

Mental Health in Academia

Sanjana Gupta

ASTR 8500

GRADUATE STUDENT SURVIVAL INITIATIVE

Proposal ID: GRAD-2025-0042

Cycle: Ongoing

**A Multi-Epoch Investigation into the Declining
Signal-to-Noise Ratio of Graduate Student Wellbeing**

PI: My Advisor
Co-I: My Existential Dread
Institution: University of Virginia, Dept. of Astronomy
Requested Duration: 5 years (negotiable)
Funding Requested: Enough to cover therapy + coffee

Abstract

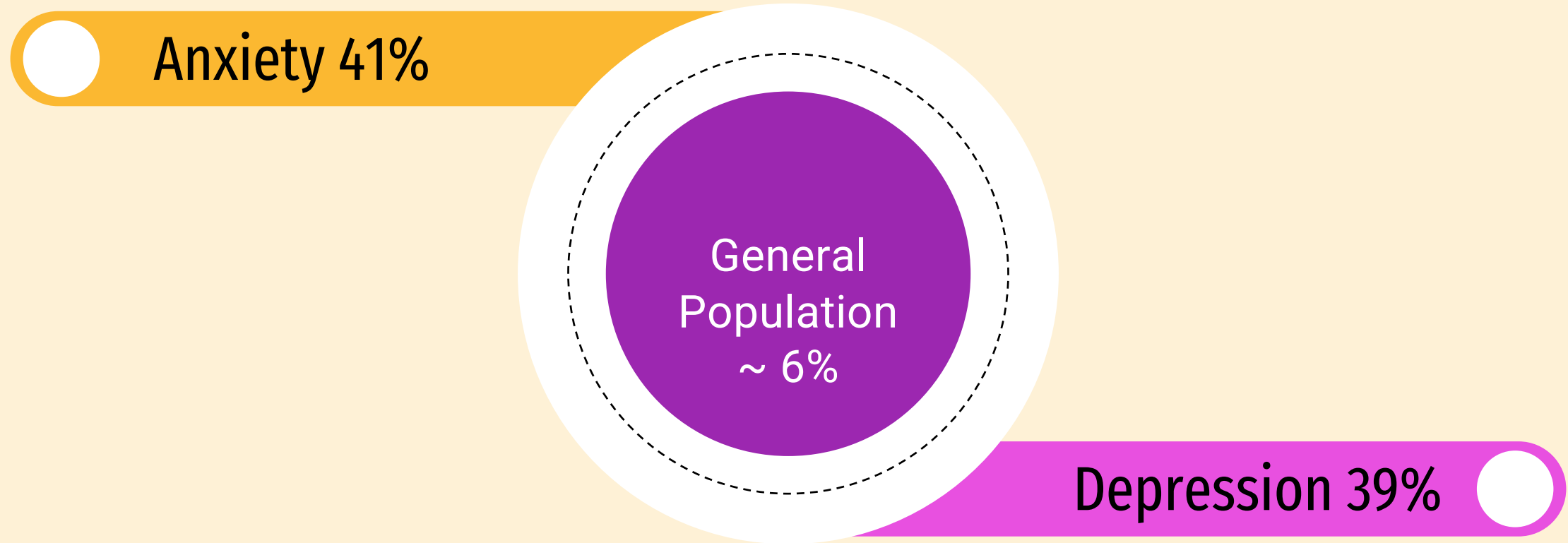
We propose continuous multi-epoch observation of a rapidly fading source, first detected at peak brightness circa 2020 during undergraduate studies. Preliminary data indicate the signal has been below detection threshold since qualifying exams ($S/N < 1$). Source confusion with neighboring objects ("the student who seems to have it together") has complicated analysis. We strongly suspect the signal is recoverable but requires immediate follow-up. **Funding is urgently requested before the source becomes undetectable.**

Reviewer 1: Lacks novelty. Every grad student faces this.

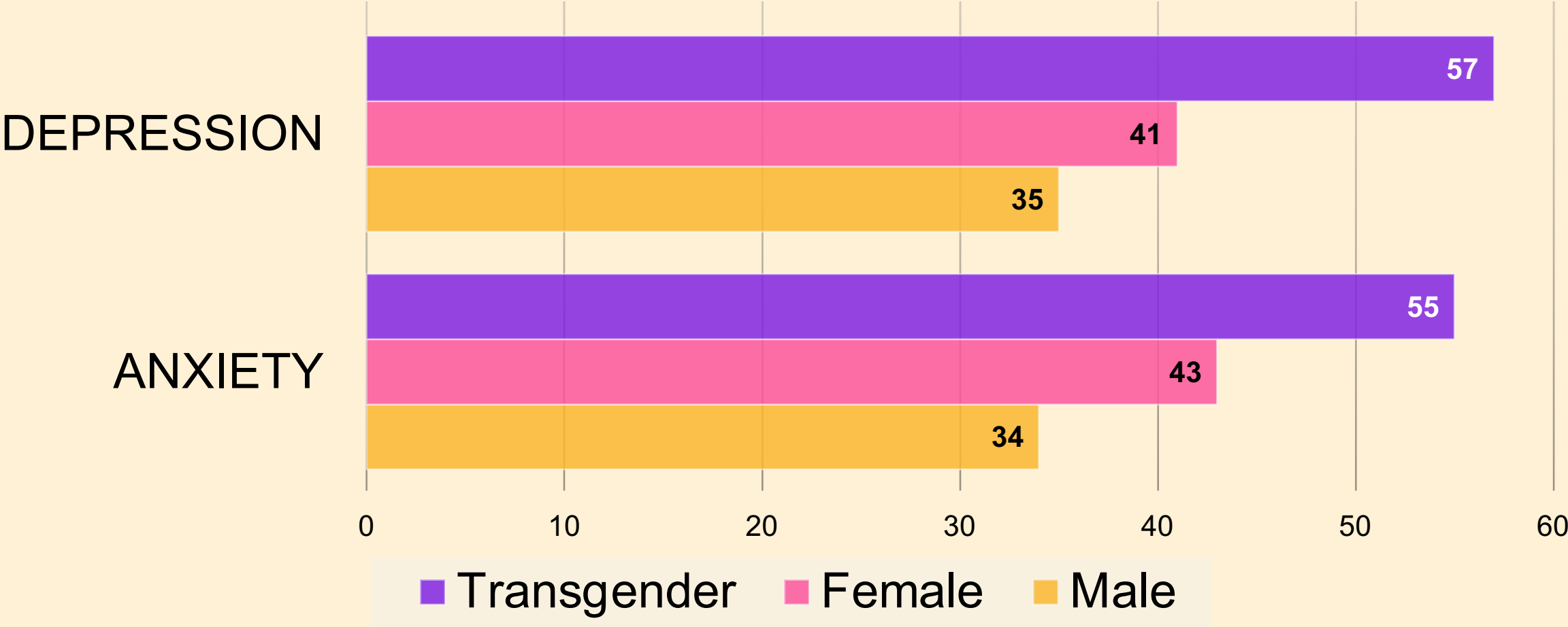
Reviewer 2: Insufficient preliminary data on work-life balance.

Reviewer 3: Promising but needs 3 more years of data before funding decision.

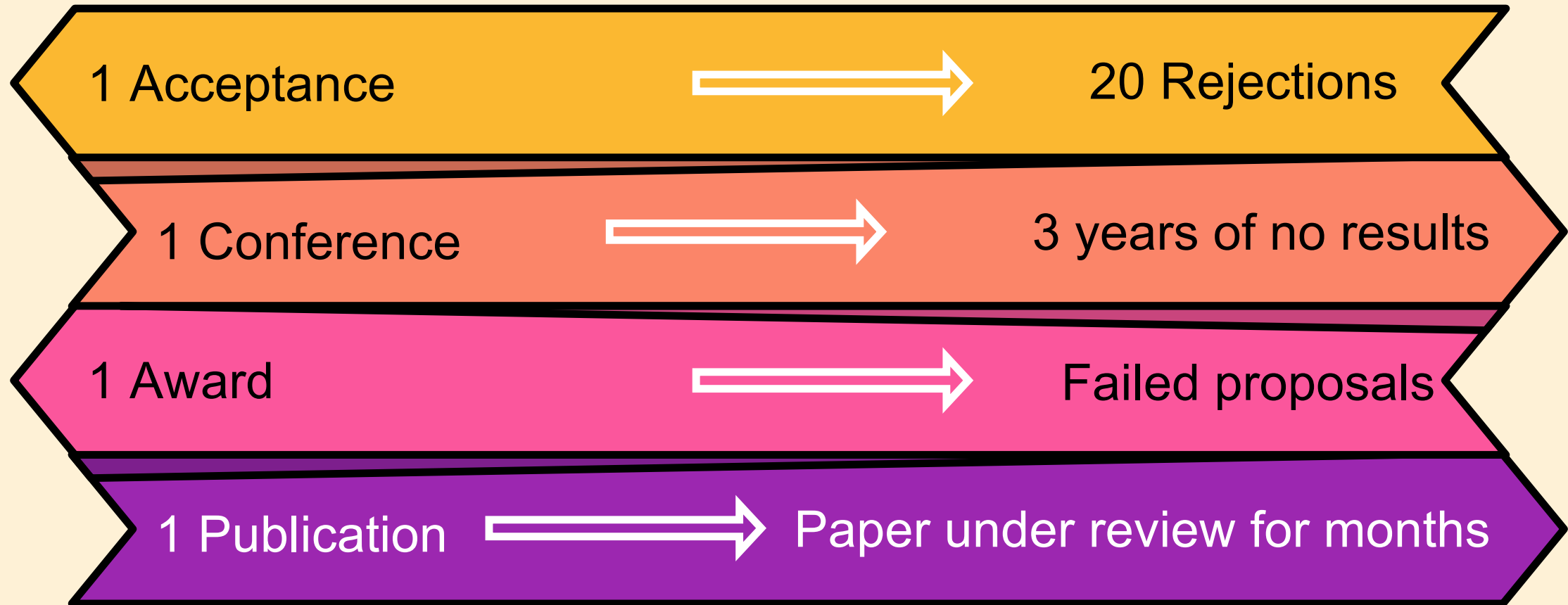
The Scale of the Problem



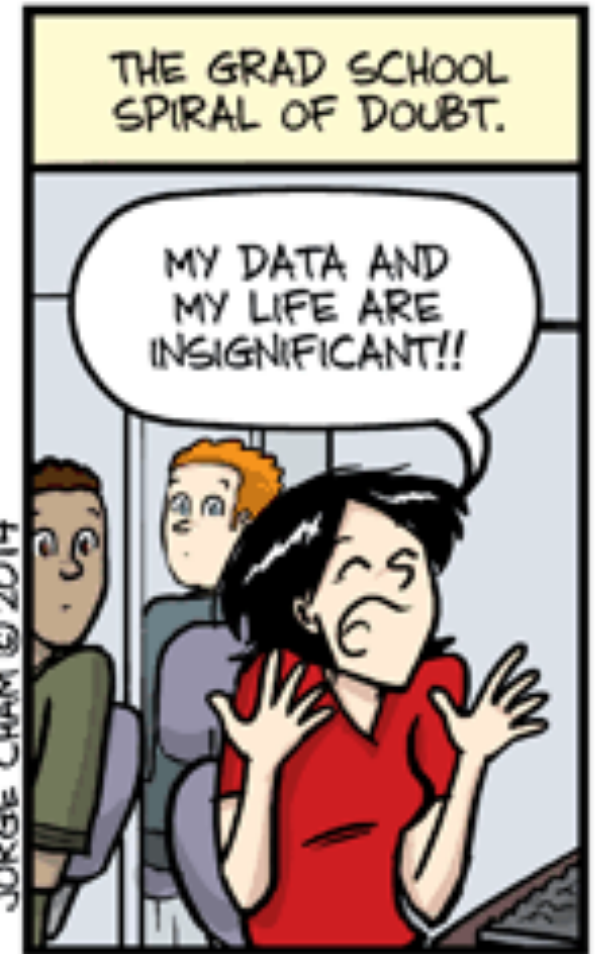
Who is Most Affected?



The Social Media Trap



The Impostor Syndrome



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SG



Mentimeter

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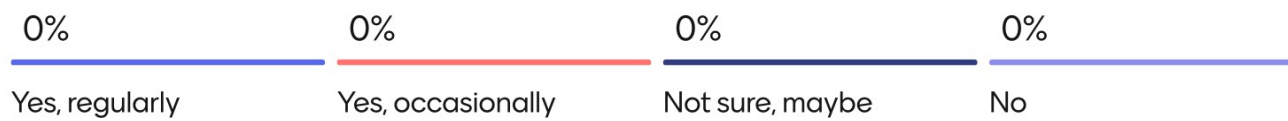


Select which slide to add

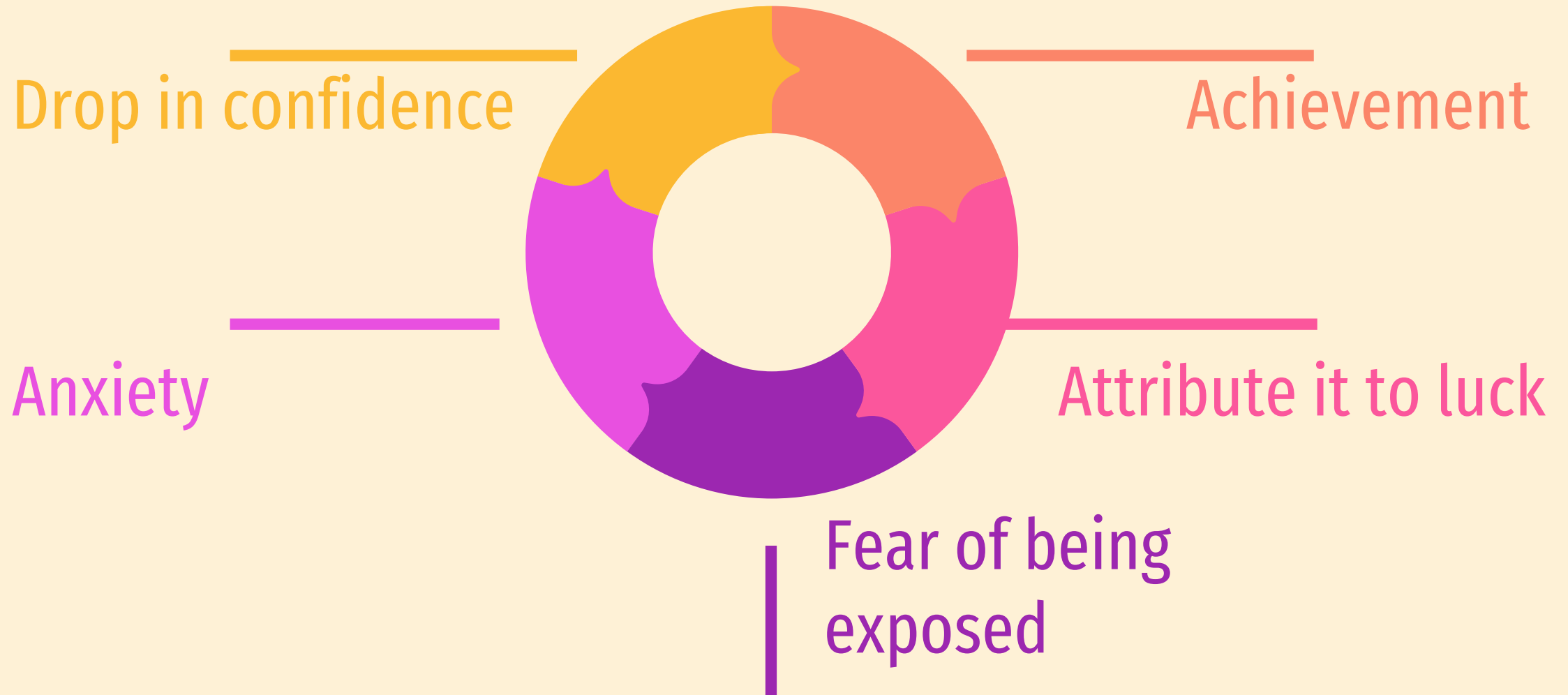
In one word, how have you felt most often this semester?

0 Option 1 0 Option 2 0 Option 3

What helps you the best to deal with academic stress?



The Impostor Syndrome

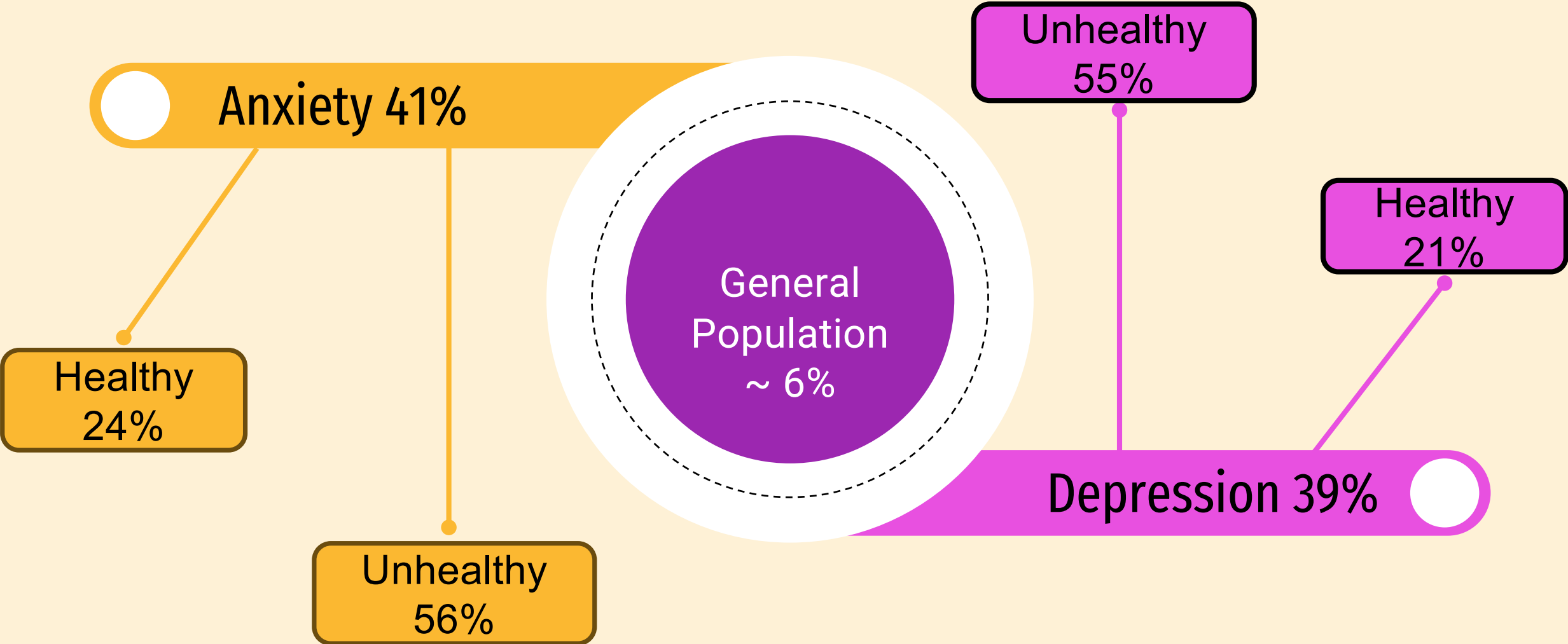


Work-Life Balance

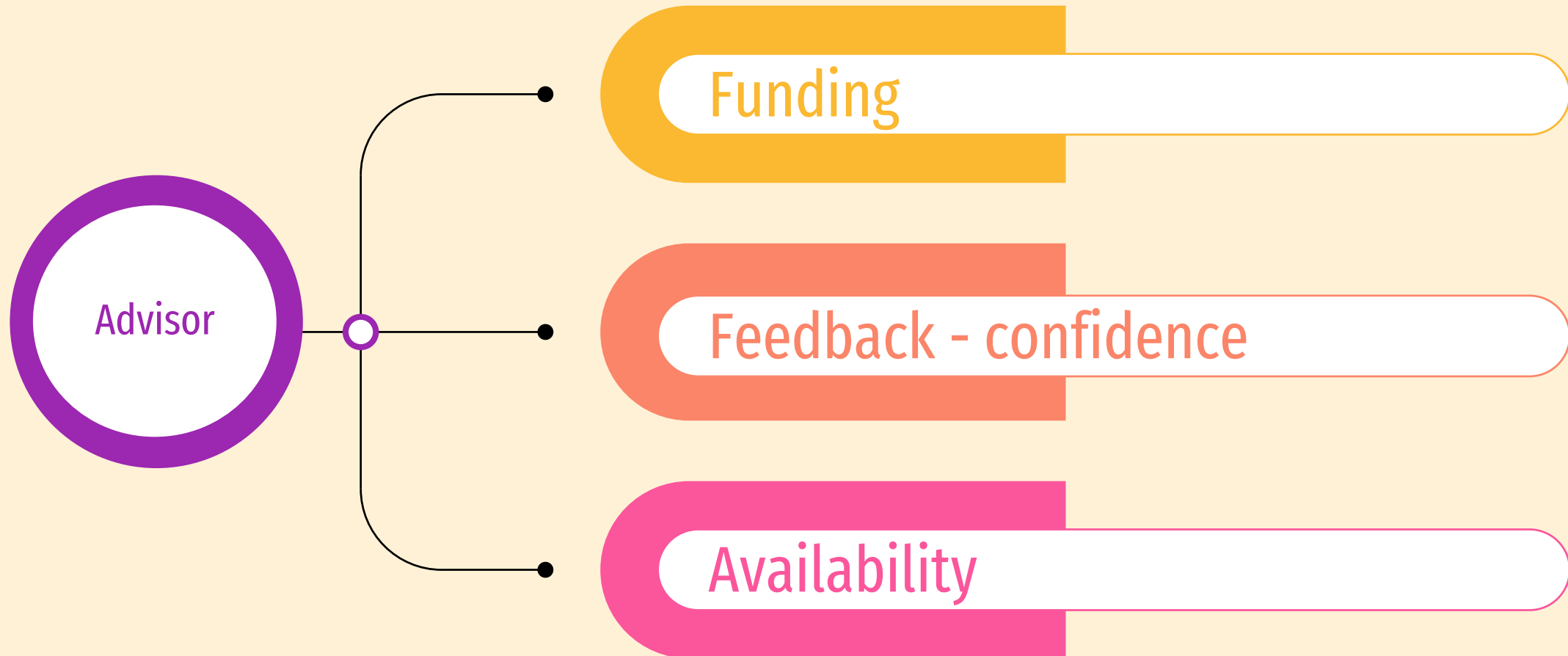


Nearly 40% were dissatisfied with the balance between work and personal life (Nature PhD Survey (2019))

Work-Life Balance

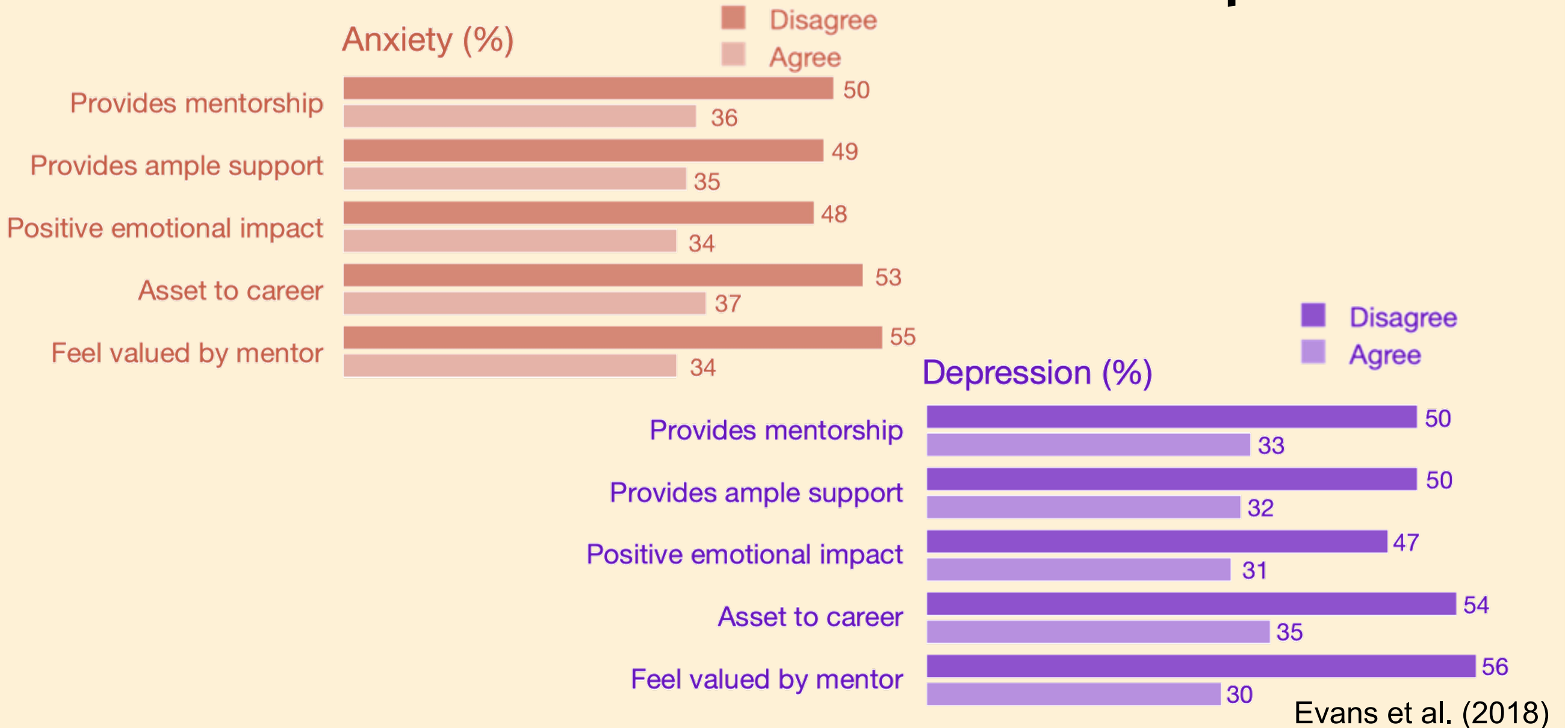


Student-Advisor Relationship



Entire career depends on one person

Student-Advisor Relationship



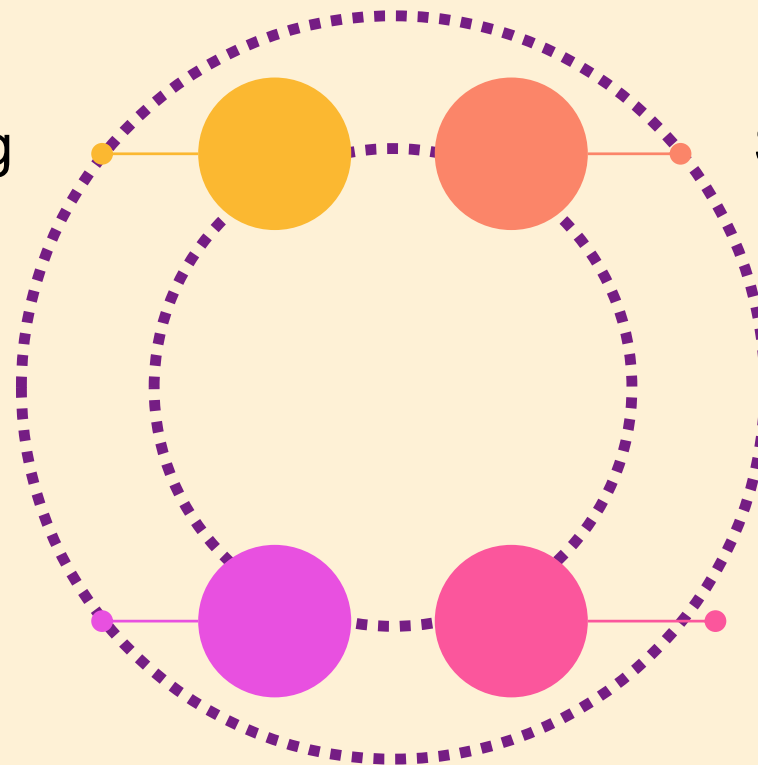
Factors Contributing to the Crisis

The System

Publish or perish, shrinking job market, chronic underpaying, no clear career timeline

The Culture

Toxic productivity norms, stigma around struggle, comparison to peers, "just push through it" passed down for generations



The Isolation

Solitary work, no separation between identity and career, unclear working hours, no real onboarding

The Feedback Loop

Years of work with no signal you are doing okay, rejections with vague explanations, proposals and papers taking forever

International Students

HIGHER STAKES

- Visa status tied to academic standing
- Cannot take medical leave freely
- Immigration consequences

THE DISTANCE

- Built support network from scratch
- Cannot go home easily
- Missing family milestones
- Homesickness

NAVIGATION

- Foreign healthcare system
- No credit history
- Cultural and language barriers
- Pressure to succeed because failure has consequences beyond just yourself

International Students

HIGHER STAKES

THE DISTANCE

NAVIGATION

37% of PhD students globally are not studying in their home country (Nature PhD Survey 2019, n = 6,300)

freely

- Immigration consequences

easily

- Missing family milestones
- Homesickness

barriers

- Pressure to succeed because failure has consequences beyond just yourself

Help-seeking Gap



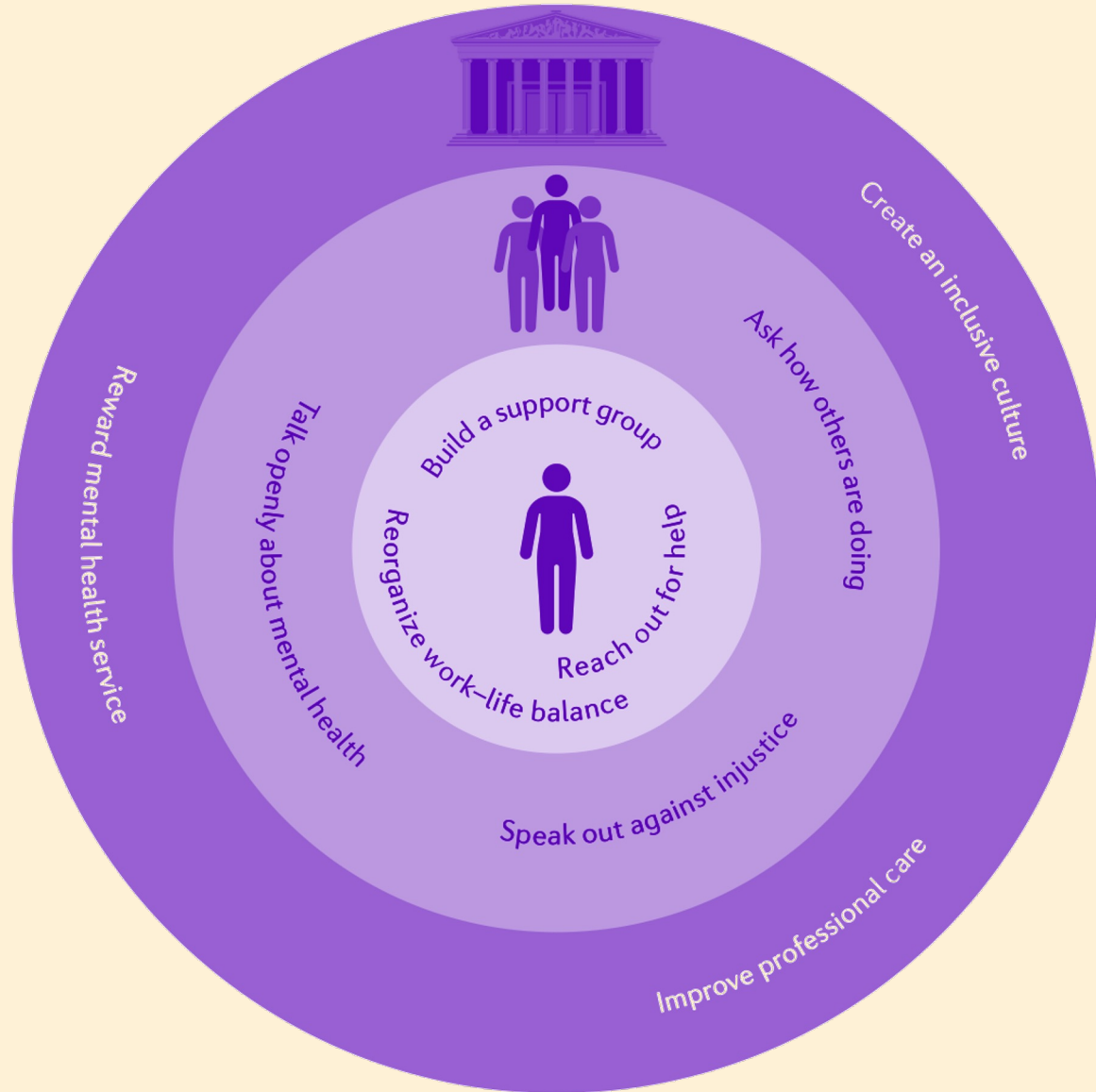
36% sought help for anxiety or depression caused by PhD

Of those, 26% got assistance at institution

18% sought help at institution but did not feel supported

9% wanted help but said none was available on campus

What Actually Helps



*You. Your peers. The institution.
All three have to move.*

Identify what's best for you!



Mentimeter

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Select which slide to add

In one word, how have you felt most often this semester?

0 Option 1 0 Option 2 0 Option 3

What helps you the best to deal with academic stress?

What helps you the best to deal with academic stress?

Talking to a friend

Exercise and sports

Therapy

Hobbies

Non-academic department activities (Run club, book club, restaurant club etc.)

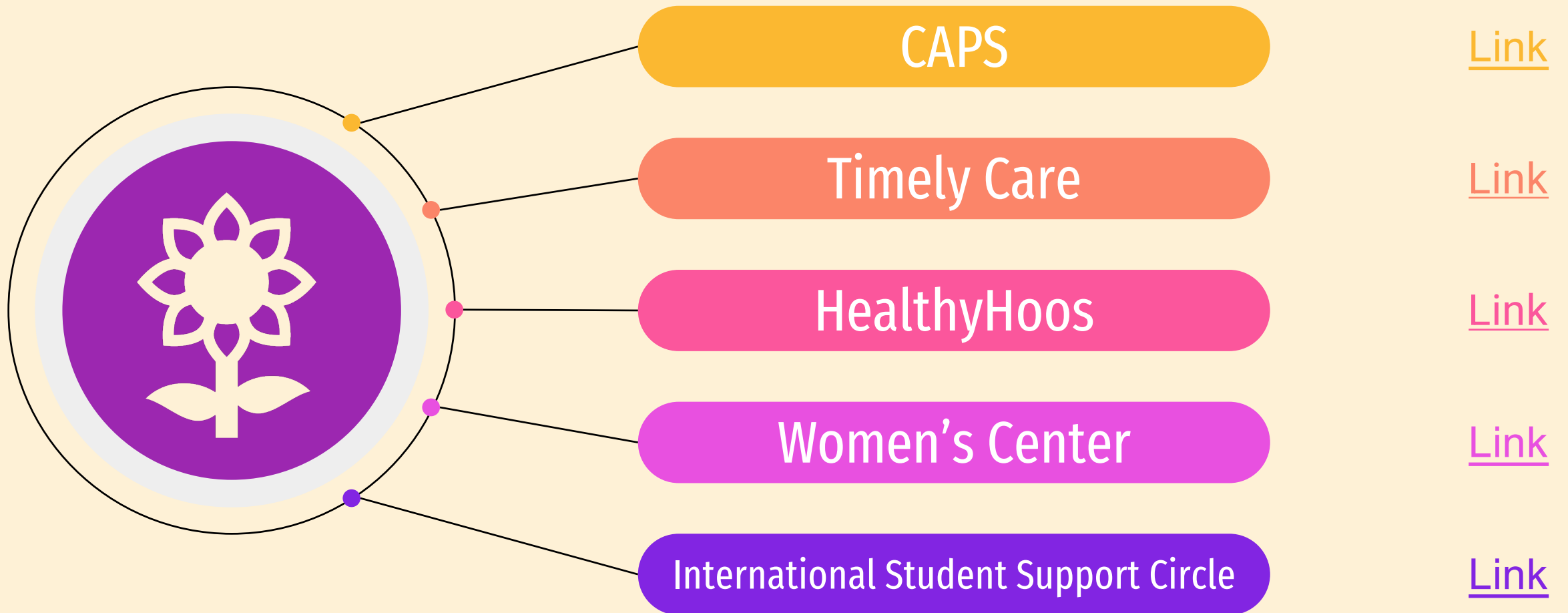


menti.com
1509 9439

Waiting for participants



UVa Resources



GRADUATE STUDENT SURVIVAL INITIATIVE

Proposal ID: GRAD-2025-0043

Cycle: Ongoing

**A Multi-Epoch Investigation into the Declining
Signal-to-Noise Ratio of Graduate Student Wellbeing**

PI: My Advisor

Co-I: My Existential Dread

Institution: University of Virginia, Dept. of Astronomy

Abstract

Follow-up observations confirm the source is recoverable. Signal-to-noise ratio improves significantly under the following conditions: **reduced isolation, peer support, adequate sleep**, and occasional exposure to sunlight. Contamination from impostor syndrome has been identified and is being corrected for in the pipeline. We recommend **sustained investment in the observer, not just the telescope**. The universe will still be there on Monday.

References

- Evans, T.M., Bira, L., Gastelum, J.B., Weiss, L.T. & Vanderford, N.L. (2018). Evidence for a mental health crisis in graduate education. *Nature Biotechnology*, 36, 282--284. <https://doi.org/10.1038/nbt.4089>
- Woolston, C. (2019). PhD poll reveals fear and joy, contentment and anguish. *Nature*, 575, 403--406. <https://doi.org/10.1038/d41586-019-03459-7>
- Murguía Burton, Z.F. & Cao, X.E. (2022). Navigating mental health challenges in graduate school. *Nature Reviews Materials*, 7, 421--423. <https://doi.org/10.1038/s41578-022-00444-x> Eleftheriades, R.,
- Clarke, K. (2023). International graduate students' mental health diagnoses, challenges, and support: A descriptive comparison to their non-international graduate student peers. *Journal of International Students*, 13(3), 280--304. <https://doi.org/10.32674/jis.v13i3.3148>

slidesgo.com (for template)