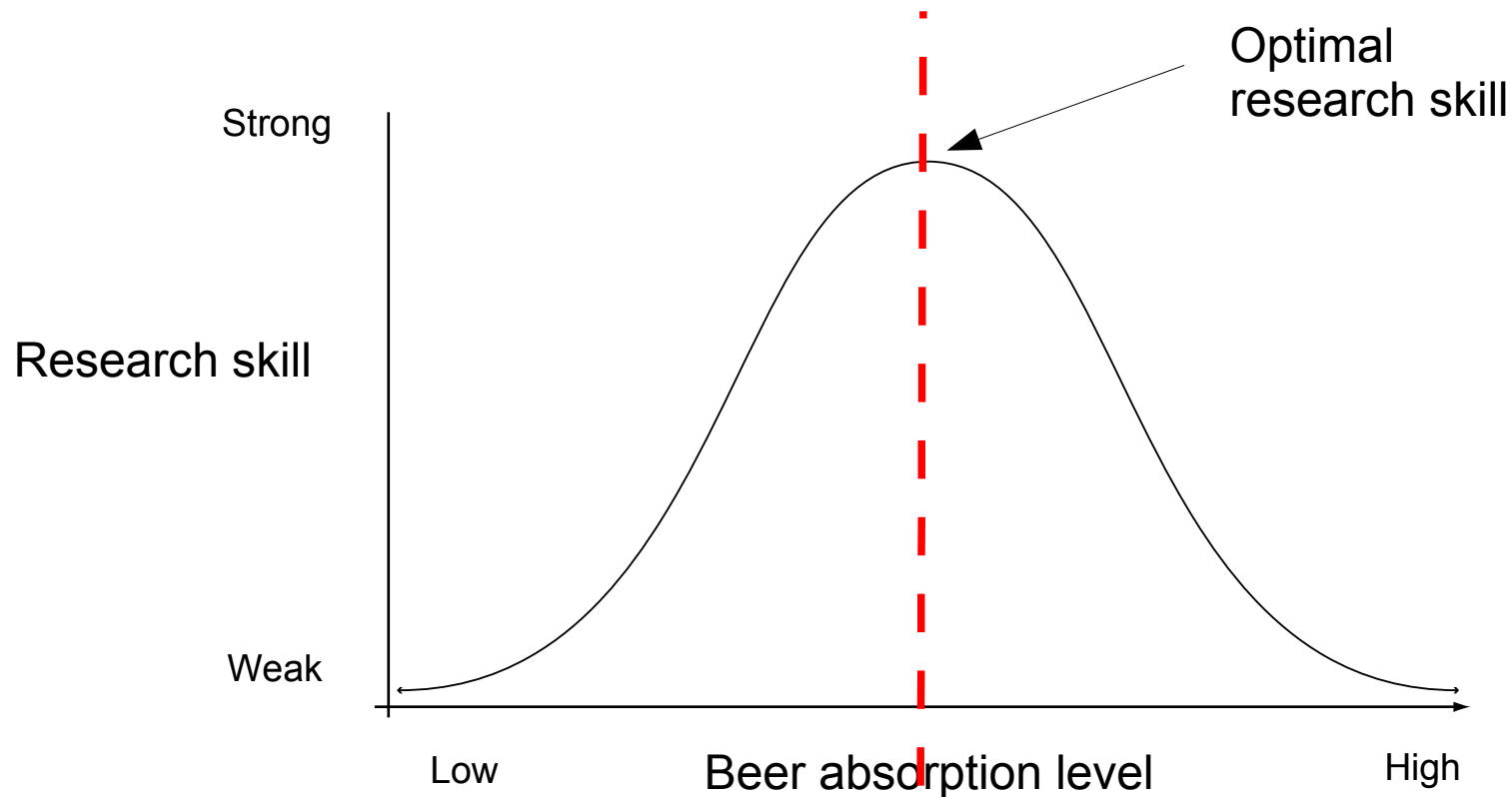
- BDR Theory = application of Yerkes-Dodson law
 - Performance = Research skill
 - Arousal = Beer



Most Important Research Question



Most Important Research Question



How many beers???

References

- Yerkes RM, Dodson JD (1908). "The relation of strength of stimulus to rapidity of habit-formation". *Journal of Comparative Neurology and Psychology* 18: 459–482
- Munroe, R. Ballmer's peak. In XKCD. Available at: <http://xkcd.com/323/>
- Lupien SJ, Maheu F, Tu M, Fiocco A, Schramek TE (2007). "The effects of stress and stress hormones on human cognition: Implications for the field of brain and cognition". *Brain and Cognition* 65: 209–237