

The Resilient Researcher

Building Your PhD Management Toolkit

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Why PhD Mental Health Matters

- Growing mental health concern
- Sustainability is key
- Mental health as a prerequisite
- The investment mindset





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A closer look at
PhD stress

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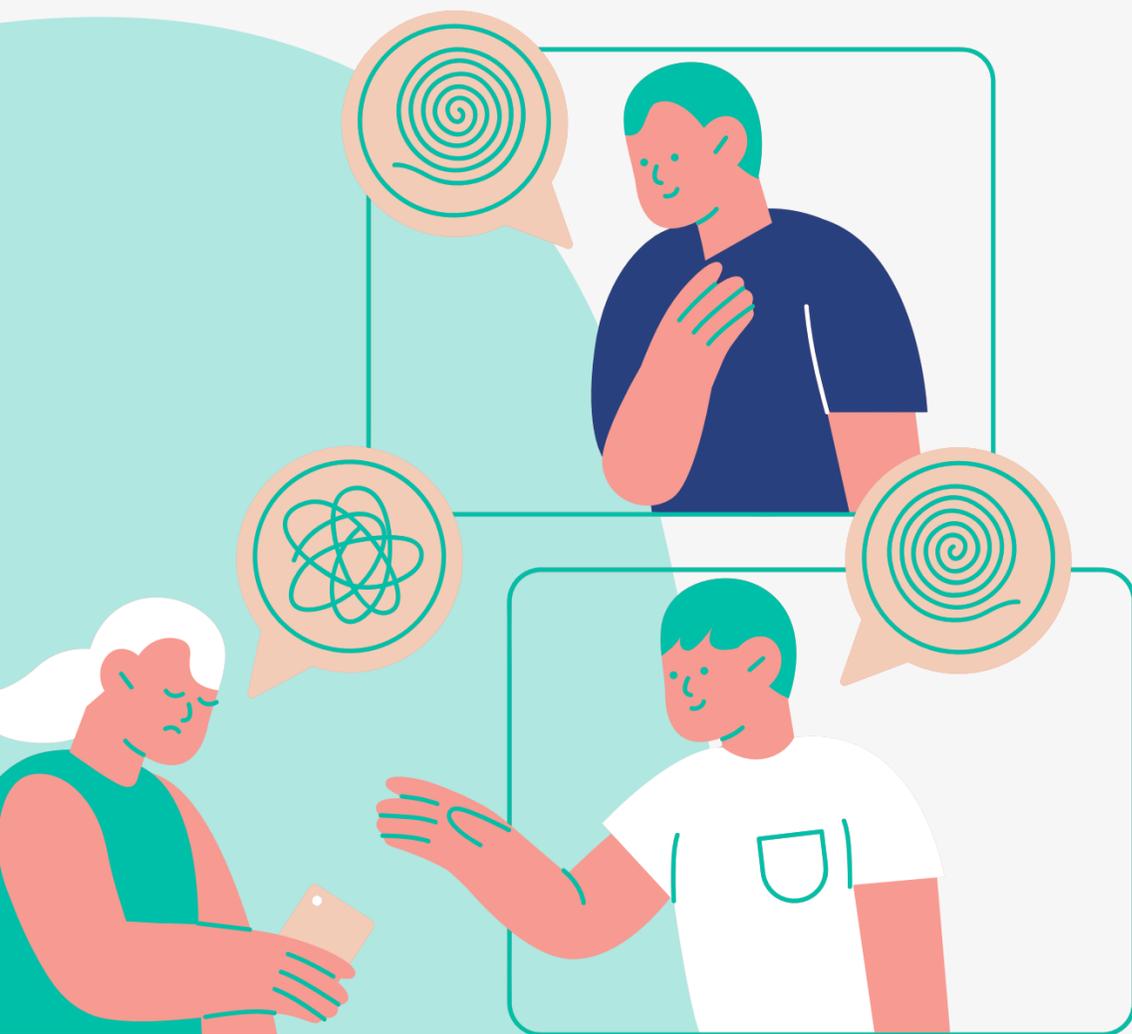
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Useful resources

A quick survey

Pause
&
Reflect





What is unique about PhD stress?



MENTAL HEALTH DURING YOUR PhD THE TOXIC MIX

A study by the University of California, Berkeley, found nearly half of postgraduate students met criteria to classify them as depressed.¹

This poster explores the common stressors that PhD students may be exposed to during their PhD.



IMPOSTER SYNDROME

Most prevalent in women and minority groups, feelings of not 'deserving' to be on your PhD despite having earned it are rife.



FIRST TIME FAILING

Students undertaking a PhD have often never experienced failure, having done well in previous studies.



PRESENTEEISM

Maintaining a work/life balance can be difficult with the academic culture of overwork.



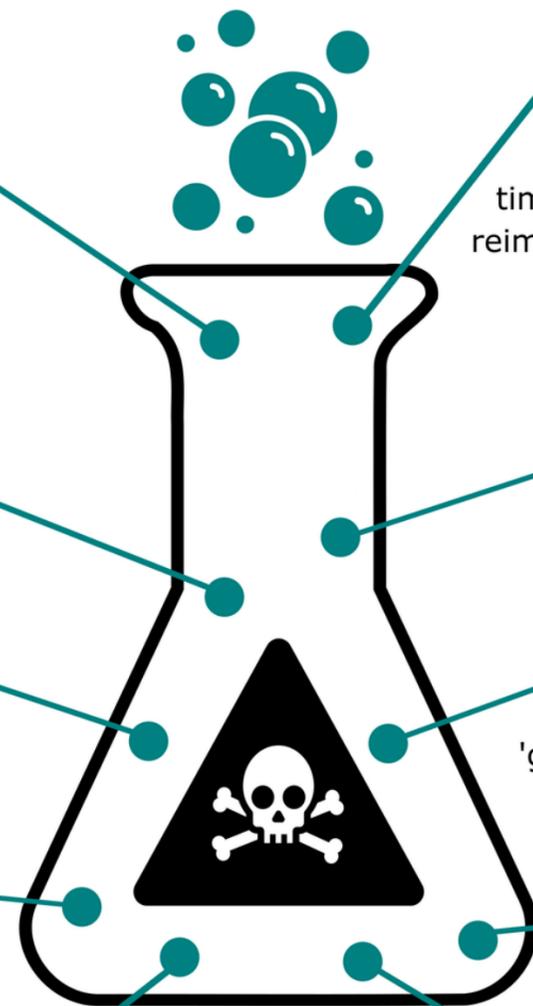
TOUGH RELATIONSHIPS

Supervisor/student relationships be it an absent supervisor, or overbearing, can be particularly tough to manage.



NO MORE TICK BOXES

Transitioning from taught courses to research can be difficult, particularly given the open-ended nature of research.



FINANCIAL CONCERNS



Money worries can lead to increased stress. Waiting long time periods to receive for example, conference reimbursement can exacerbate the issue.

COMPETITIVE LANDSCAPE



Competition not collaboration is often fostered. Given no two PhDs are the same comparing your PhD to someone else's can be deflating.

PAPERS, PLEASE



Focus on research output can lead to feelings of not being 'good enough' if you do not have *n* publications.

ISOLATION/GUILT



Writing a thesis can be isolating. This can also be coupled with feelings of guilt when taking breaks.

CULTURE OF ACCEPTANCE



In academia, there is a culture of acceptance that mental health issues are part of the journey. This needs to change.



Dr Zoë J Ayres

@zjayres

SELF-HARMING?
SUICIDAL THOUGHTS? CALL SAMARITANS NOW ON 116-123

Part of the #mentalhealth series by Dr Zoe Ayres (@zjayres). Free to distribute.

Reference: 1. Graduate Student Happiness & Well-Being Report, 2014, University of California, Berkeley.

What is unique about PhD stress?

01

Ambiguity of success

- success was clearly defined before
- no 'answer key' now
- constant, low-grade anxiety

02

The advisor power dynamic

- the academic hierarchy
- power asymmetry
- can be psychologically taxing

03

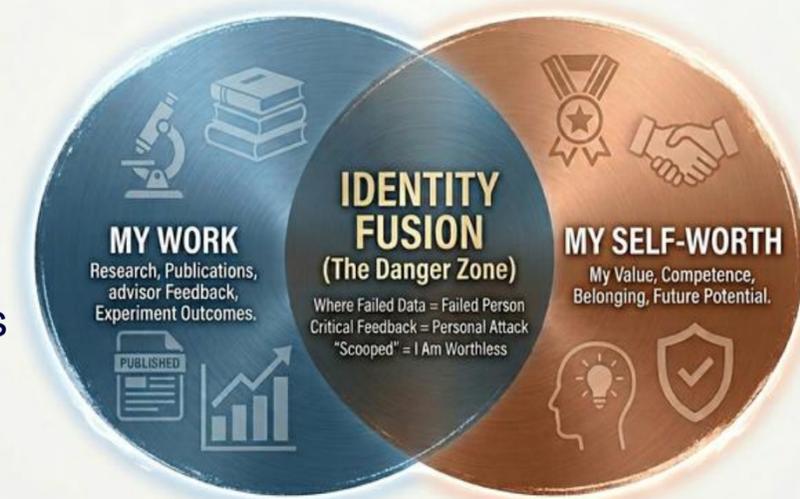
The always-on guilt

- the office is everywhere
- the academic FOMO
- hyper-vigilance

04

Identity fusion

- your work is who you are
- fuse self-worth to research results
- need to un-fuse



The Impact of Unmanaged Stress

Physiological

Cognitive

Emotional



The Impact of Unmanaged Stress

Physiological



- Cortisol becomes dysregulated
- Consistent elevated cortisol levels can be damaging
- Weakened immune system

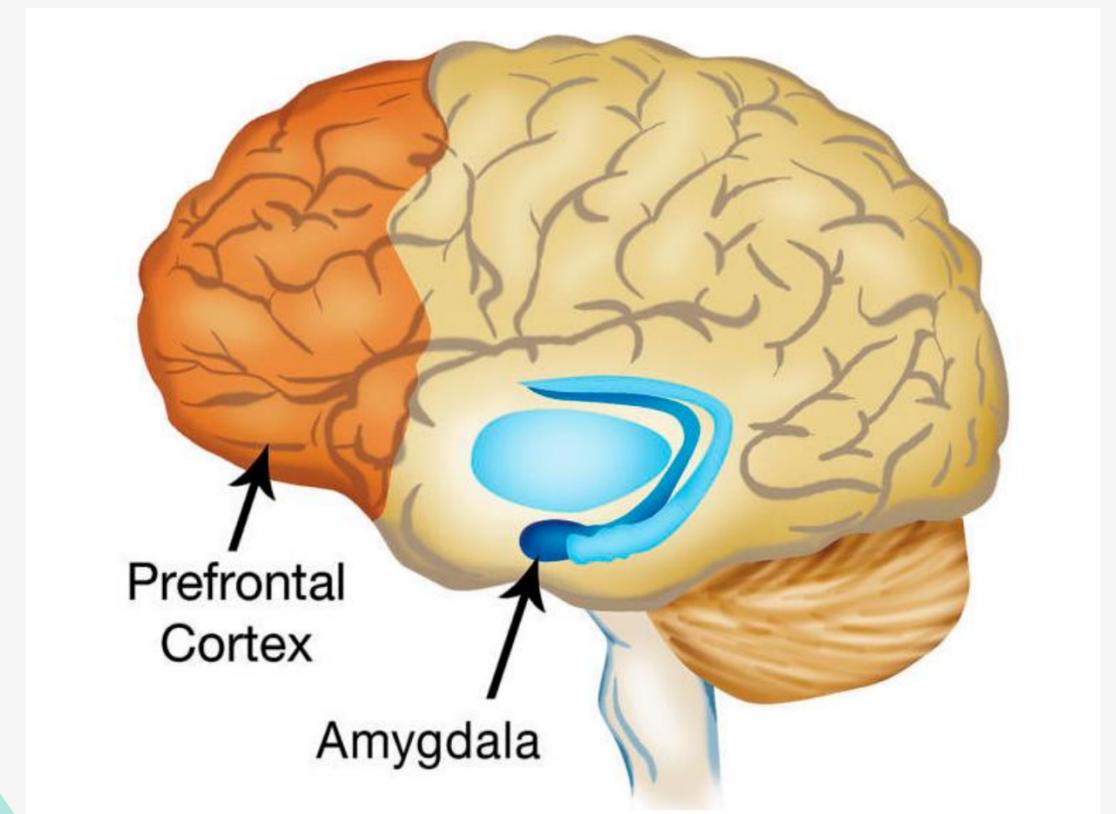


The Impact of Unmanaged Stress

Cognitive



- **Detrimental effects on the hippocampus**
critical for memory and learning
- **Amygdala hijack**
in chronic stress, amygdala takes over, prefrontal cortex unable to function properly



The Impact of Unmanaged Stress

Cognitive



- **Detrimental effects on the hippocampus**
critical for memory and learning
- **Amygdala hijack**
in chronic stress, amygdala takes over, prefrontal cortex unable to function properly
- **Cognitive overload**
not being able to process and act on what is received
- **Decision fatigue**
after making many decisions, your ability to make more decisions over the course of a day becomes worse
- **Task avoidance**
When a task exceeds your working memory capacity, the brain disengages as a protective response



The Impact of Unmanaged Stress

Emotional

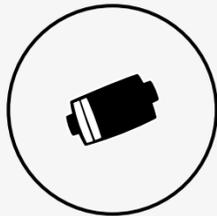


- higher rates of stress and burnout than other professions
- correlation between elevated academic stress and diminished mental health

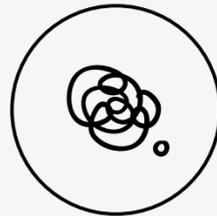




Burnout: 3 aspects



Exhaustion



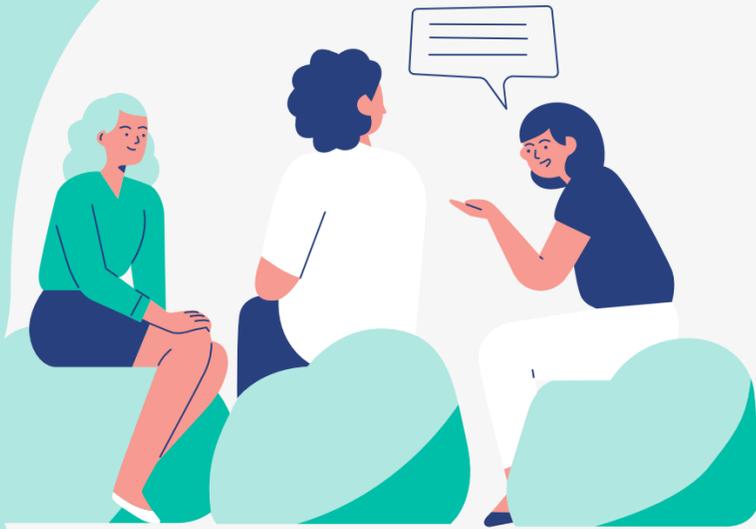
**Cynicism
(Depersonalization)**



**Reduced personal
accomplishment**



Burnout: 5 stages



1 the Honeymoon

High energy, optimistic, driven,
May overwork, ignoring limits

2 The Onset of Stress

Newness wears off, optimism
and productivity decreasing,
physical symptoms appear

3 Chronic Stress

Pressure becomes new normal,
getting ill more frequently,
withdraw, resentment grows, get
into denial

4 Burnout

NS move into survival mode,
sense of emptiness, exhausted,
cynical about research, no longer
operating at full cognitive
capacity

5 Habitual Burnout

Chronic sadness, physical
collapse, clinical depression,
need professional intervention



Catch Burnout with Awareness

Watch for energy patterns

"Is my energy recovering?"

Notice emotional shifts

- are you becoming more cynical?
- do you feel less compassion?
- are you feeling emotionally numb?

Watch withdrawal patterns

- stop attending social events
- avoid lab discussions
- avoid your advisor

Listen to your body

- are your shoulders constantly up to your ears?
- is your jaw clenched while you are reading papers?
- are the headaches or sleep disturbances becoming your "new normal"?



Stress Management Toolkit



Stress Management Toolkit



Physiological

Cognitive

Behavioral

Social



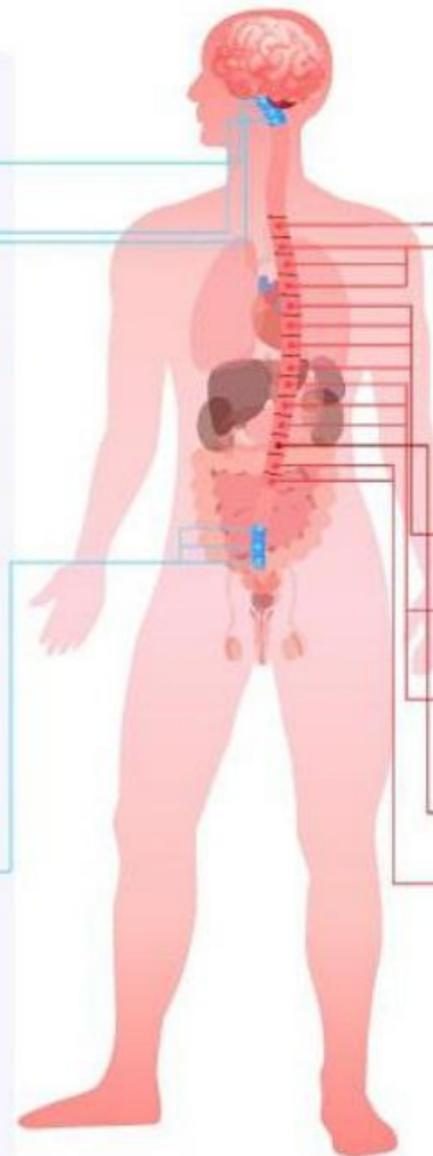
Stress Management Toolkit

Physiological

PARASYMPATHETIC

- Pupil Constriction
- Stimulation Saliva
- Constrict Bronchi
- Slow Heart rate
- Stimulate Production of Bile
- Stimulate Digestion
- Stimulate Digestion
- Causes an Erection

Rest & Digest



SYMPATHETIC

- Dilated Pupils
- Inhibit Salivation
- Relaxes Bronchi
- Increases Heartbeat
- Slows Down Digestion
- Simulates Glucose release
- Reduces Intestinal Muscles
- Adrenaline Production
- Reduces Blood Flow

Fight or Flight

Stress Management Toolkit

Physiological

Mindfulness based tools

- Mindfulness movement
- Box breathing
- Sensory exercises
- NSDR



Stress Management Toolkit

Physiological

Box Breathing



Stress Management Toolkit

Physiological

Sensory Exercises



Stress Management Toolkit

Physiological

Sensory Exercises

- 5 things you can see



Stress Management Toolkit

Physiological

Sensory Exercises

- 5 things you can see
- 4 things you can touch



Stress Management Toolkit

Physiological

Sensory Exercises

- 5 things you can see
- 4 things you can touch
- 3 things you can hear



Stress Management Toolkit

Physiological

Sensory Exercises

- 5 things you can see
- 4 things you can touch
- 3 things you can hear
- 2 things you can smell



Stress Management Toolkit

Physiological

Sensory Exercises

- 5 things you can see
- 4 things you can touch
- 3 things you can hear
- 2 things you can smell
- 1 thing you can taste

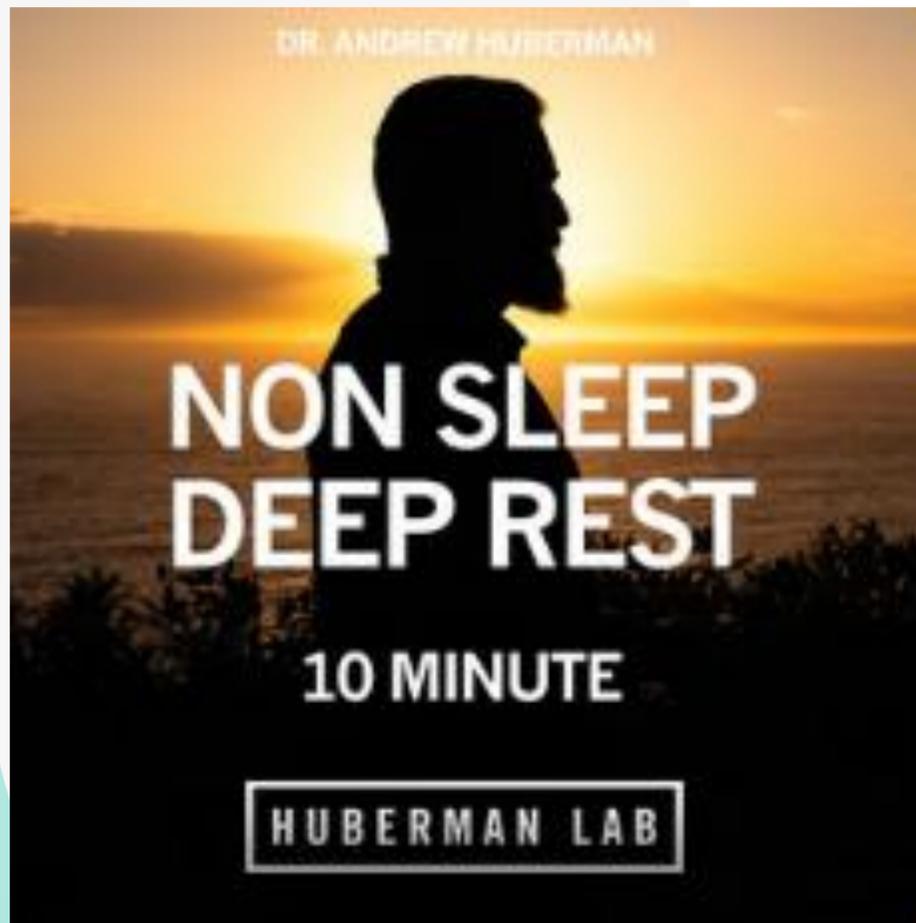


Stress Management Toolkit

Physiological

NSDR

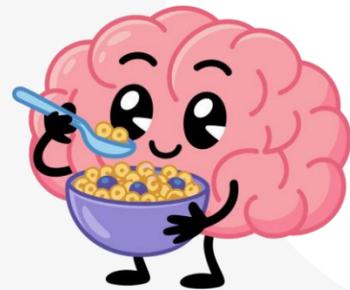
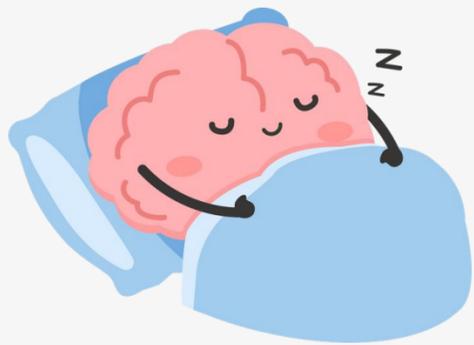
- Proposed by Dr. Andrew Huberman
- Evidence-based stress reduction tool
- Deep relaxation w/o falling asleep
- Use the body to affect the mind
- Check it out!



Stress Management Toolkit

Physiological

Power-input



- **Sleep:** glymphatic system clears out metabolic waste
- **Nutrition:** stable glucose levels vital for PFC, hunger affects ability to regulate emotions
- **Hydration:** your brain is 75% water, dehydration slows neurotransmitters
- **Movement:** stimulates neuroplasticity



Stress Management Toolkit



Physiological

Cognitive

Behavioral

Social



Stress Management Toolkit

Cognitive

Things out of my control

Things in my control

The circle of control



Stress Management Toolkit

Cognitive

Things out of my control

Things in my control

The circle of control



Identify the stressor

Locate it

Shift the focus

Stress Management Toolkit

Cognitive

My experiment failed;
I am a failure.

**Cognitive
Reframing**

This paper was rejected;
I don't belong in academia.



Stress Management Toolkit

Cognitive

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Cognitive Reframing

This paper was rejected;
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The experiment produced a
negative result. This is data. I
have eliminated one path and
am now closer to the correct one.



Stress Management Toolkit

Cognitive

My experiment failed;
I am a failure.

Cognitive Reframing

The experiment produced a negative result. This is data. I have eliminated one path and am now closer to the correct one.

This paper was rejected;
I don't belong in academia.

This is how peer-review works. I now have a roadmap of what needs to be strengthened for the next submission.



Stress Management Toolkit

Cognitive

I don't know enough.
Everyone here is
smarter than me.

**Cognitive
Reframing**

Do I even belong here?



Stress Management Toolkit

Cognitive

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I am an apprentice. If I knew everything already, I wouldn't need to be in a PhD program. My job isn't to be an expert yet; it's to be a learner.



Stress Management Toolkit

Cognitive

I don't know enough.
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Cognitive Reframing

Do I even belong here?

I am an apprentice. If I knew everything already, I wouldn't need to be in a PhD program. My job isn't to be an expert yet; it's to be a learner.

The admissions committee, who are experts in this field, looked at my work and decided I belong here. My feeling of doubt is a symptom of stress, not a lack of merit.



Stress Management Toolkit



Physiological

Cognitive

Behavioral

Social



Stress Management Toolkit

Behavioral

- **The deep-work method:
monotasking**
- **Micro-rest**
- **The Imposter Syndrome antidote:
a win log**



Stress Management Toolkit



Physiological

Cognitive

Behavioral

Social



Stress Management Toolkit

Social



Managing up

- Own the agenda
- Clarify the work
- Adapt to their style

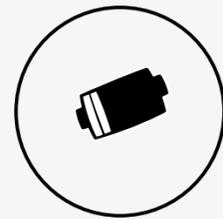
Building the non-PhD identity

- The no-work zone
- Diversify your joy





Navigating Resources



Inner Resources

What are some of my personality traits that can support myself?

What my favorite play list, smells, drinks are?

What touch sensation brings me comfort?

What kind of movement/activities help me calm down or can energize me?



External Resources

Family, friends, partner, colleagues, PI, program assistant, mentor, my religion, the internet, social media, my community, medication and health care, counseling center...

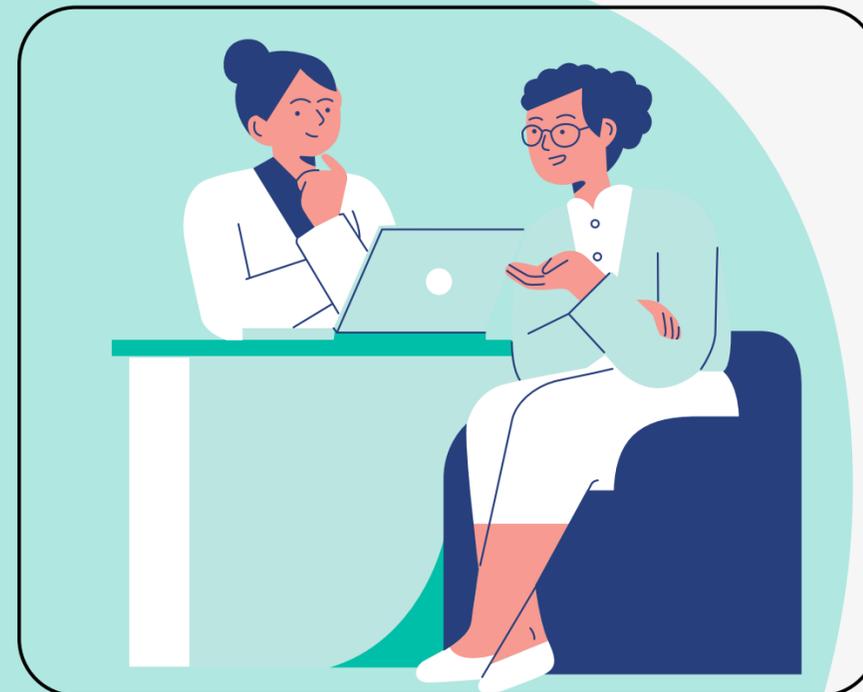
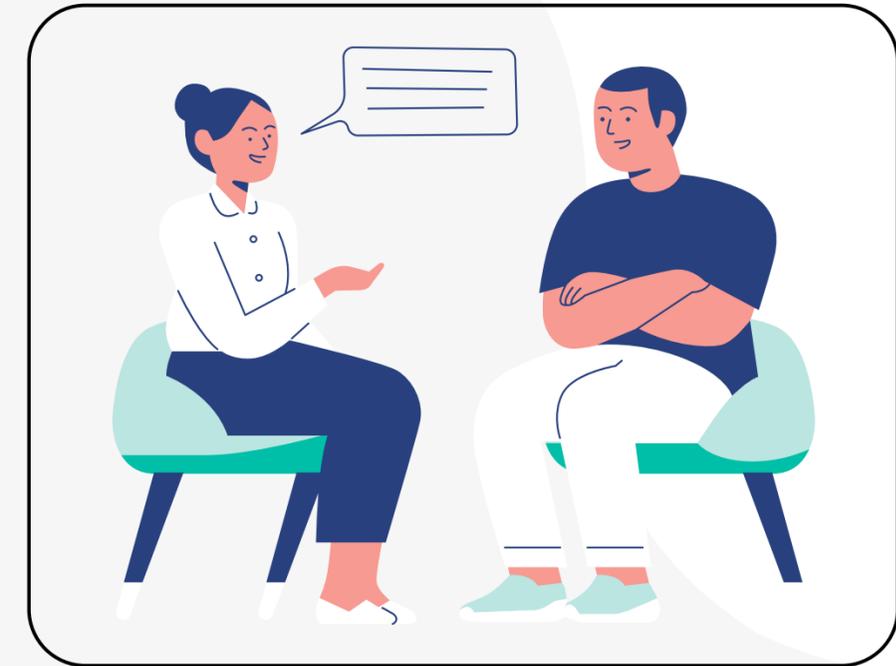


Mental Health Resources



Counseling Services

- Academia Sinica Counseling Center
- University Student Counseling Center

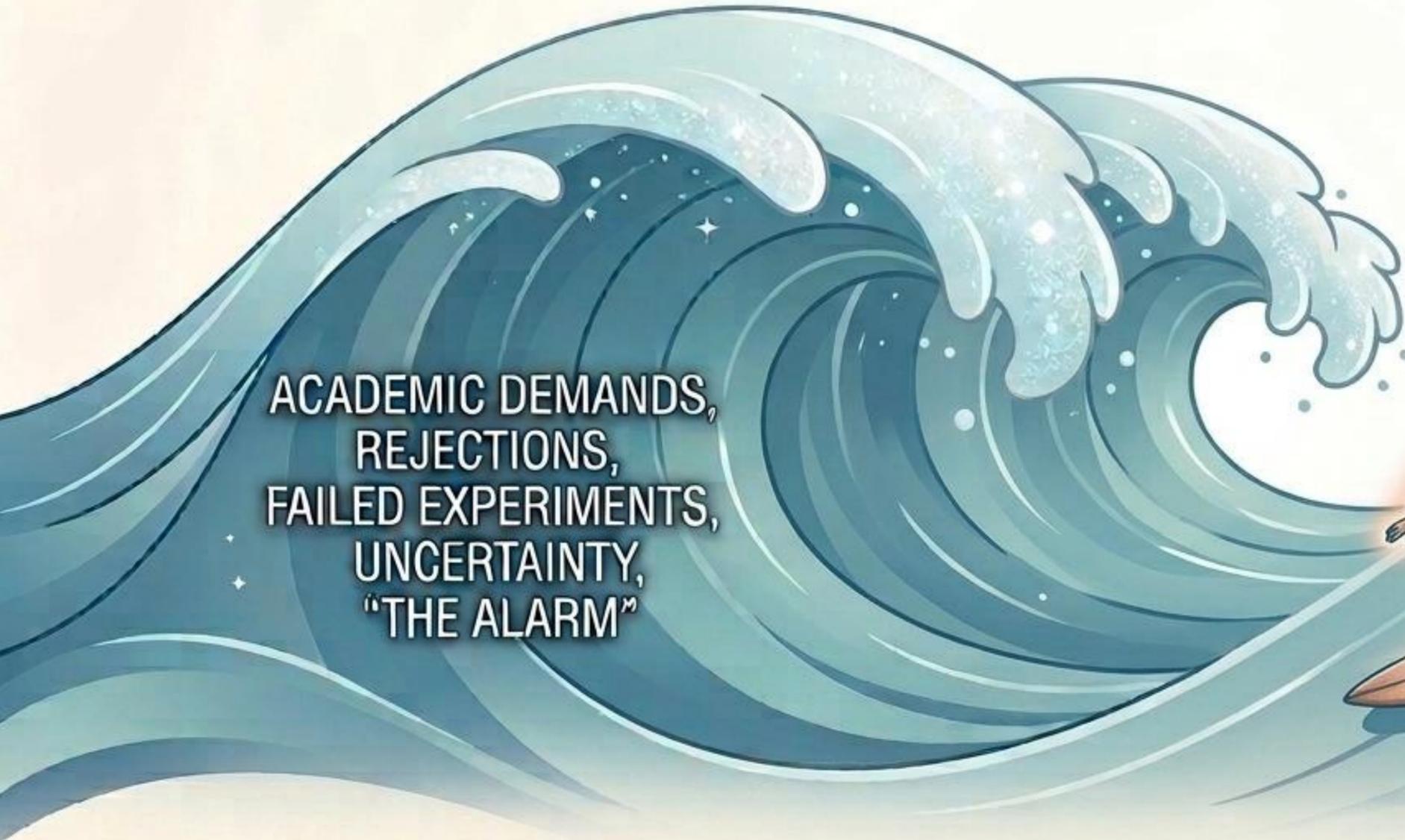


Psychiatric Services

- Academia Infirmary Room (every Monday morning)
- Being Alive Clinic (near Nangang station)

YOU CAN'T STOP THE WAVES, BUT YOU CAN LEARN TO SURF.

— JON KABAT-ZINN



ACADEMIC DEMANDS,
REJECTIONS,
FAILED EXPERIMENTS,
UNCERTAINTY,
"THE ALARM"



MINDFULNESS TOOLS,
BREATHING, REFRAMING, PRIORITIZING

Thank You!



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