SUSTAINING WELLNESS: STRESS, COPING, IMMUNITY & RESILIENCE

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No conflicts of interest
Mind-body connection

“Psyche and body react sympathetically to each other, it seem to me. A change in the state of the psyche produces a change in the structure of the body, and, conversely, a change in the structure of the body produces a change in the state of the psyche”

Aristotle, Physiognomica
Major modifiable risk factors for depression


Additional risk factors for depression

- Early adversity
- Lifetime traumas
- Genetic predisposition
- History of depression
- Exposure to recent stressful life event
  - Stress → depression (also comorbid)
- Excessive alcohol consumption
- Helplessness, inability to control external environment
- Rumination
- Lack of structure/routine
- Social Isolation


COVID-19 Prevention
Recommendations—especially for high risk groups

• Social distancing recommendations
  – Stay at home as much as possible
  – Do not let people in your home that you do not live with
  – Stay six feet away from other people, with a mask, if you need to go leave your home

We have a problem

• There is a world-wide pandemic
  – Major life stressor ✗
• I can do little to modify the course of this stress
  – Helplessness ✗
• To stay safe, I need to
  – Socially isolate ✗
  – Loneliness ✗
  – Stay relatively sedentary ✗
What do I do with all of this time?

• “It is 11 a.m., I have nothing to do, I’ll have my first glass of wine today”
  – Excessive alcohol use
• “It is 12:30 p.m., I have nothing to do, I guess I will take a nap”
  – Lack of routine
  – Dysregulated sleep
• Lots of time on my hands
  – Rumination
### Social Isolation

- Social isolation
  - Depression
  - Anxiety
  - Cardiovascular disease
  - Stroke
  - Mortality (equivalent to smoking)
  - Immunogenic tumors
  - Colds/viruses

#### Levelness Among Older Adults

AARP’s loneliness study examined the prevalence and impact of loneliness and social isolation among older adults. The study was conducted via online panel using a nationally representative sample of 3,012 US adults age 45 and older.

**Seniors Are Less Likely to Be Lonely Than Boomers**

- 42%
- 39%
- 22%
- 21%
- 18%
- 17%

#### Over One Third of Older Adults Are Lonely

35% of adults age 43 and over are lonely.

**Lonely Adults View Technology Differently Than Non-Lonely Adults**

- 17%
- 10%
- 6%

#### Lack Of Social Support Is Associated with Loneliness

Social isolation, loneliness, depression, stress, and immune system changes can happen simultaneously. Loneliness and depression can lead to a decreased immune system, which can increase the risk of illness and death.

- Social isolation, loneliness, depression, stress
- Adrenal Glands
- Bi Cells
- T Cells
- Macrophage
- Neutrophil
- CRH
- ACTH
- Proinflammatory Cytokine Production
- Sympathetic Vagus Nerve

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Social Isolation & virus

- Isolated
  - Longer duration of illness
  - Shortened incubation time


Cohen’s cold studies

Large scale prospective experimental investigations of stress and the common cold
PSS=social support

- **PSS**
- **Life events**
- **Mood**

Exposed to cold virus

- Replicated virus
- Clinical symptoms

Age, gender, weight, ethnicity, season, smoking, alcohol, diet exercise, sleep not related to stress and illness
Stress, loneliness, and inflammation

What can I do? Mental Health Hygiene

Keep a routine

- Not just for children!
- Buffers
  - Rumination
  - Sleep problems
  - Feelings of helplessness
Worry time

• Buffers
  – Rumination
  – Sleep problems
  – Feelings of helplessness

Stay connected

• Buffers
  – Loneliness
Stay active as much as possible

- Buffers
  - Sedentary lifestyle's impact on depression

Try cognitive or “third wave” intervention techniques

A. Activating Event
B. Belief
C. Consequences
Try cognitive or “third wave” intervention techniques

Ongoing studies:
- Project Act – Recruiting individuals who are caring at home for a spouse diagnosed with Alzheimer’s Disease/related dementias & devote at least 4 hours daily of care for their spouse for at least the last 3 months
- Project Chroma – Recruiting individuals 70 years or older and/or individuals medically diagnosed with Mild Cognitive Impairment
- Project Heart – Recruiting individuals 55 years or older
- Writing During COVID-19 – Recruiting individuals who are currently living in the U.S., who can read & write in English, who are 60 years or older AND/OR have an underlying health

Email: Kristi L. Parker kristi.parker@rice.edu for more information
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