

Resiliency Building

Grillo Lecture series January 22, 2013
Will Van Derveer, MD

Learning Objectives

Challenges + abundant resources =

Increased resilience



Necessary for Growth

- * Growth cannot be achieved by avoidance of adversity
- * Three requirements for healthy child development: Attunement, Rupture, and Repair. Daniel J Siegel
- * The "Good enough mother" of DW Winnecott

What happens when you repeatedly experience challenges with inadequate resources?

CHRONIC STRESS

Self Check for Stress

* Effects on Mind

- * Anxiety
- * Irritability/anger
- * Lack of focus
- * Depression
- * Drug abuse
- * Social withdrawal

Source: American Psychological Association "Stress in America Report," 2010

Self Check for Stress

* Effects on Mind

- * Anxiety
- * Irritability/anger
- * Lack of focus
- * Depression
- * Drug abuse
- * Social withdrawal

* Effects on Body

- * Headache
- * Muscle tension
- * Chest pain
- * Fatigue
- * Change in sex drive
- * Sleep disturbances
- * Upset Stomach

Source: American Psychological Association "Stress in America Report," 2010



Exercise 1: Affiliation



Lessons from primates

Affiliation and play reduce stress states and increase resilience

Higher ranking baboons enjoy more affiliation, have lower cortisol (stress hormone) levels, and fewer diseases.



Why Zebras Don't Get Ulcers (1994)

Robert Sapolsky, Stanford University professor

Autonomic Nervous System

- The venue for stress to play out
- Sympathetic (SNS)
- Parasympathetic (PSNS)
- Healthy balance

ACE study: long term effects of early stress

- 17000 Kaiser patients
- Number of Adverse Childhood Events correlate to <u>strong</u> and <u>graded increased risk</u> of the following conditions in adulthood:
- Ischemic heart disease, liver disease, lung disease, miscarriage, smoking, alcoholism, STDs, and others

Science of Resiliency

Chronically elevated stress hormone levels correlate with physical diseases in baboons and humans

http://news.stanford.edu/news/2007/march7/sapolskysr-030707.html



Robert Sapolsky with Rock, one of many wild baboons that he has studied in Kenya's Serengeti. By linking baboons' behavior with their health, Sapolsky has learned that individuals cope with stress in different ways.

 "Heart rate" as we think of it is an averaged number of heart beats per minute.

- "Heart rate" as we think of it is an averaged number of heart beats per minute.
- There is a difference in length of time from one heart beat to the next.

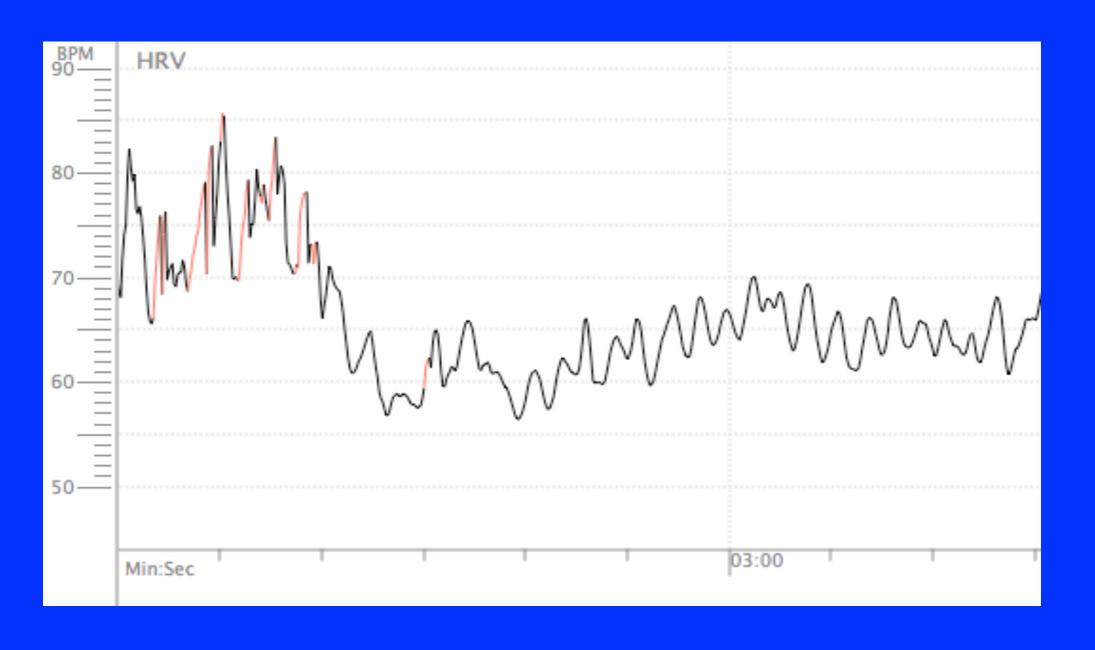
- "Heart rate" as we think of it is an averaged number of heart beats per minute.
- There is a difference in length of time from one heart beat to the next.
- That difference is HRV.

- "Heart rate" as we think of it is an averaged number of heart beats per minute.
- There is a difference in length of time from one heart beat to the next.
- That difference is HRV.
- Optimal HRV appears as a smooth sinusoidal waveform.

Healthy HRV is correlated with resiliency and longevity

- Healthy HRV is correlated with resiliency and longevity
- HRV pattern changes in acute stress states and chronic diseases and earlier mortality
- Can measure in real-time the differences between resilient and stressed states
- Hand held devices and software readily available.

HRV sessions



Exercise #2: breathing with body awareness



Breathing Naturally



Basic Toolbox

- *Affiliation
- *Breath awareness

Additional Resiliency resources

- * Exercise
- * Play
- * Relaxation
- * Good food
- * Nature
- * Good sleep

Additional Resiliency resources

- * Exercise: Ideally 30 minutes of cardio plus weights if possible 3 days a week.
- * Play
- * Relaxation
- * Good food
- * Nature
- * Good sleep

Resiliency resources

- * Exercise
- * Play: vacations, laughter, silliness, lots of "down time," music, dancing, pets?
- * Relaxation
- * Good food

Resiliency resources

- * Exercise
- * Play
- * Relaxation techniques: diaphragm breathing, yoga, meditation, tai chi, many others unique to you
- * Good food

Resiliency resources

- * Exercise
- * Play
- * Relaxation techniques
- * Good food
 - * Lots of lean protein
 - * Plenty of healthy fats
 - * Leafy greens
 - * Minimal grains
 - * No sugar



Nature



Good sleep

Take home...

- Stress Happens
- Rather than struggling to eliminate stress...
- Focus on building resiliency
- Resiliency is earned by facing challenges while practicing skills such as affiliation and breath awareness and many others

Further reading...

- * Robert Sapolsky PhD Why Zebras Don't Get Ulcers
- * John Kabat-Zinn PhD Full Catastrophe Living
- * Robert Scaer, MD. 8 Keys to Brain Body Balance
- * www.heartmath.org for Heart Rate Variability

