Neurocomputations of threat learning in combat veterans

Philipp Homan[1,2,3]

[1]The Donald and Barbara Zucker School of Medicine at Northwell/Hofstra, NY, USA

[2]The Feinstein Institute for Medical Research, Manhasset, NY, USA

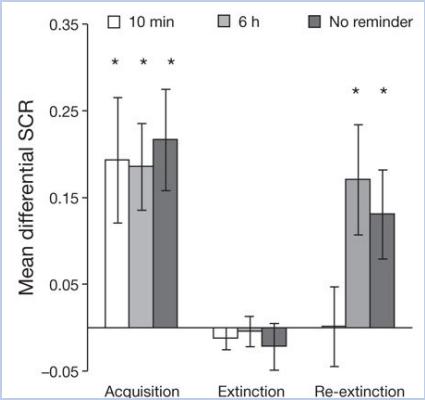
[3]The Zucker Hillside Hospital, NY, USA

phoman1@northwell.edu
http://github.com/philipphoman/ptsd-talk

At a glance: The point I'm trying to make

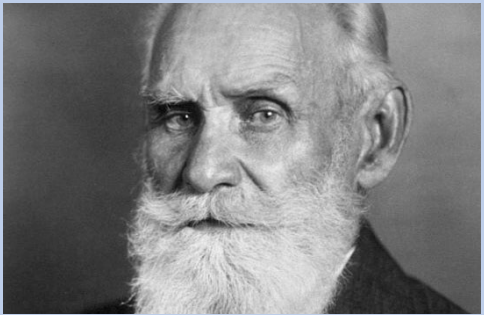
- PTSD is unique in that we have a highly relevant disease mechanism
- The disease mechanism:
  1. Explains the pathophysiology
  2. Suggests a suitable treatment
- We may learn even more about the mechanism with computational modeling

Introduction: Forgetting the memory of fear

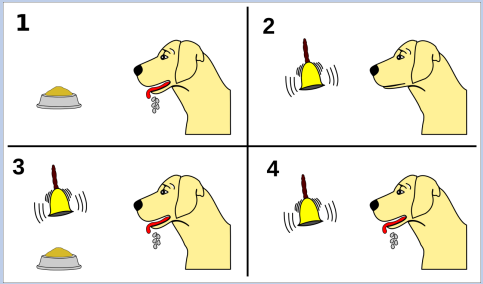


Schiller et al. 2010, Nature

Learning by association



Ivan Pavlov (1849 - 1936)



Credit: https://www.psychestudy.com