References

Stress

•) Learned helplessness stories

For a thorough treatment of Seligman’s work, see http://www.ppc.sas.upenn.edu/


•) Gamel(n)


•) Stress can temporarily boost learning


•) Physiological signatures of stress and pleasure are similar


•) Jeansok Kim and David Diamond’s three part definition of stress


•) General review on the physiology of stress responses


•) The brain evolved to solve problems in the short-term


•) Addison’s disease (and other related dysfunction)


•) The inverted U – cardiovascular responses


•) Increased susceptibility to infection


Cohen SW and Doyle, W (1997) Social ties and susceptibility to the common cold Journal of the American Medical Association 277: 1940

•) The inverted U – increased risk of stroke


•) The inverted U – immune responses


•) The inverted U – cognitive responses

Sapolsky R (2005) Stress and cognition in Gazzaniga M
•) Stress hurts declarative memory (encoding and retrieval)


•) Stress hurts executive function

•) Humans

•) Chronic stress induces high levels of glucocorticoids. This results in damage to cognitive function. This has been shown in humans

•) BDNF protects against this damage

Radecki, DT et al (2005) BDNF protects against stress-induced impairments in spatial learning and memory and LTP Hippocampus 15: 246 - 253
•) BDNF is necessary for memory formation

Alonso, M et al (2002) BDNF-triggered events in the rat hippocampus are required for both short and long-term memory formation Hippocampus 12: 551 - 560
•) If BDNF is overwhelmed, its positive effects are negated. Glucocorticoids exert their negative effects in part by this by shutting down BDNF expression

Schaaf MJ et al (2000) Corticosterone effects on BDNF expression in the hippocampus. Implications for memory formation Stress 3: 201-208
•) Glucocorticoids cause neural damage


Exposure to excess glucocorticoids alters dendritic morphology of adult hippocampal pyramidal neurons Brain Research 531: 225
•) Stress inhibits birth of new neurons


#3) Stress can kill neurons outright in the hippocampus

Sapolsky, R et al (1985) Prolonged corticoid exposure reduces hippocampal neuron number: implications for aging J. of Neurosci 5: 1221

•) Effects of stress on depression


•) Chronic stress can lead to depression


•) Story of Jill (resiliency in children)


•) Definition of Allostasis

The End of Stress as We Know It
Joseph Henry Press
pp. 5 - 9

•) Children react negatively to unresolved marital conflict

The study of relations between marital conflict and child adjustment: Challenges and new directions for methodology. In J. H. Grych & F. D. Fincham (Eds.), Child development and interparental conflict
NY, NY: Cambridge University Press
(pp. 39-63).

•) Divorce can predict academic failure

Mulholland DJ et al (1991) (first quote)
Academic performance in children of divorce: psychological resilience and vulnerability
Psychiatry 54(3): 28 – 280

•) Amato PR (2001)
J. Fam Psychol 15: 355 - 370

•) But it is really marital conflict that is the problem

Bryner, CL (2001) (second quote)
Children of divorce
JABFP 14(3):210 – 210

Kelly, JB (1998)
Marital conflict, divorce and children’s adjustment

Gottman, J. (1997)
Raising an Emotionally Intelligent Child: the Heart of Parenting
Simon & Schuster (NY)
pp. 25, 145

•) Barbara Whitehead quote

Whitehead, B. (1993)
Dan Quayle was right
The Atlantic Monthly, April, 1993

•) Decrease in overall health of children in hostile emotional environs

Mauldon, J (1990)
The effect of marital disruption on children’s health
Demography 27: 431 - 446

•) Increased risk for childhood psychiatric disorders

Thompson, P (1998)
Adolescents from families of divorce: vulnerability to physiological and psychological disturbances
J. Psychosoc Nurs Ment Health Serv 36: 34 - 39

•) Stress and illness

Maseda, M
Healthy, stress-free workplace benefits employees, bottom line
Houston Business Journal, Sept 3, 2004

Stress and cognition: a cognitive psychological perspective
NASA Technical Reports

•) Stress behind half of the 550 million working days lost

“Work-life experts launch new web-based training to help employers battle the costs of stress and build a resilient workforce”
http://www.hr.com/servlets/sfs?t=/contentManager/onStory&e=UTF-8&i=1116423256281&l=0&ParentID=1170434234858&StoryID=1139067747063

•) CDC asserts that 80% of our medical expenditures are stress related.

Fast Company Magazine, p. 88
February 2, 2003

•) 77% of the workforce reports being burned out

“Once Again, Treatment Improves Productivity”
American Psychiatric Association/ American Psychiatric Foundation, MentalHealthWorks,
Third Quarter, 2003

•) Effects of depression on bottom line ($53 billion)

Disease Management and Health Outcomes 4(3): 135 - 142

•) Final tally is $200 to $300 billion per year

Priority Magazine January 2, 2007

•) Two malignant facts

Sapolsky, R (2004)
Why Zebras Don’t Get Ulcers,
Owl Books (3rd Edition)
p. 262

American Psychological Association, quoted in Wellbeing Lifestyles, Inc.
• Stress management program

(Harvard Medical School)

• Initially, most people thought divorced kids could recover quickly, but that is not true.

Second chances: men, women and children a decade after divorce
Ticknor & Fields (NY)

The following data from Gottman and references therein.

Gottman, J. (1997)
Raising an Emotionally Intelligent Child: the Heart of Parenting
Simon & Schuster (NY)

• When a couple constantly fights, their conflict gets in the way of their child’s ability to form friendships. Gottman, p. 25.

• Parents displaying constant hostility create kids with more antisocial behavior and aggression towards their playmates. There is more stress hormone in urine. They have more difficulty regulating their emotions, focusing attention and soothing themselves when they become upset. Gottman, p. 139

• Children whose parents were distressed in their marriages played less collaboratively and had more negative interactions with their playmates than children whose parents were happily married. Gottman, p. 140