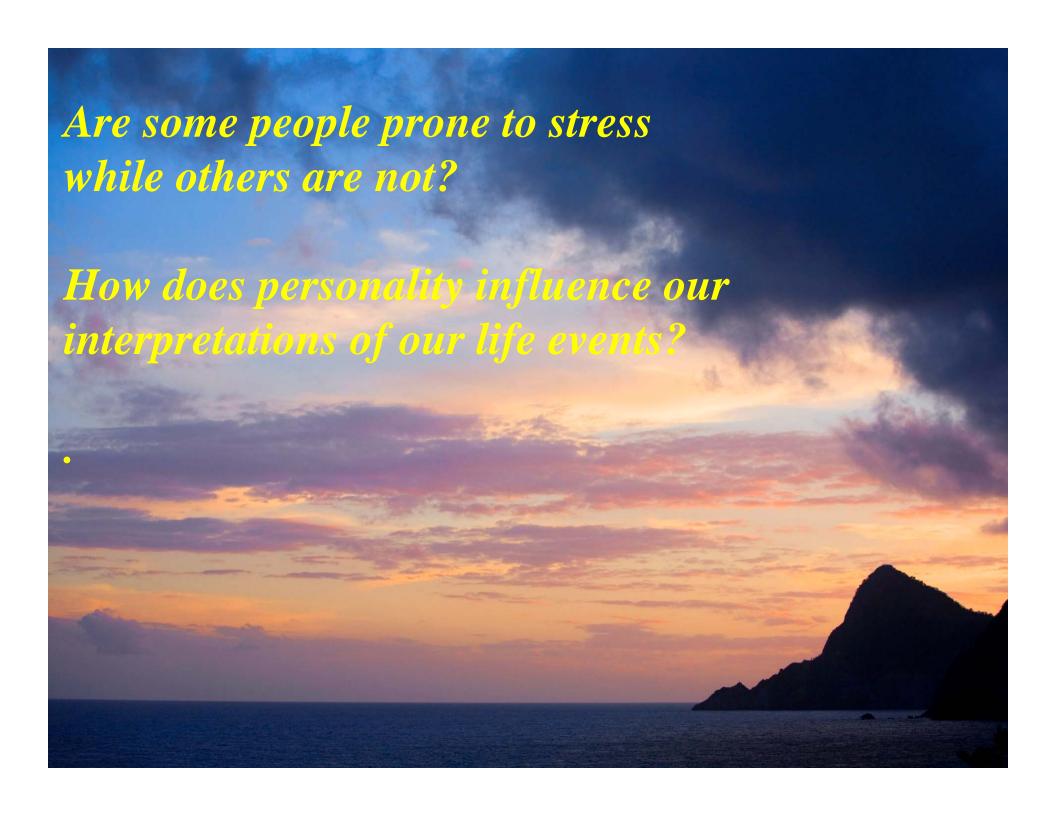
# Why Doesn't Everyone React to Stress in the Same Way?

Ali A. Weinstein, PhD aweinst2@gmu.edu



# Genetics & Development

#### **Genetics**

- Genes control the stress response
  - Individuals have different responses to stress
- There is a genetic component to:
  - fearful behavior
  - anxiety disorders
  - Neurobiological response

#### **Development**

- Life experiences can affect a person's stress response
- Social support
  - Strong support is protective
- Early life stress
  - Increases stress reactivity as an adult

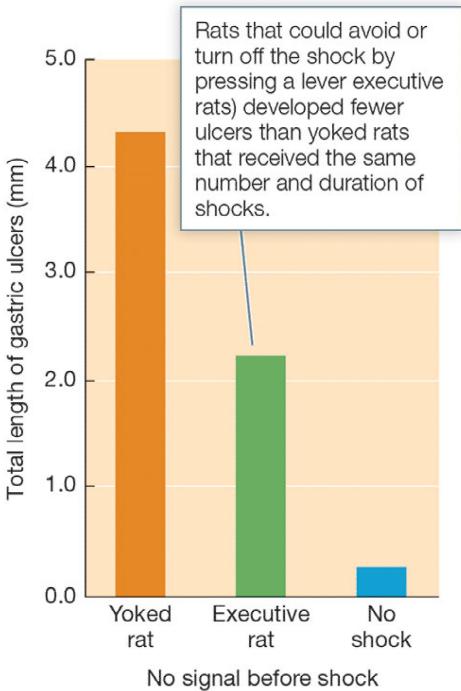
# Perception of Stressors

Cognitive Appraisal:

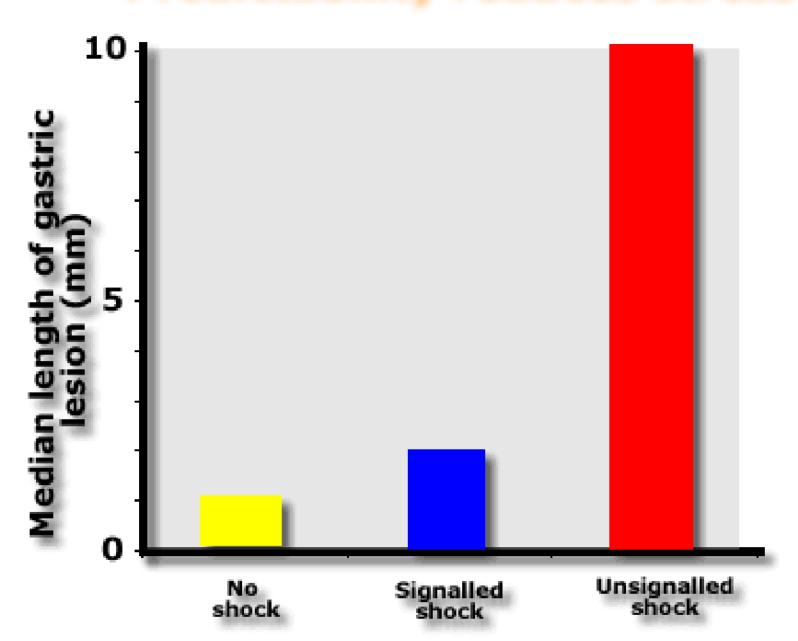
Physical and psychological responses to stress depends on how we think about them

# **Predictability and Control**

- Two important features that influence the magnitude of the stress response
- Perception of control: if one believes that they cannot exert control over the stressors have increased impact
- Predictability: knowing when an expected stressor will occur

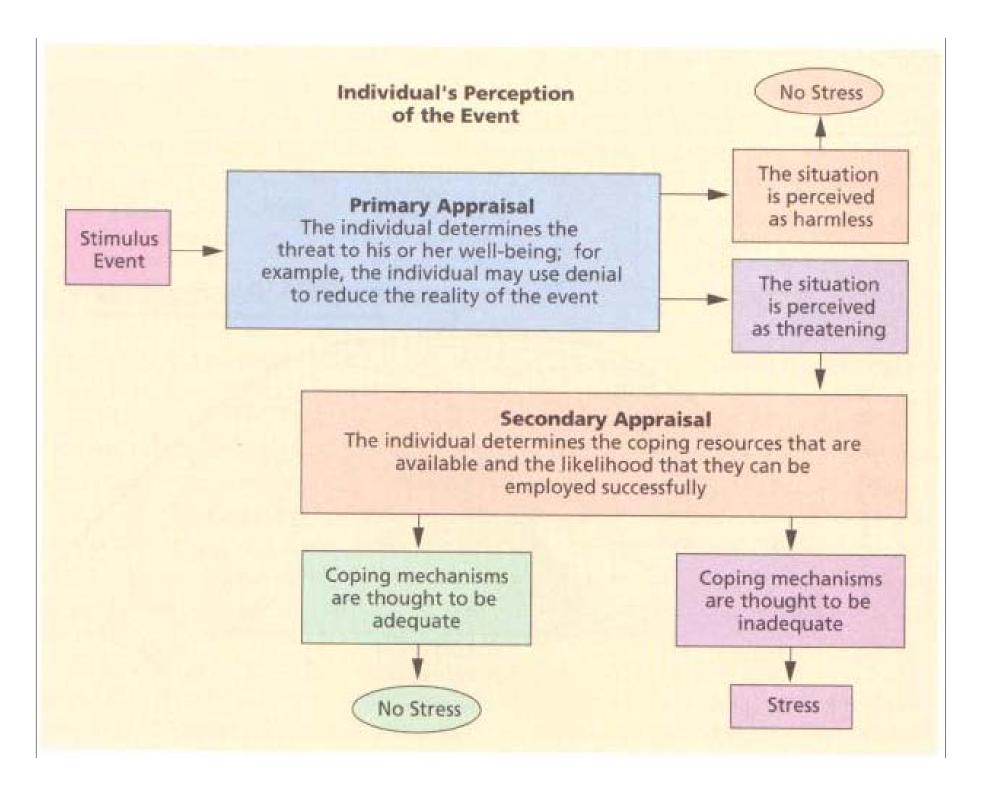


# Predictability reduces stress



### Transactional Model of Stress

- Propose that the interpretation of stressful events is more important than the events themselves
- It is neither the environment nor the person's response that defines stress
- It is the individual's perception of the psychological situation that defines stress
- Stress is a function of the person's feeling of threat, vulnerability, and ability to cope rather than the function of the stressor



# **Primary Appraisal**

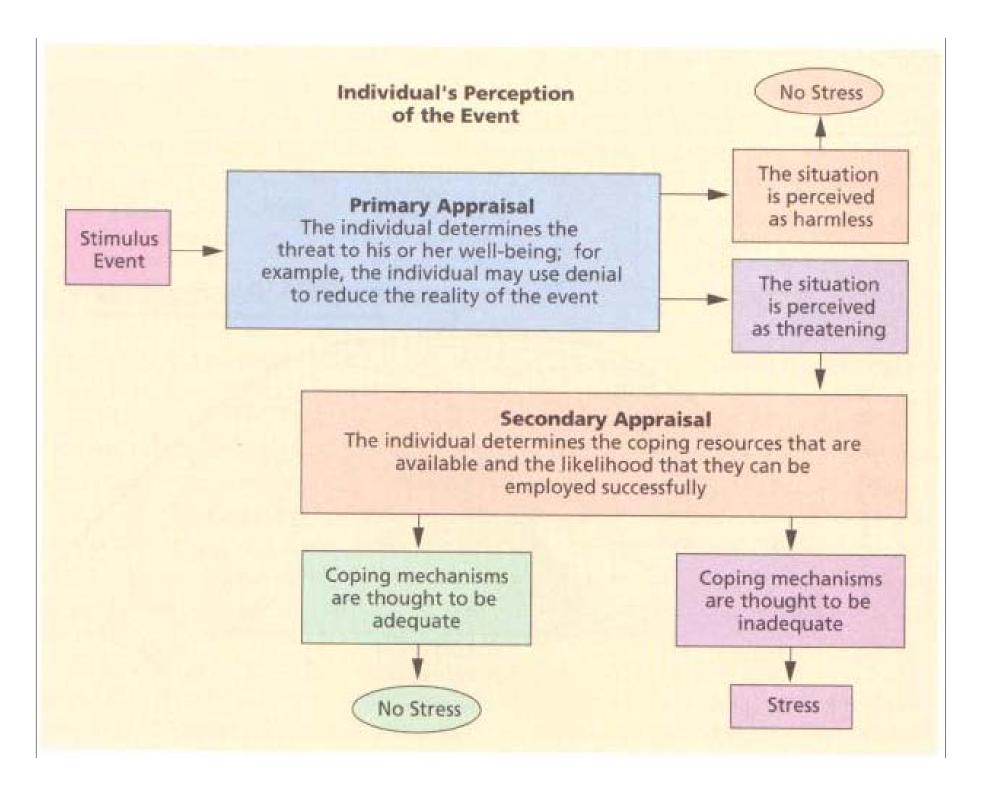
- Initial evaluation of a situation
- Three possible outcomes
  - Irrelevant
    - The event has no implication for the individual's wellbeing
  - Benign-positive
    - The event may increase well-being
  - Stressful
    - The situation is perceived as harmful, threatening, or challenging

# Secondary Appraisal

- Concerned with a person's evaluation of his/her ability to cope with the situation
- Three questions:
  - What coping options are available?
  - Likelihood that one can apply the strategy?
  - Likelihood that any given options will work: will it reduce stress?

# Reappraisal

- Continuous reappraisal on the basis of new information
- Identical to the initial process
- May lead to more stress OR less stress





# **Coping Strategies**



Problem-Focused Coping: a response aimed at reducing, modifying, or eliminating a source of stress (e.g., if grades in a course are low, reduce work hours, change study strategy, etc.).

Emotion-Focused Coping: a response aimed at reducing the emotional impact of the stressor (e.g., denial, religious faith, wishful thinking, humor, alcohol/drugs, promiscuous sex).

You can reappraise the stressor and reduce the importance you attach to it.

Two major emotion-focused strategies are:

MEDITATION and BIOFEEDBACK

# Coping & Resilience

#### Coping

- Ability to control emotions
- Ability to perceive reality
- Ability to think rationally
- Ability to problem solve
- Culturally defined

#### Resilience

- The ability to bounce back
- The positive capacity to cope with stress
- Provides resistance to negative events
  - Hardiness,
  - Resourcefulness

# Coping

## **Adaptive Coping**

Contribute to resolution of the stress response

## Maladaptive Coping

Strategies that cause further problems

## **Active Coping**

Actively seeking resolution to the stress

# Promote Adaptive Coping

- Realistic expectations
  - Set realistic goals
- Planning
  - Anticipate problems, have a backup plan
- Reframing
  - Change the way you look at things
- Relaxation
  - Learn relaxation techniques, take time-out for leisure
- Discuss the problem
  - Utilize existing social supports to problem solve

# **Promote Adaptive Coping**

## Training

Prepares for stressful events

#### Nutrition

Eat healthy, avoid skipping meals

#### Exercise

Include regular exercise

## Sleep

Get adequate sleep—avoid fatigue



# Avoid Maladaptive Coping

- Blurring of boundaries
- Avoidance/withdrawal
- Negative attitude
- Anger outbursts
- Alcohol/Drugs
- Hopelessness
- Negative self-talk
- Resentment
- Violence

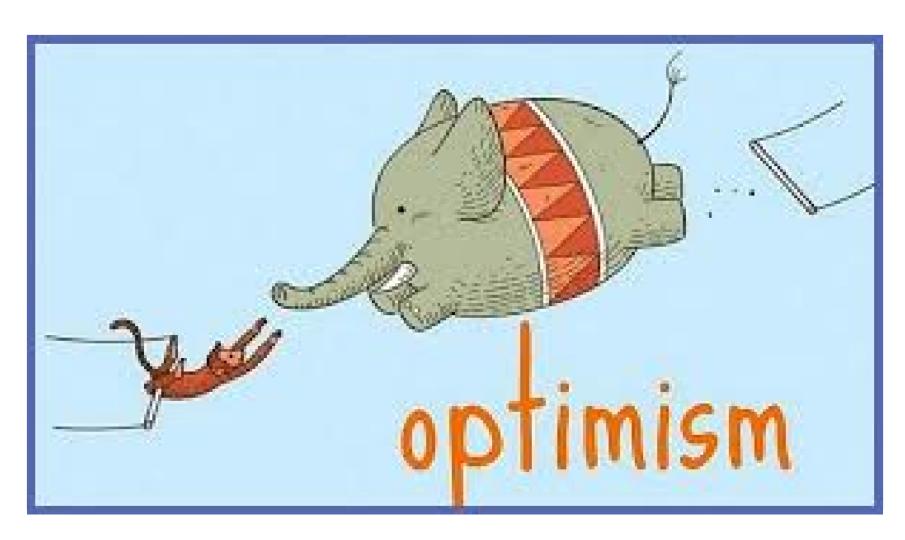
## Promote Resilience Factors

- Positive Role Models
- Optimism
- Humor
- Moral Compass
- Altruism
- Religion & Spirituality
- Social Support

# Optimism

- Positive Beliefs
  - Associated with well being
  - Cognitive reframing
  - Positive thinking
  - Refute the negative thinking
  - Believe in a meaningful cause
- It is important to acknowledge relevant negative factors
  - Unrealistic expectations

# Let's Take a Quiz

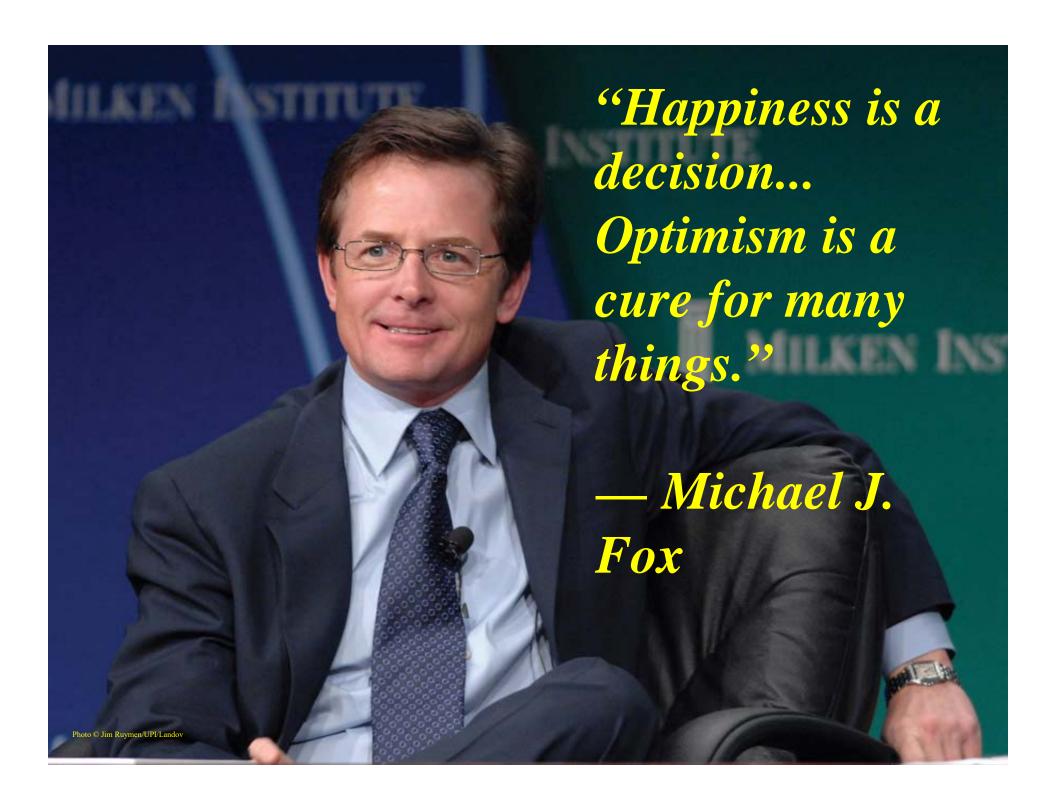


#### Calculate Your Score

- Ignore questions 2, 5, 6, and 8 they are fillers!
- For questions 1, 4, and 10
  - A gets 4 points, B gets 3 points, C gets 2 points, D gets 1 point, E gets 0 points
- For questions 3, 7, and 9
  - A gets 0 points, B gets 1 point, C gets 2 points, D gets 3 points, E gets 4 points
- Add the scores together

#### Calculate Your Score

- The sum is your optimism score
- It ranges from 0-24
- 0 is extreme pessimism
- 24 extreme optimism
- On average, most people score 15 (slightly optimistic)



A lonely man is a strong man



A lonely man is a strong man

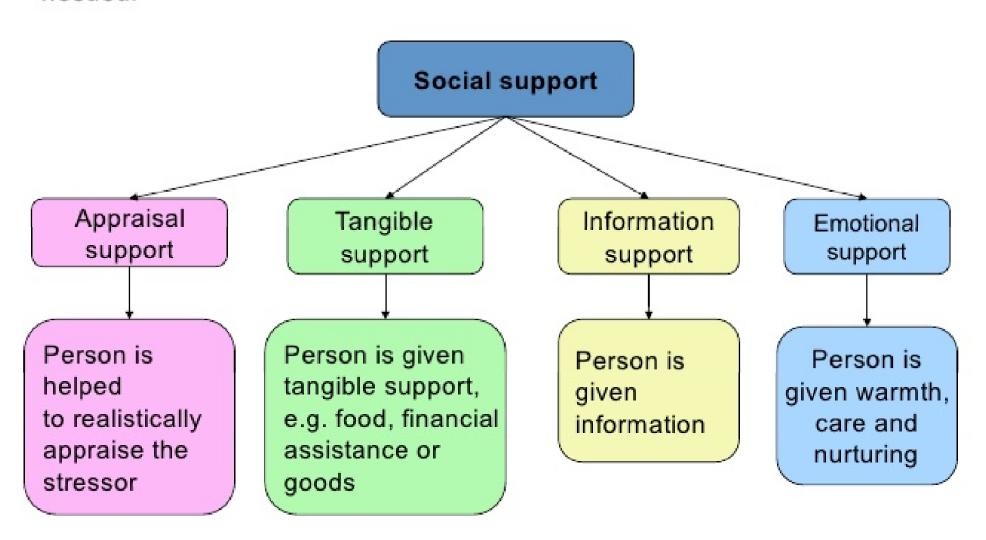


#### Social Support: Environmental Resource for Coping

What is Social Support?

 social interactions or relationships that provide individuals with actual assistance

 Settings that provide love, caring, or a sense of attachment to a valued social group or dyad Social support is help or assistance from other people when needed.



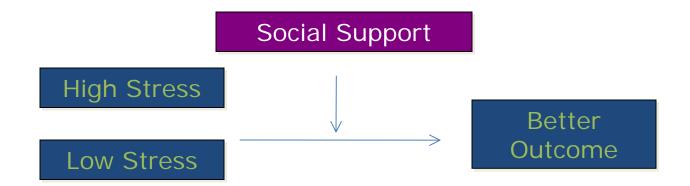
# Social Support Hypotheses

1. Direct Effect

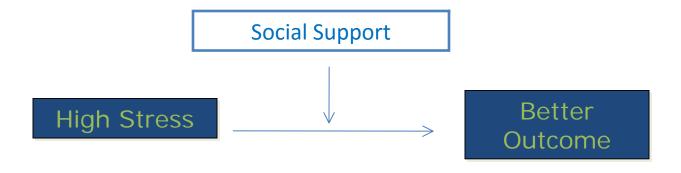
2. Stress-buffering

# **Direct Effect Hypothesis**

- Social Support has equivalent positive impact on well-being under both high & low stress conditions
- Social support is always good



# Stress-Buffering Hypothesis





# Downside of Social Support

All relationships have costs & benefits

- Examples:
  - relatives with chronic illness
  - Social Support from high risk group

# Personality Defined

• A collection of thoughts, attitudes, values, beliefs, perceptions, behaviors, and emotions that define who we are, how we view the world around us, and how others perceive us

# Emotional Development and Personality

- Personality development theories
  - Watson (behaviorism)
  - Freud (psychoanalytical theory)
  - Erikson (developmental stages and tasks)
  - Piaget (cognitive development)
  - Kohlberg (moral development)
  - Maslow (hierarchy of needs)

# Stress and Personality

- Stress-Prone Personality Types
- Type A Personality
- Type C Personality
- Type D Personality
- (Ellis's) Irrational, Illogical Personality
  - Negative Self-Talk
- Millon's Model

### The Type A Personality

- Pioneered by cardiologists Friedman and Rosenman (1974)
  - Noticed their cardiology patients always tried to achieve more in less time
  - Hypothesized this was stressful and harmful to one's heart

### Characteristics of Type A Personality

- Competitive
- Verbally aggressive
- Hard-driving
- Unable to relax
- Very time conscious
- Easily angered
- Hostile

# Type A Personality Body Language and Speech Patterns

- Tightening of facial muscles
- Gesturing with a clenched fist
- Grimacing
- Using explosive speech
- Interrupting the interviewer
- Hurrying the pace

### Type A Personality Health Risks

- Greater rate of cardiovascular disease
- Greater rate of heart attacks
- Increased risk for premature death from all causes
- Not gender-specific

#### Millon's Model

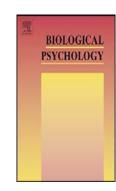
- Millon identified 8 personality styles that are particularly prone to stress
  - Aggressive
  - Narcissistic
  - Histrionic
  - Dependent
  - Passive-Aggressive
  - Compulsive
  - Avoidant
  - Schizoid



Contents lists available at ScienceDirect

#### Biological Psychology

journal homepage: www.elsevier.com/locate/biopsycho



## Neurohormonal and inflammatory hyper-responsiveness to acute mental stress in depression<sup>☆</sup>

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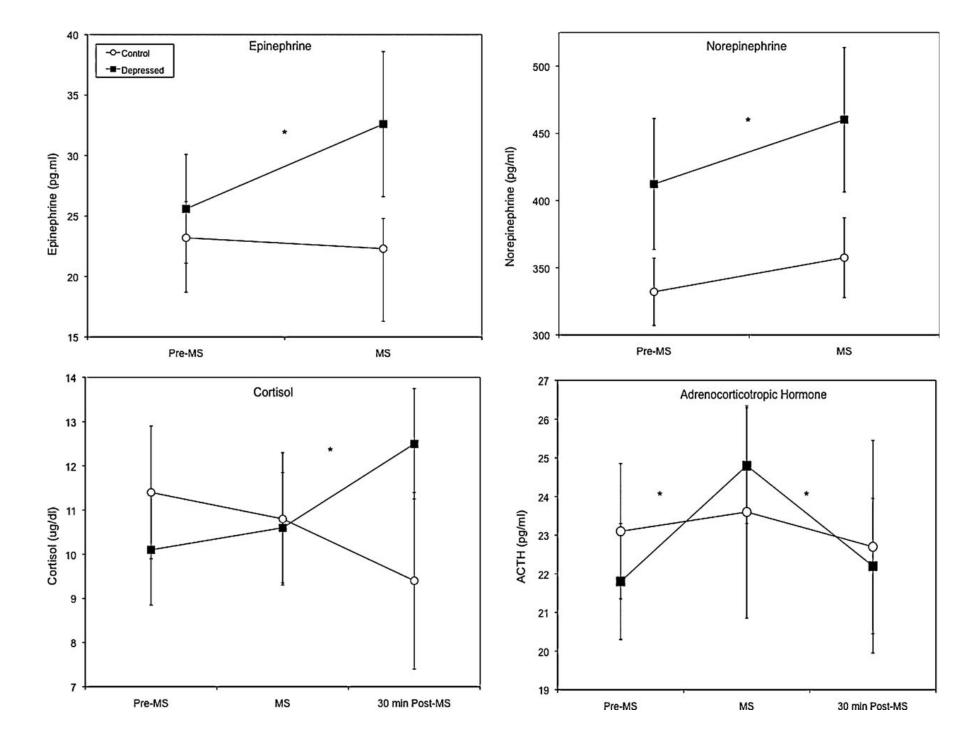
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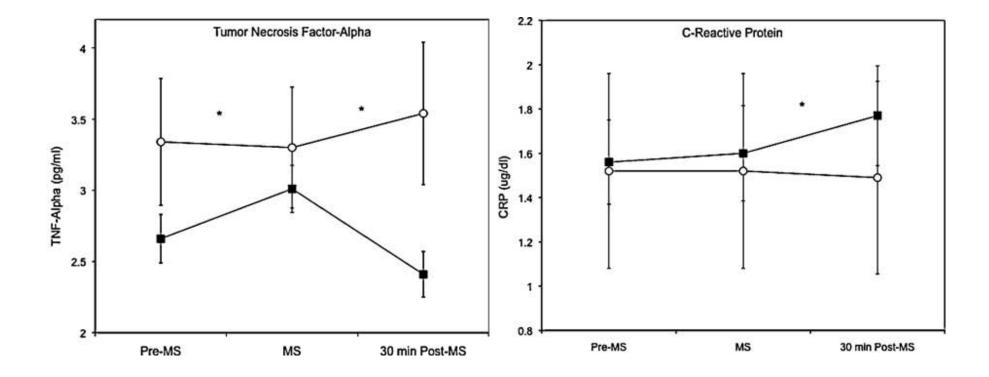
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### Stress-Resistant Personality Types

- Personality types that are protective against stress
  - -The Type B Personality
  - -The Hardy Personality

### The Type B Personality

- Identified by Rosenman and Friedman as polar opposite of Type A
  - Also known as non-Type A
  - Lower risk of heart disease
  - Doesn't preclude success and achievement

### The Hardy Personality

- Identified by Kobasa and Maddi
- Exhibits three personality traits that protect against ravages of stress
  - Commitment (actively involved with life)
  - Control (internal locus of control)
  - Challenge (welcomes change)



While we may not be able to change our personality completely, we can change personality traits that tend to promote stress in our lives.