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# **Cumulative Stress and Self-Care**

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# Agenda

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- The Nature of Cumulative Stress
  - ▶ Cumulative vs. Chronic Stress
- Effects of Stress
  - ▶ Stress and Health
  - ▶ COVID-19 and Stress
  - ▶ Civil Unrest and Stress
- Self-Care Practices
  - ▶ Cognitive Practices
  - ▶ Cognitive Behavioral Practices
- A Note on Zoom Fatigue



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# The Nature of Cumulative Stress



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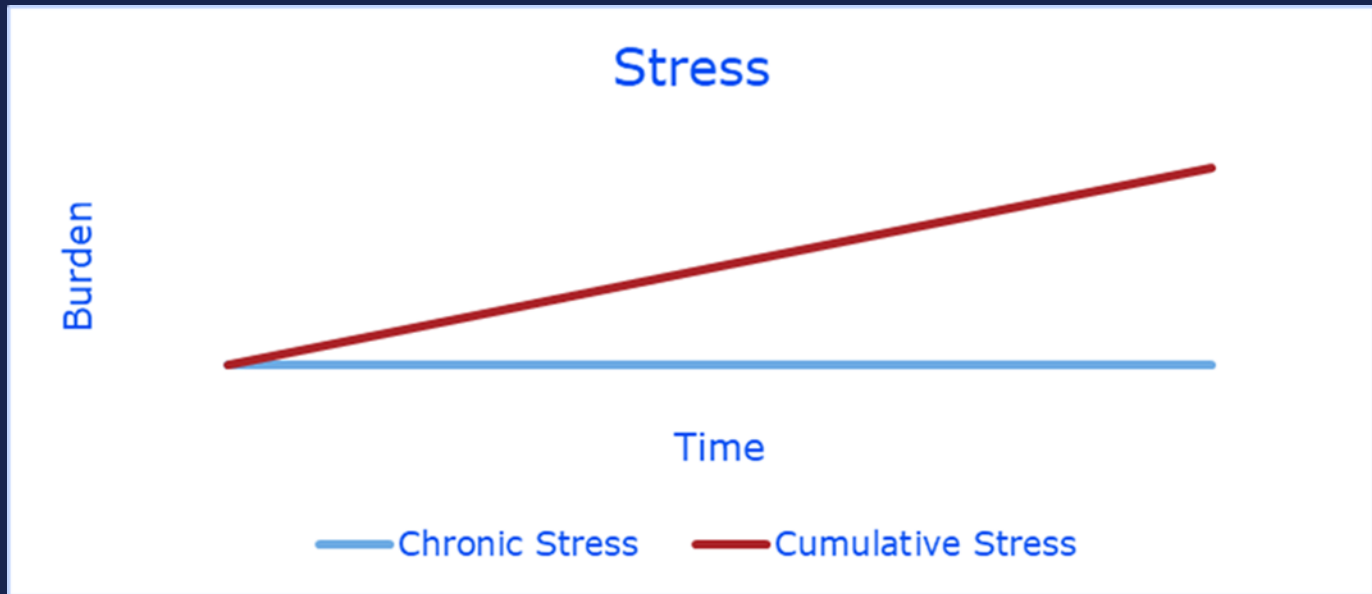
## What is it?

- Chronic stress refers to any continued exposure to stressors over a period of time.
- Cumulative stress (CS) refers to not only chronic exposure to stressors but to the accumulation of chronic stressors over time.
- CS is stress piled on top of stress.

# Cumulative Stress



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# Effects of Stress

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# Stress and Health (1 of 8)



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- Atrophy of brain structures and prevention of neurogenesis <sup>5, 12</sup>
- Reduction of hippocampal volume and function
  - ▶ Depression <sup>21</sup>
  - ▶ Post-traumatic stress disorder (PTSD) <sup>20</sup>

# Stress and Health (2 of 8)



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- Stress during pregnancy produces neurological, cognitive, and behavioral setbacks
  - ▶ Unsocial behavior
  - ▶ Attention Deficit Hyperactivity Disorder
  - ▶ Sleep disturbances
  - ▶ Psychiatric disorders
    - ◇ Depressive symptoms
    - ◇ Substance use disorders
    - ◇ Mood and anxiety disorders <sup>20</sup>

# Stress and Health (3 of 8)



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- The face of CS is a shifting mask of psychological and physiological effects which wreaks havoc on the cognitive, behavioral, emotional and physical systems within the body, and also is affected by environmental factors.



# Stress and Health (4 of 8)



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Effects are wide ranging:

- Increasing anxiety and depression
- Causing increased substance use
- Driving parental burnout contributing to child abuse
- PTSD
- Increased cortisol production
  - ▶ Can lead to heart issues and weight gain

# Stress and Health (5 of 8)



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- Cumulative stress is impacted by socio-economic status (SES). <sup>4, 12, 23</sup>
- Work-related stress increases cumulative stress. <sup>12, 30</sup>

# Stress and Health (6 of 8)



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Stress suppresses the immune system and opens individuals with higher CS to various health related diseases. <sup>16</sup>

- Gastric ulcers <sup>15, 29</sup>
- Obesity
  - ▶ Cardiovascular disease
    - ◇ Coronary heart disease
      - ◇ Ischemic heart disease
      - ◇ Peripheral artery disease <sup>12</sup>

# Stress and Health (7 of 8)



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- Stress interferes with cognitive executive functions, decreases self-regulation, and promotes eating.
- Behavior is affected through intake of high caloric foods, sugar, and fats; decreasing physical activity; and shortening sleep.

# Stress and Health (8 of 8)



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- Physiologically, stress affects:
  - ▶ The autoimmune system <sup>28</sup>
  - ▶ The gut microbiome
  - ▶ Reward processing in the brain
  - ▶ Biochemical hormones such as cortisol, which increase eating behaviors and promote fat deposits in unhealthy areas of the body, particularly the abdomen. <sup>3, 18, 31</sup>



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# COVID-19 and Stress

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# COVID-19 and Stress (1 of 5)



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- The ongoing COVID-19 pandemic is a multidimensional contributing factor to cumulative stress and has a myriad of physiological and psychological effects caused by increased allostatic load.
- The biggest culprit to increased allostatic load currently is COVID-19, which has exacerbated existing factors related to cumulative stress.

# COVID-19 and Stress (2 of 5)



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- Mood and substance use disorders are contributing factors to suicide, and the cumulative stress of COVID-19 affects mood and substance use disorders. <sup>26</sup>



# COVID-19 and Stress (3 of 5)



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The effects of COVID-19:

- Increased stress eating
- Decreased exercise
- Decreased social contact
- Economic adversity
- Fear of the disease itself, and general uncertainty, have led to an increase in suicide rates, especially among vulnerable populations who are already prone to suicidality. <sup>25</sup>

# COVID-19 and Stress (4 of 5)



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- Depressive symptoms, anxiety, and PTSD have increased with COVID-19
  - ▶ Especially among females younger than 40 years
  - ▶ Those who are unemployed
  - ▶ Students

These symptoms are also contributing factors to suicide. <sup>1, 36</sup>

# COVID-19 and Stress (5 of 5)



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- Previous disasters have shown an increase in suicide rates
- It is important to remember that the coronavirus pandemic is ongoing, and effects of disasters continue to occur for six to 12 months after the official end of the event. <sup>6, 19, 30, 33</sup>

# COVID-19 and Stress: Youth



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- COVID-19 has increased factors associated with parental burnout and child abuse, thus increasing risk of prevalence for cumulative stress and associated effects with children. <sup>10</sup>
- Effects of COVID-19 in the adolescent population result in increased risk of PTSD, anxiety, and depression. <sup>11</sup>
- Higher perceived risk of COVID-19 infection predicted greater risk of depressive symptoms, especially among adults with a history of childhood trauma. <sup>17</sup>



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# Civil Unrest and Stress

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# Civil Unrest and Stress (1 of 3)



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- The years 2020 and 2021 have been marked by ongoing civil unrest.
- Examinations of continuing social unrest in Hong Kong found a roughly 12% increase in depression and PTSD among the population. <sup>24</sup>
- Studies of the psychological effects of the civil unrest in 1992 Los Angeles found 17% of law enforcement officers experienced stress symptoms. <sup>13</sup>

# Civil Unrest and Stress (2 of 3)



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- Examinations of stress related outcomes after the death of Freddie Gray in Baltimore found an increase in depressive symptoms in the community near the epicenter of the civil unrest. <sup>14</sup>
  - ▶ Follows the disaster proximity model
- Studies on the effects of social unrest on stress in a Nursing staff found that the severity of the unrest was the greatest predictor of stress (27.7%). <sup>2</sup>



# Civil Unrest and Stress (3 of 3)



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- Civil unrest increases feelings of fear, uncertainty, and anxiety. It often displaces individuals and families and affects SES.
- The chaos that is part of civil unrest creates social change, which erodes perceived control, which is generally a mitigating factor in controlling stress and decreasing allostatic load.





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# Self-Care

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# Self-Care (1 of 13)



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## Cognitive Practices

- Cumulative stress can be mediated through certain interventions. This can have positive effects in decreasing allostatic load and increasing euthymia.
- Key in maintaining euthymia is a healthy diet, getting quality sleep, having positive social interactions, spending time in positive environments that include greenspace, and engaging in regular physical exercise. <sup>22</sup>

# Self-Care (2 of 13)



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## Cognitive Practices

- Job stress is mediated by decision latitude in the workplace. <sup>29</sup>
- Perceived control:
  - ▶ Moderates the health effects of traumatic stressors.
  - ▶ Meditates the effects of SES and other chronic stressors. <sup>23</sup>
- Having a greater sense of purpose in life also reduces stress. <sup>12</sup>

# Self-Care (3 of 13)



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## Cognitive Behavioral Practices

- While cognitive exercises can provide a greater sense of purpose and increase perceived control, behavioral exercises can address embodied aspects of stress and trauma.

# Self-Care (4 of 13)



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## Cognitive Behavioral Practices

The practice of mind-body skills:

- Decreases PTSD symptoms, including depression and increases hopefulness.
- Includes meditation, guided imagery, breathing techniques, biofeedback, and self-expression through drawing, words, and movement (including tai chi-type movements). <sup>8, 9, 27</sup>

# Self-Care (5 of 13)



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## Cognitive Behavioral Practices

- Cumulative stress may be used as an intervention through the consistent practice of stress management.
- Some evidence-based practices include:
  - ▶ Guided imagery
  - ▶ Progressive muscle relaxation
  - ▶ Diaphragmatic breathing
  - ▶ Relaxation response
  - ▶ Autogenic training

# Self-Care (6 of 13)



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## Cognitive Behavioral Practices

- Evidence-based practices cont.:
  - ▶ Mindfulness based stress reduction
  - ▶ Transcendental meditation
  - ▶ Cognitive behavioral therapy
  - ▶ Biofeedback
  - ▶ Emotional freedom technique <sup>32</sup>

# Self-Care (7 of 13)



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## Cognitive Behavioral Practices

- Weekly Words of Wellness emails



# Self-Care (8 of 13)



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## Zoom Fatigue

- While Zoom Fatigue currently has no diagnostic criteria, it is generally characterized by extreme physical and mental tiredness after spending prolonged amounts of time in virtual meetings, e.g., Zoom, Skype, Microsoft Teams.

# Self-Care (9 of 13)



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## Zoom Fatigue

- One of the reasons that we experience this phenomenon is that communication is a holistic endeavor with speech being only one piece of the communication puzzle.
- In virtual meetings, tiredness results from spending a great amount of psychological energy trying to fill in “minutiae gaps” in an attempt to discern context and, therefore meaning.

# Self-Care (10 of 13)



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## Zoom Fatigue

- There are several techniques that can help reduce Zoom Fatigue:
  - ▶ Use the voice option and eliminate the camera.
  - ▶ Without the visual data to distract us, we focus more on speech pattern recognition, freeing the mind from trying to interpret data that can't be discerned through the virtual medium.

# Self-Care (11 of 13)



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## Zoom Fatigue

- Avoid multitasking during virtual meetings for the same reasons that we turn off the video: distraction.
- Additionally, different types of work utilize different areas of the brain to accomplish their tasks.
- Multitasking overtaxes the brain and may reduce productivity by 40%. <sup>7</sup>

# Self-Care (12 of 13)



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## Zoom Fatigue

- Take breaks during long periods of videoconferencing by minimizing your screen; and when you do use your screen, look at the camera at eye level, rather than looking at yourself or other participants. <sup>34</sup>

# Self-Care (13 of 13)



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## Zoom Fatigue

- Avoid overuse of videoconferencing. Mix it up by using emails and phone calls and not exclusively using virtual media.
- Check-in with participants during video meetings. Even brief silences, as little as 1.2 seconds, cause participants to negatively view the interaction. <sup>35</sup>

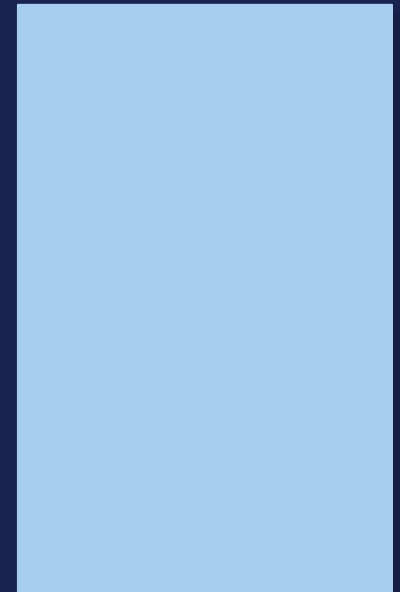
# Survey



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- Link:

<https://forms.office.com/Pages/ResponsePage.aspx?id=Mnf5m7mCm0mxaqk-jr1Ta9er1u6JuwNFi1YcxphcMOZUREFSWEFSMkhFME1BSDdKSUcyWIZMT0hETC4u>



# CCP Online Resources



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## General Information About the CCP:

- <https://bit.ly/2MilRV2>

## Brochures: (English and Spanish)

- Provider List and Contact Information

## Other Helpful Resources:

- <https://bit.ly/2MhbErX>



# General Resources



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## Center for Disease Control and Prevention

- <https://www.cdc.gov/coronavirus/2019-ncov/index.html>

## SAMHSA CCP Toolkit

- <https://www.samhsa.gov/dtac/ccp-toolkit>

## SAMHSA Resource Database

- <https://store.samhsa.gov>



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# Hotlines

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- **COVID-19 Mental Health Support Line**
  - 1-833-986-1919
- **Crisis Textline**
  - Text TALK to 741741
- **Heroes First Responder Helpline**
  - 1-833-367-4689  
<https://sbmi.uth.edu/ace/helpline.htm>
- **National Suicide Prevention Lifeline**
  - 1-800-273-8255
- **SAMHSA Disaster Distress Helpline**
  - 1-800-985-5990
  - Text TalkWithUs to 66746
- **Texas 2-1-1**
  - Dial 2-1-1, option 8
- **The Trevor Project (LGBTQ Suicide Help)**
  - 1-866-488-7386
  - Text START to 6786780
- **Veterans Crisis Line**
  - 1-800-273-8255
  - Text 838355

# More Resources

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CCP Provider List with contact information:

<https://hhs.texas.gov/sites/default/files/documents/doing-business-with-hhs/grants/ccatp/lmha-lmbha-ccp-list.pdf>



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# Thank you

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