

**Panic in the Streets:
Why Are We Seeing More
Hyperventilation Syndrome in EMS**

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24th World Scout Jamboree - 2019



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#1 NEW YORK TIMES BESTSELLER

The Anxious Generation

How the Great Rewiring of
Childhood Is Causing an Epidemic
of Mental Illness

Jonathan Haidt

Coauthor of *The Coddling of the American Mind*

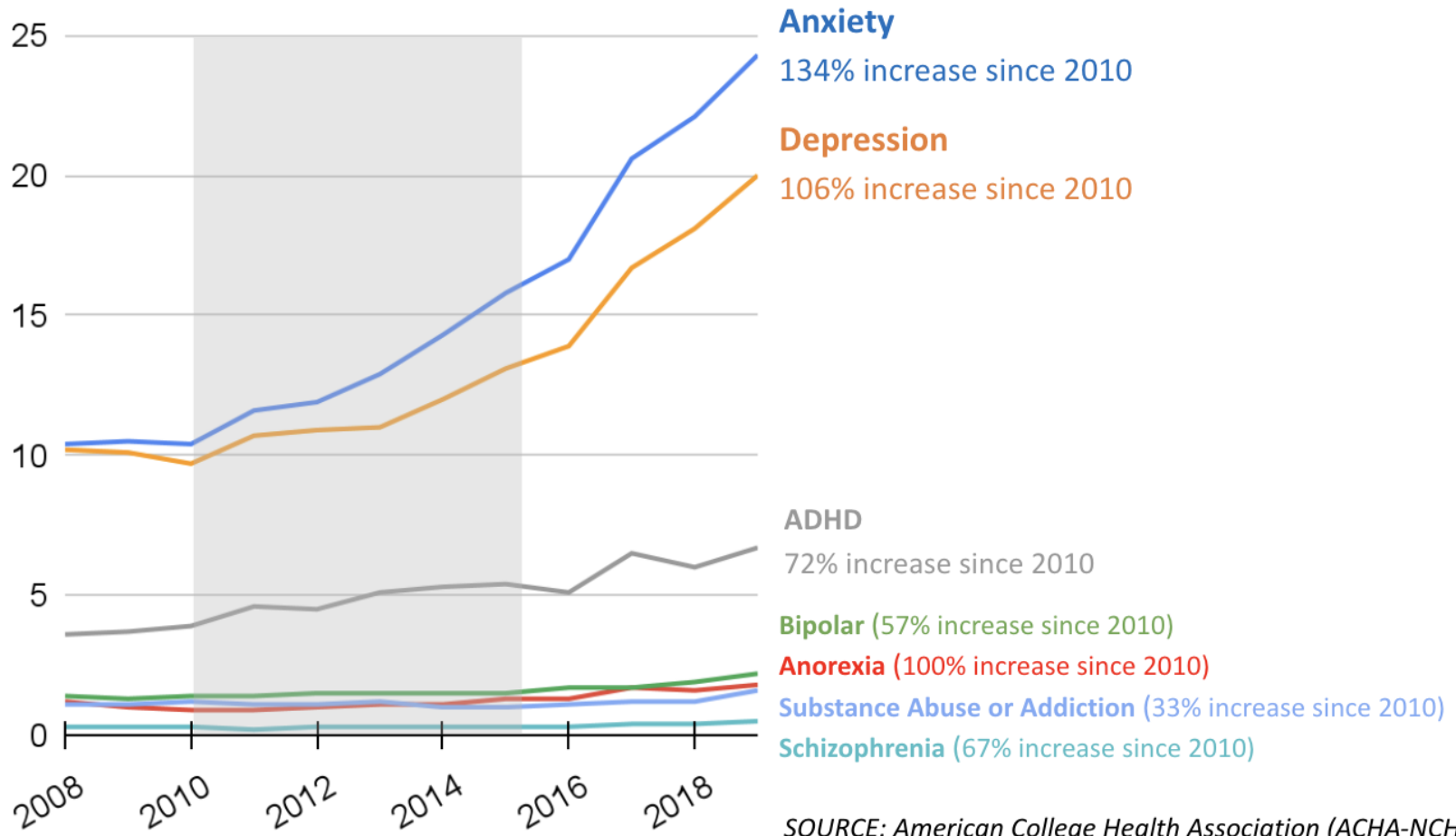
A
New York Times
NOTABLE
BOOK



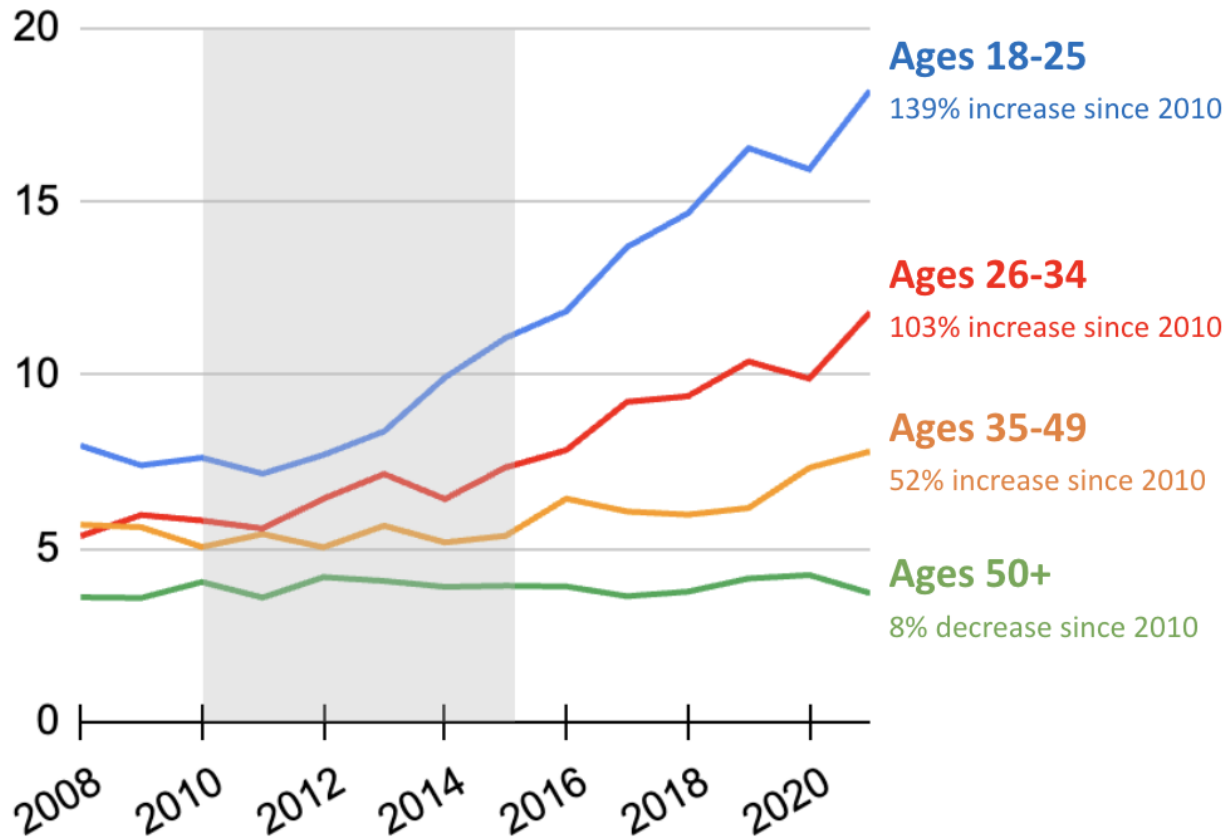
Epidemic of Internalizing Disorders

- Anxiety
- Depression
- Panic Attack
- Hyperventilation Syndrome

Percent of U.S. Undergraduates Diagnosed with a Mental Illness



Percent U.S. Anxiety Prevalence



SOURCE: U.S. National Survey on Drug Use and Health

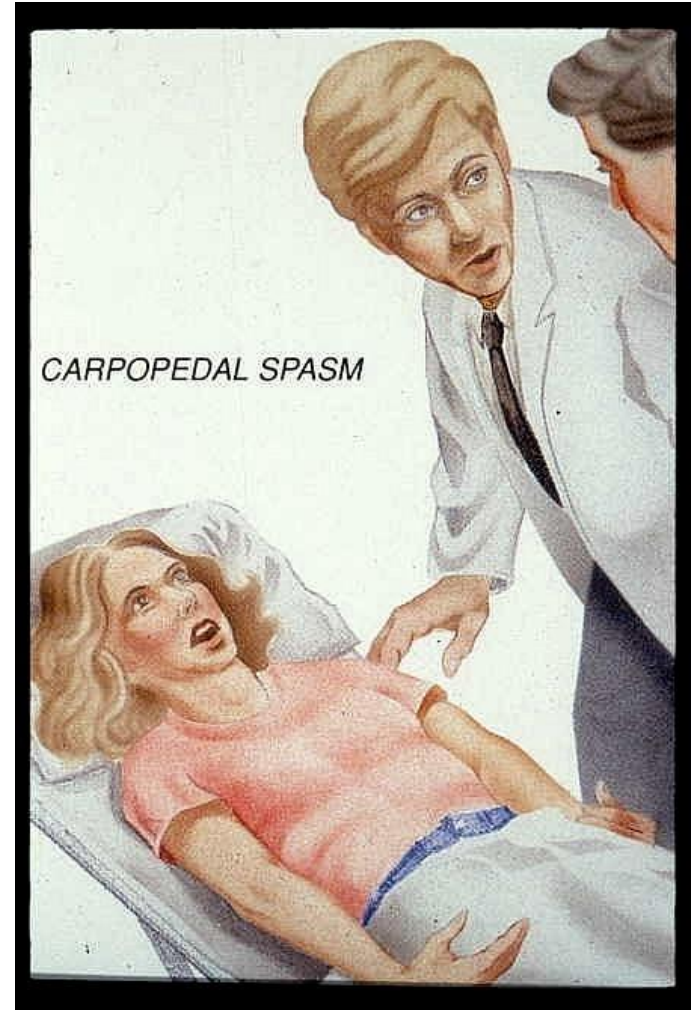
Anxiety

Physiologic Symptoms

- Tightness/tension/discomfort
 - Chest or Abdomen
- Shortness of Breath
- Headache
- Nausea
- Dizziness
- Fainting

Hyperventilation Syndrome

- Symptoms
 - Numb hands/feet/lips
 - Carpopedal spasms
 - Lightheaded/dizzy
 - Fainting
 - Confusion



Hyperventilation Physiology

- Increased minute ventilation
- Reduced CO₂ (Hypocapnia)
- Respiratory alkalosis, reduces ionized calcium
- Hypocalcemia
- Vasoconstriction

Emergency Care, 4th Ed.

Harvey Grant, Robert Murray, & J. David Bergeron, 1986

- In most cases, the hyperventilating patient will not be cyanotic. This is a reliable clue that helps you to rule out severe respiratory distress.
- The carbon dioxide level in the blood of a hyperventilating patient is too low. Having the patient breathe into a paper bag (not plastic) increases the carbon dioxide level in the blood, bringing it closer to normal.”

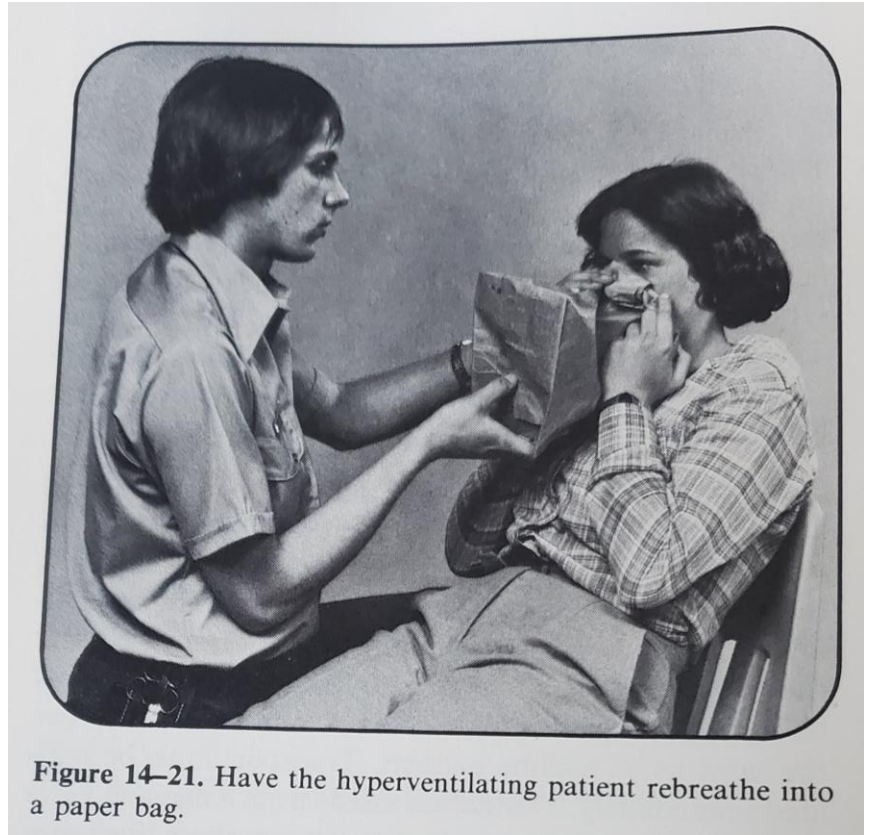


Figure 14-21. Have the hyperventilating patient rebreathe into a paper bag.

Emergency

Care and Transportation of the Sick and Injured, 14th Ed.

AAOS, Andrew Pollack, MD, Editor, 2021

“The decision whether hyperventilation is being caused by a life-threatening illness or a panic attack should not be made outside the hospital. Initially, you can verbally instruct the patient to slow his or her breathing; however if that does not work, give supplemental oxygen and provide transport to the hospital where physicians will determine the cause of the hyperventilation.”

- “Happiness is not from eliminating “triggers” from life, but from learning to deprive extremal events of those triggers.”
- Buddhist teaching