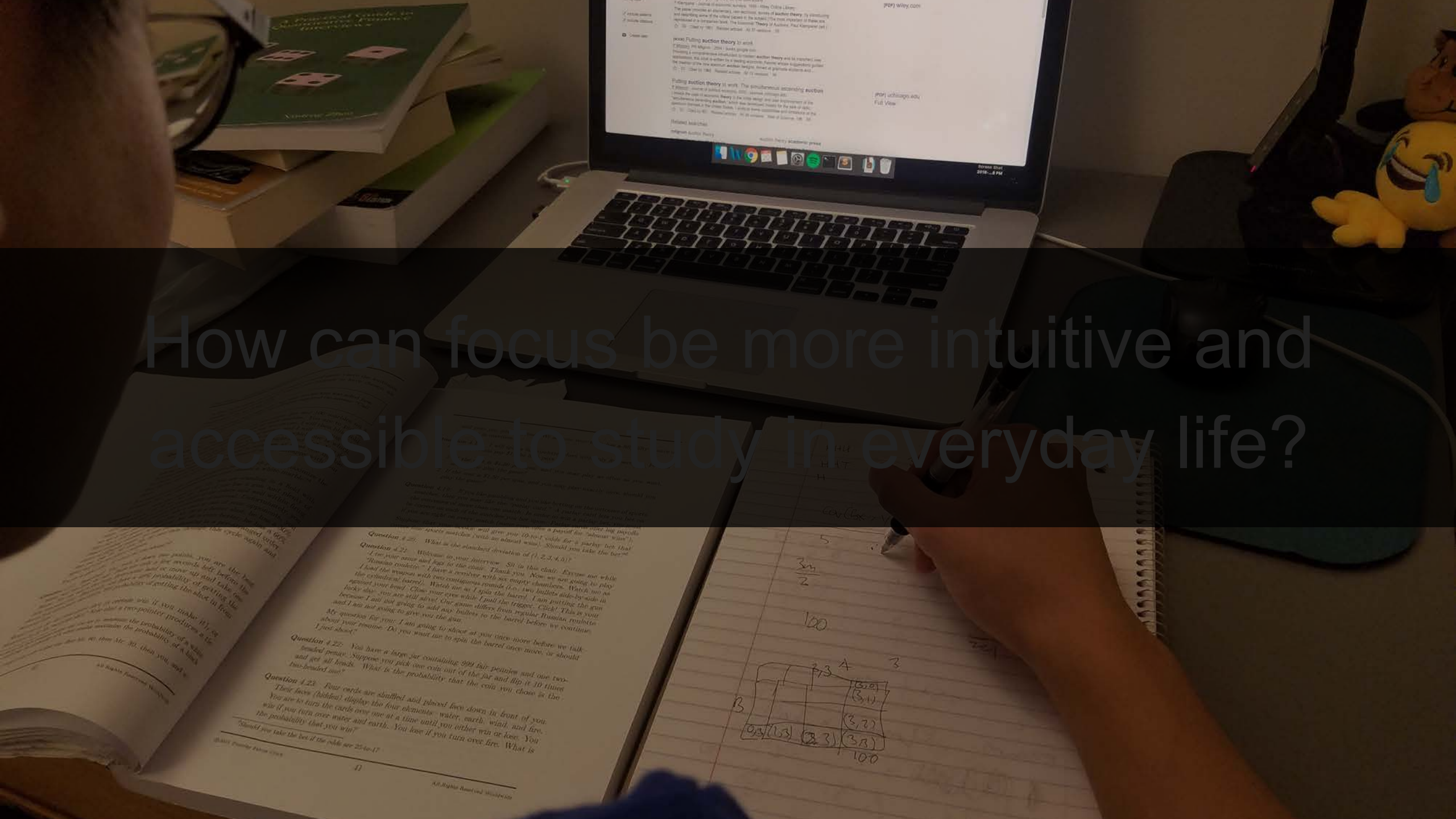
A hand holding a pen over a notebook with a pen holder in the background.

What can our breathing rate tell us about our focus?

Shamay Agaron
Princeton University

How can focus be more intuitive and accessible to study in everyday life?



Probability: A Practical Introduction
by David Spiegelhalter

Journal of Economic Surveys
The Journal provides an international, critical, survey of auction theory. It presents and discusses work of the highest quality in the field. The focus is on theoretical and applied work. The Journal is published by Blackwell Publishers Ltd.
Volume 18, Number 4, December 2004

Putting auction theory to work
by Paul Klemke

Putting auction theory to work: The simultaneous ascending auction
by Paul Klemke

Question 4.19: Suppose you are playing a game where you have a 50% chance of winning a round. If you win, you get 10 points. If you lose, you get 0 points. You can choose to stop or to continue. If you stop, you get the points you have accumulated so far. If you continue, you play another round. What is the expected value of continuing?

Question 4.20: What is the standard deviation of (1, 2, 3, 4, 5)?

Question 4.21: Welcome to your interview. Sit in this chair. Examine me while I load the weapon with two consecutive rounds (i.e. two bullets side-by-side in the chamber). Watch me as I spin the barrel. I am putting the gun on the table. You are still alive! Our game differs from regular Russian roulette because I am not going to add any bullets to the barrel before we continue. My question for you: I am going to shoot at you once more before we talk. Should you continue? Do you want me to spin the barrel once more, or should I just shoot?

Question 4.22: You have a jar containing 999 fair pennies and one two-headed penny. Suppose you pick one coin out of the jar and flip it 10 times and get all heads. What is the probability that the coin you chose is the two-headed one?

Question 4.23: Four cards are shuffled and placed face down in front of you. They are labeled (hidden) with the four elements: water, earth, wind, and fire. You are to turn the cards over one at a time until you either win or lose. You win if you turn over water and earth. You lose if you turn over fire. What is the probability that you win?

100
 $\frac{3m}{2}$
5
100
A B

| | |
|-------|-------|
| (0,0) | (0,1) |
| (1,0) | (1,1) |

100

Spire







15
Breaths per minute ⓘ
Your Average **19 BPM**

MOSTLY ACTIVE

Today

9 SUN 10 MON 11 TUE 12 WED 13 THU 14 FRI **15 SAT**

55 min Calm AVG: 69 min

126 min Focus AVG: 75 min

23 min Tense AVG: 41 min

191 min Active GOAL: 60 min
CALORIES: 1516
STEPS: 15663/6000

304 min Sedentary AVG: 234 min

← ALL BREATH MOMENTS Sat, 15 Sep '18

12am 4am 8am 12pm 4pm 8pm 12am

11:07pm

Calm
2 minutes

Calendar Location

11:02pm

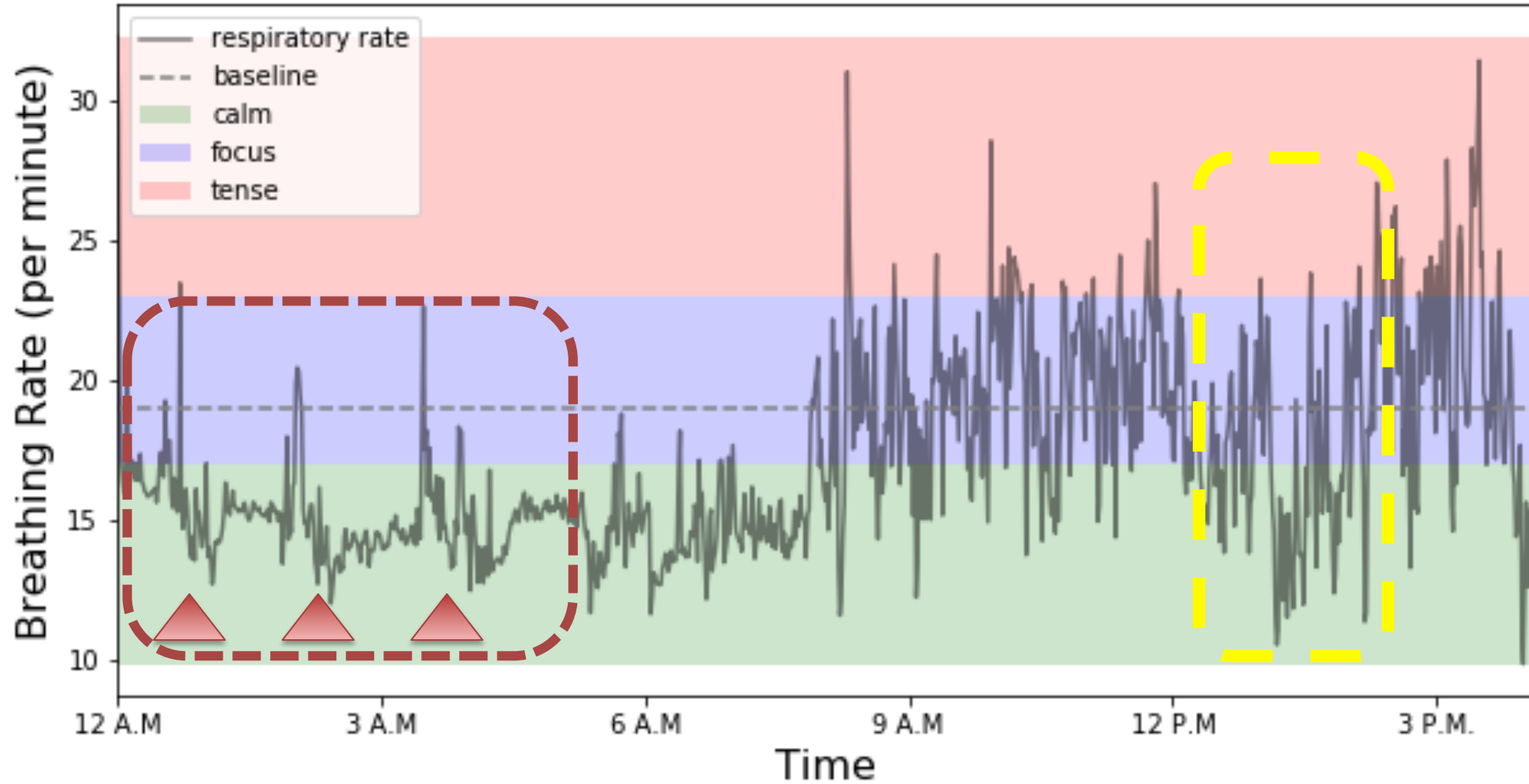
Focus
3 minutes

Calendar

10:51pm

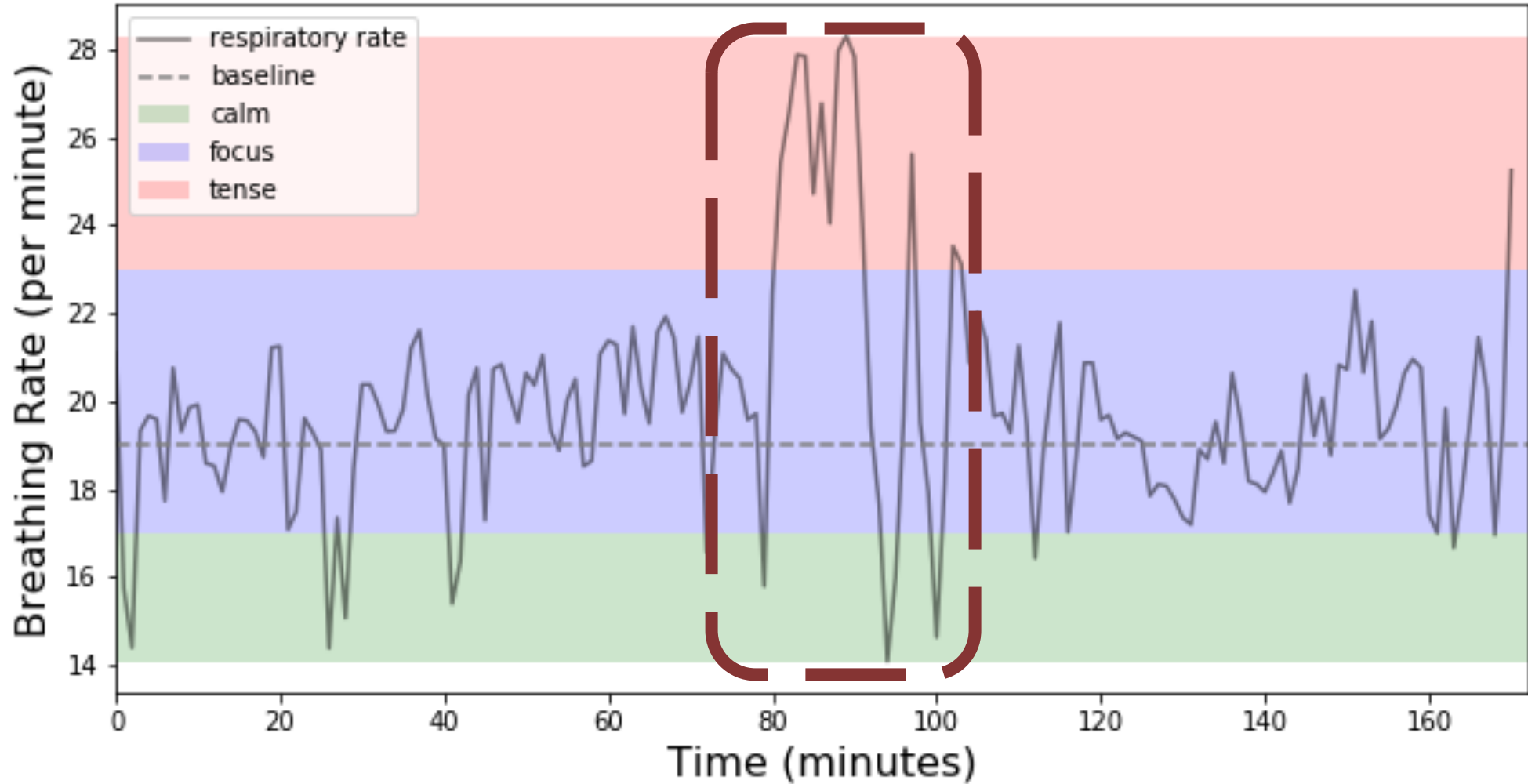
Tense
2 minutes

Breathing rate over the course of a day



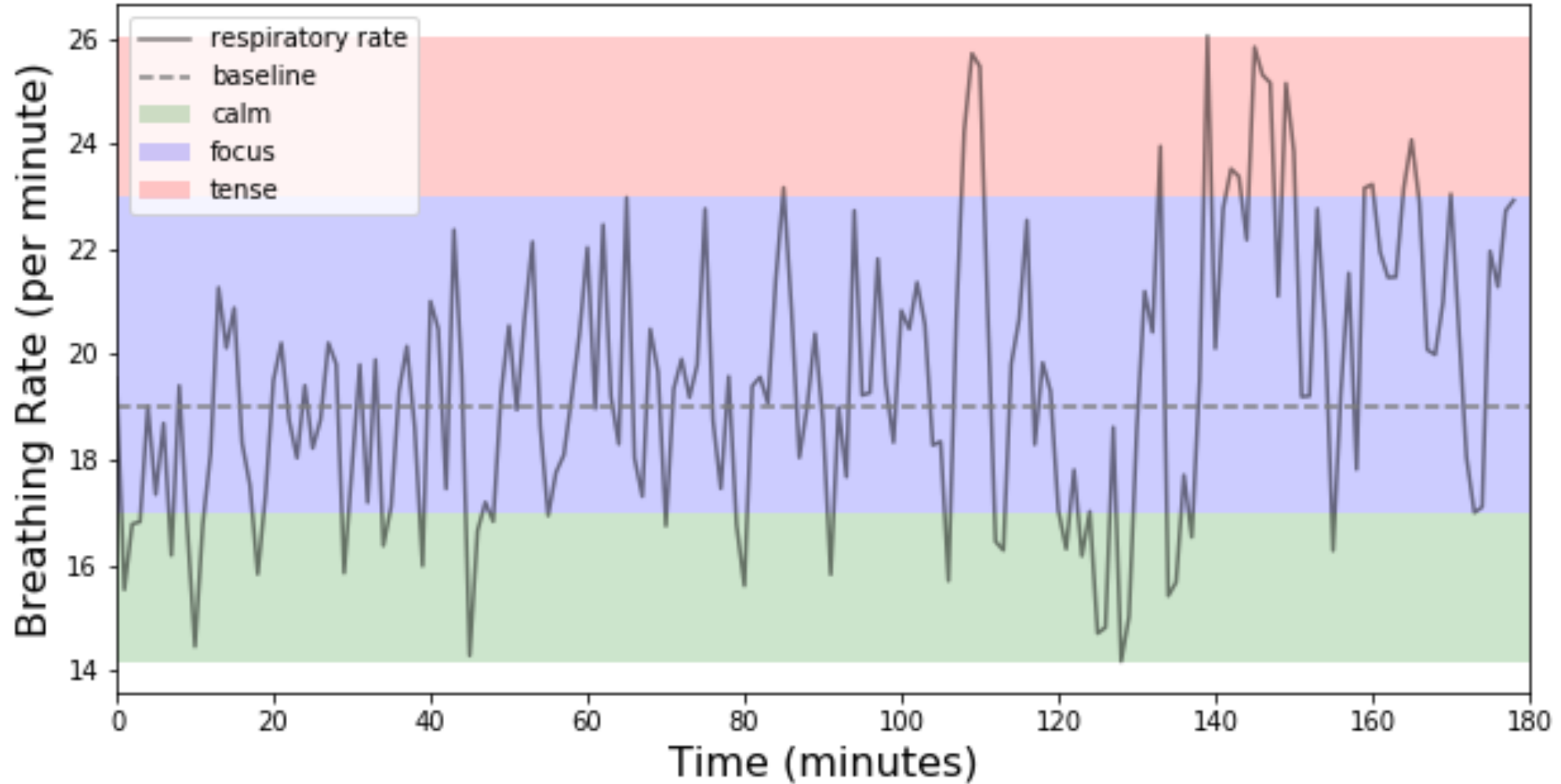
Breathing rate is a good measure of focus.

Breathing rate during a 3-hour stretch of classes



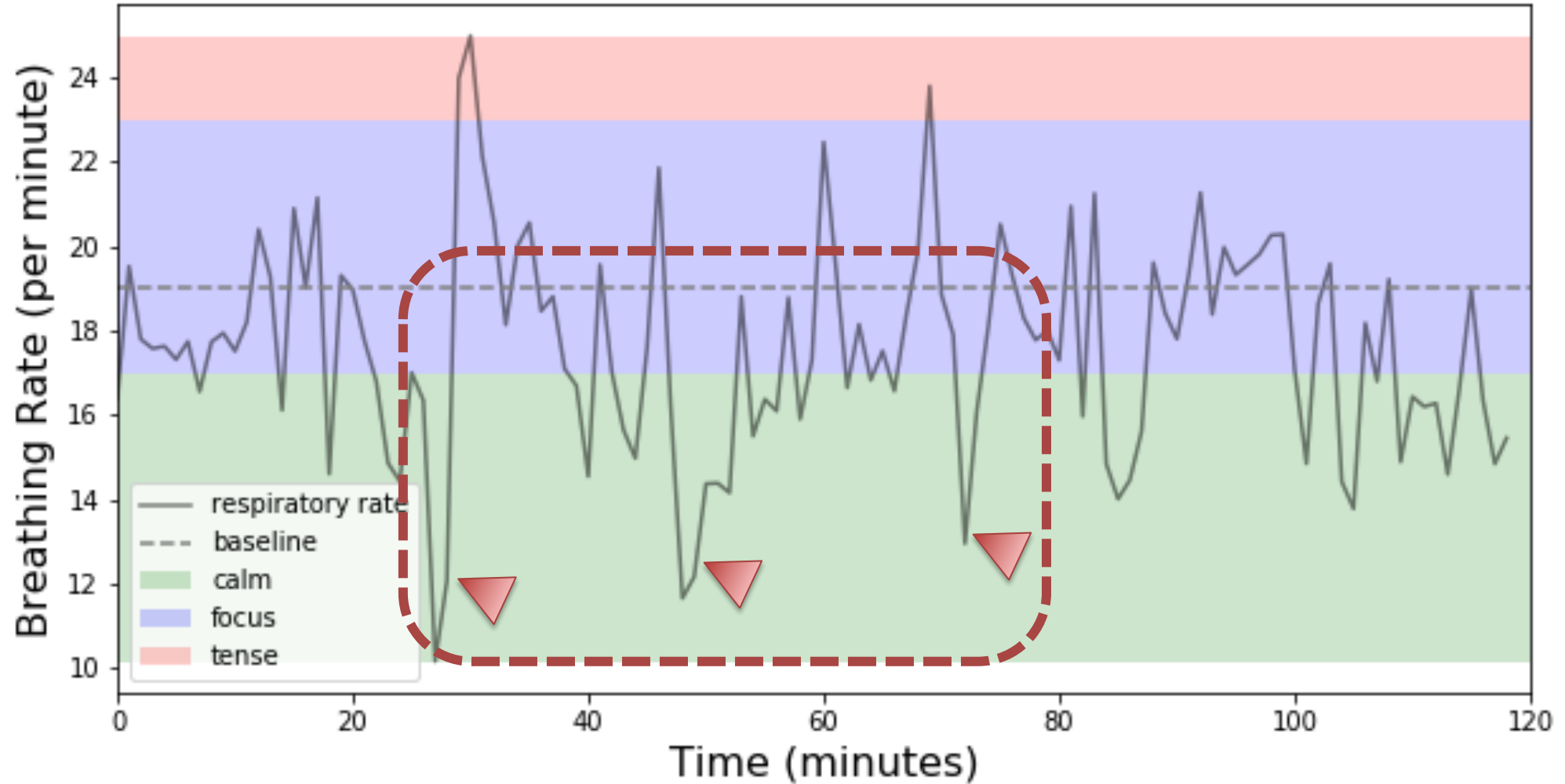
Breathing rate is a good measure of focus.

Breathing rate over a 3-hour study session



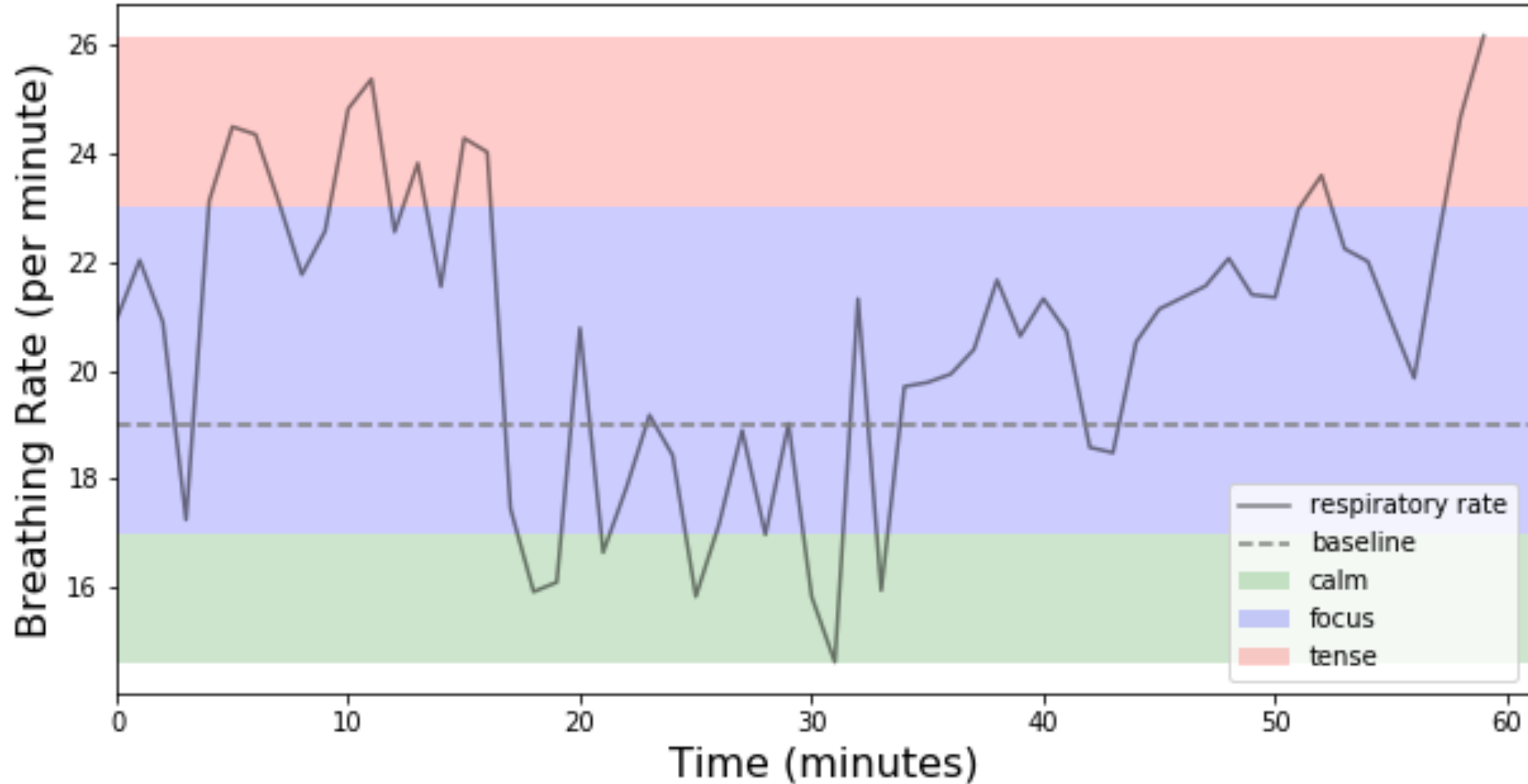
Breathing rate tends to be more erratic after a few hours of studying.

Breathing rate over a 2-hour study session



It's hard for me to focus in the morning.

Breathing rate over a 1-hour study session



Unsuccessful study sessions are characterized by highly volatile breathing patterns.

What I Learned

- © Breathing rate is a good measure of focus.
- © Breathing rate tends to be more erratic after a few hours of studying.
- © I tend to focus better in the evening time.
- © Unsuccessful study sessions are characterized by highly volatile breathing patterns.

A close-up, slightly blurred photograph of a person's hands typing on a laptop keyboard. The person is wearing a dark-colored watch with a metal link bracelet on their left wrist. A silver pen lies on the desk next to the hands. In the foreground, there is an open notebook with some faint handwriting on the page. The background is out of focus, showing a wooden desk and a laptop screen. The overall lighting is soft and natural.

What's Next



Thanks!

**ANY
QUESTIONS?**