

Mental Health in Academia

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ASTR 8500
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~75%

Are at least somewhat satisfied with their decision to pursue a PhD.

Source: *Nature* PhD Survey 2019

SUSTAINED SATISFACTION

A majority of respondents are still glad they decided to pursue a PhD, although the attitudes of some have worsened over time.

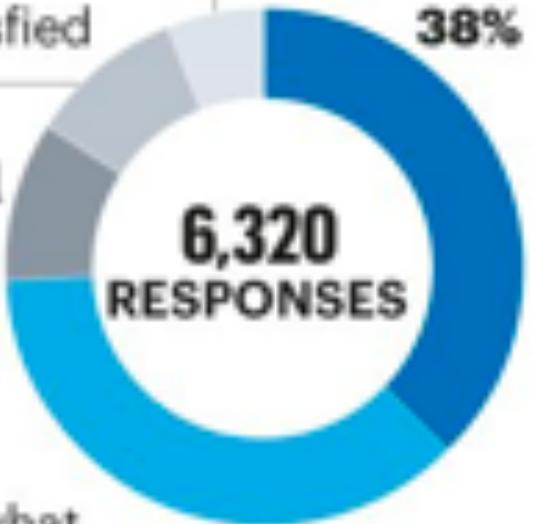
Q: How satisfied are you with your decision to pursue a PhD?

Very dissatisfied **6%**

Somewhat dissatisfied
10%

Neutral
10%

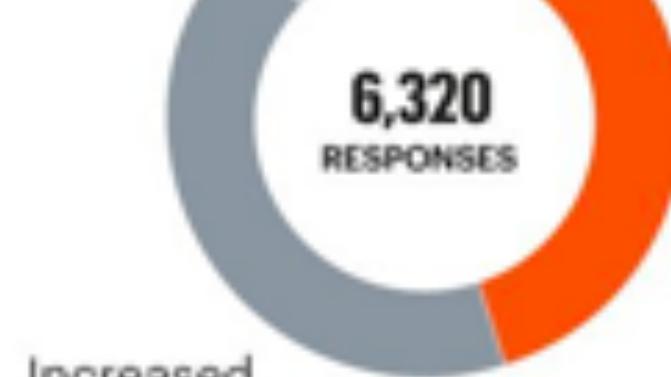
Somewhat satisfied
37%



Q: Since the start of your graduate school experience, has your level of satisfaction increased, worsened or remained the same?

Worsened
45%

Neutral **13%**



A teal-colored arrow shape pointing to the right, containing the percentage value.

26%

Feel program
has been
preparing them
very well for
satisfying
careers.

Source: *Nature* PhD Survey 2019

41% / (39%)

Experience
moderate to
severe
symptoms of
anxiety/
(depression).

Source: Evans et al., 2017

DIFFICULT DAY YET I
MAINTAIN
COMPOSURE

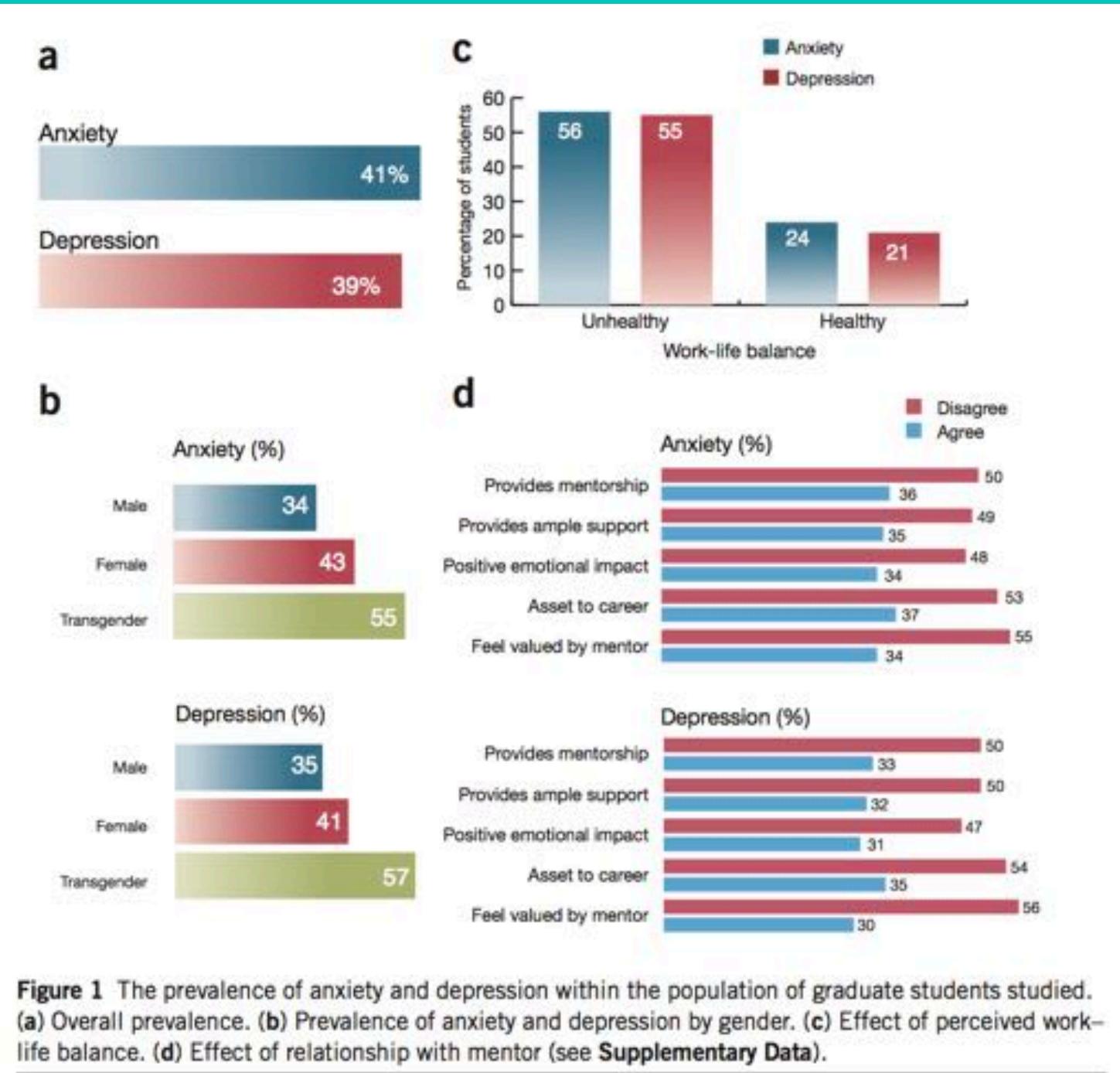


HA THIS SMALL SETBACK
AMUSES ME



NATHANWPYLE

Anxiety and Depression



Source: Nathan Vandendorf

Some other sobering numbers

- 43-46% of science graduate students depressed (Berkeley, 2014)
- 50% (23%) of graduate students under more than average (tremendous) stress (University of Arizona, Tucson, 2015)
- 32% of PhD students at risk of having or developing a psychiatric disorder (Belgium, 2017)
- 55% of higher ed. professionals describe themselves as stressed (UK, 2019)
- 86% of graduate students reported marked levels of anxiety (UK, 2019)
- 50% of scientists described struggles with depression/anxiety (International, 2020)

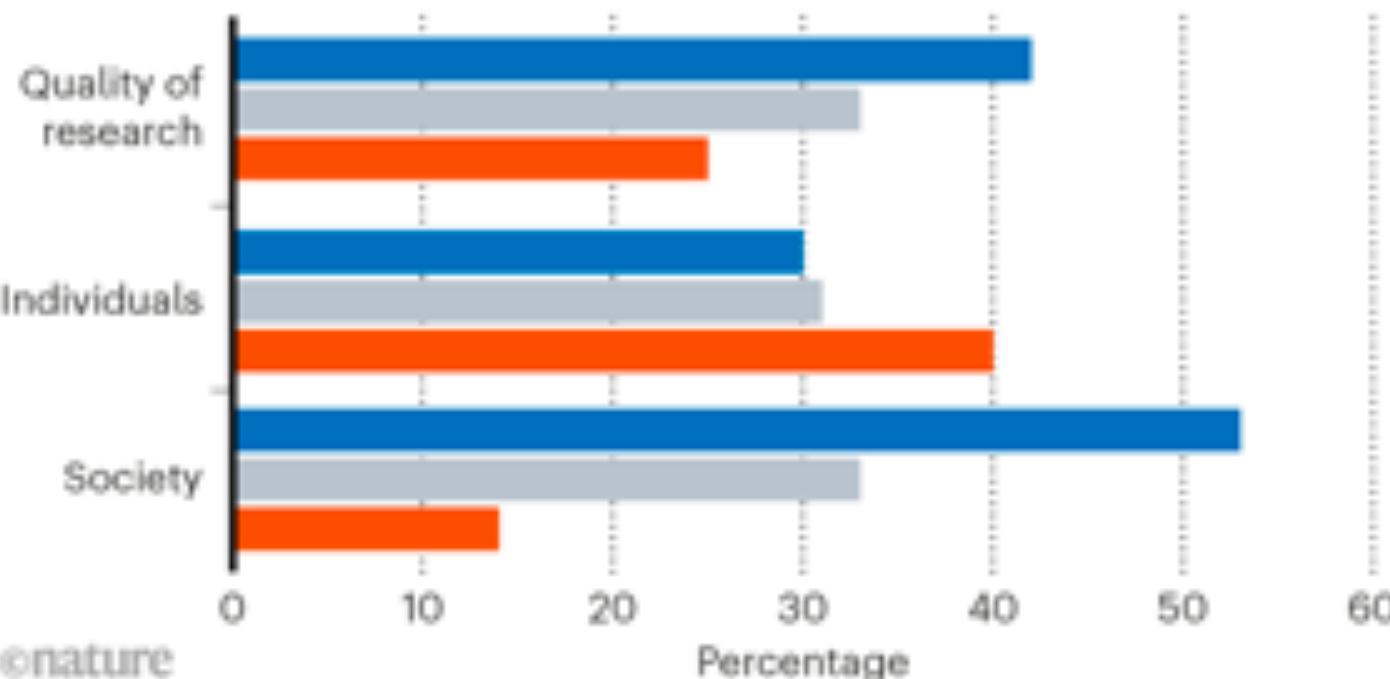
COST OF THE CULTURE

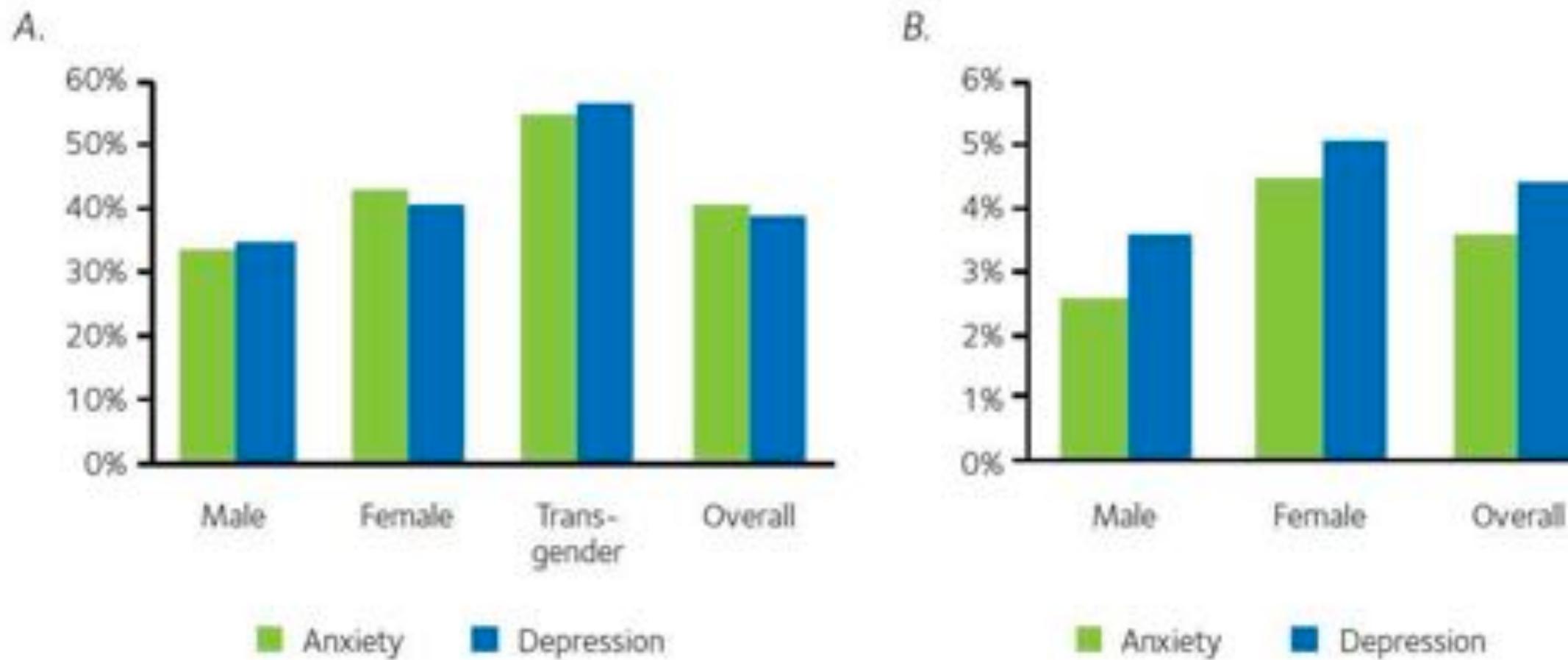
In a global survey of around 4,000 researchers, 55% said that they had a negative impression of scientific working cultures. One-quarter said that the culture damaged the quality of research.

How would you describe research culture?



What effect does the culture have on research quality, individuals and society?

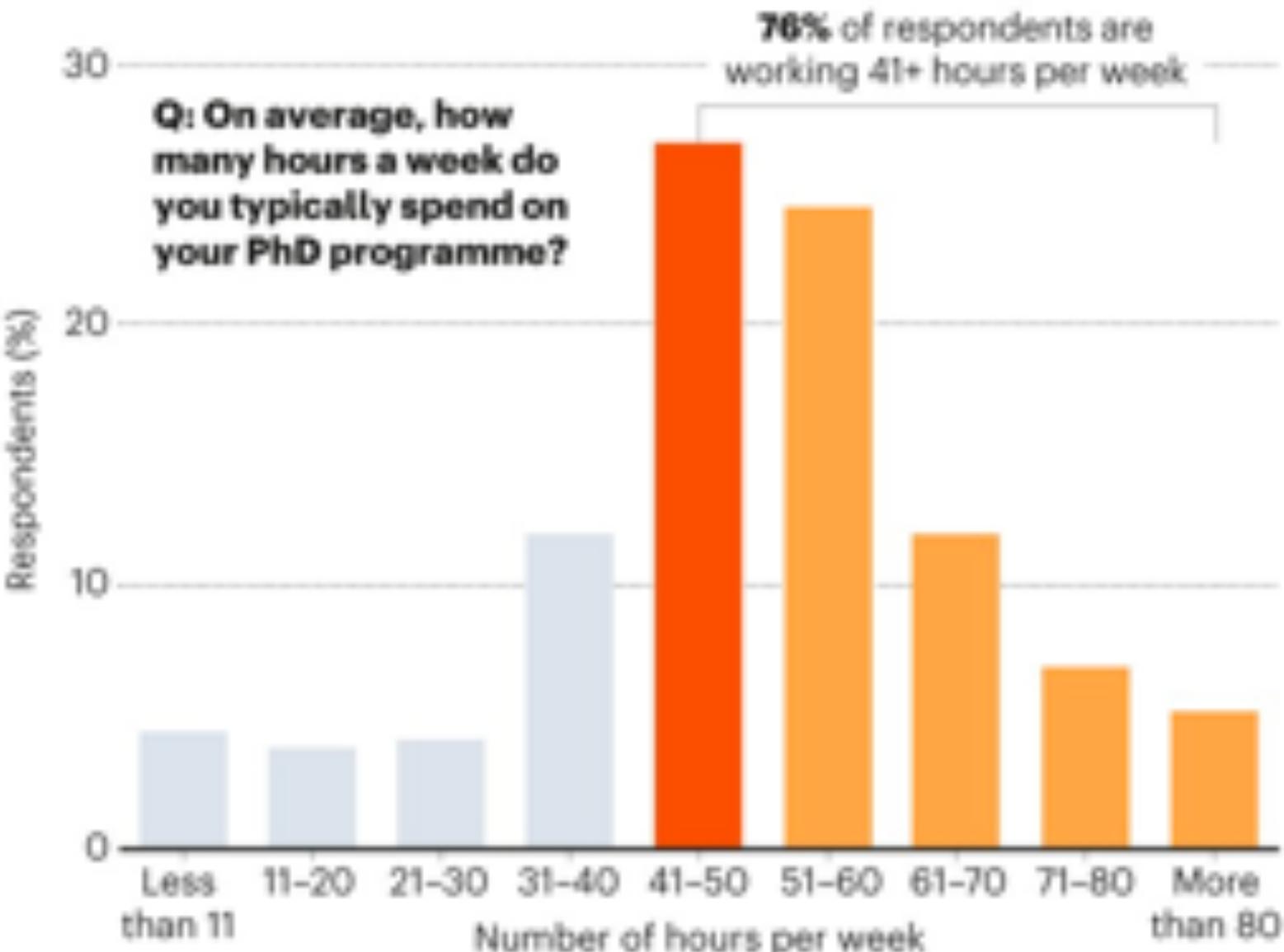




Prevalence of anxiety and depression in A. graduate trainees (Evans et al., 2018) and B. the global population (WHO, 2017).

OVEREXTENDED AND STRESSED

Long hours in the laboratory and other demands have taken a toll on PhD students' well-being and mental health.



Source: Nature PhD Survey 2019

36%

Sought help for
anxiety or
depression
caused by PhD
studies

Source: *Nature* PhD Survey 2019

Takeaways from these studies

- Mentorship is important
- Lay the groundwork with your advisor early on
- You can feel stressed yet still be satisfied with your program
- Post-docs, faculty, tenure-track academics struggle as well

Actions Being Taken

- International Conference on the Mental Health & Wellbeing of Postgraduate Researchers in Brighton, UK, 2019
- Council of Graduate Schools 22-month initiative: “Supporting Mental Health and Wellness of Graduate Students”
- New holiday policy at Boston University
- Adoption of a “Mental Health Bill of Rights and Responsibilities” at Vanderbilt University

~70% / (95%)

Source: Vaughn et al. 2019

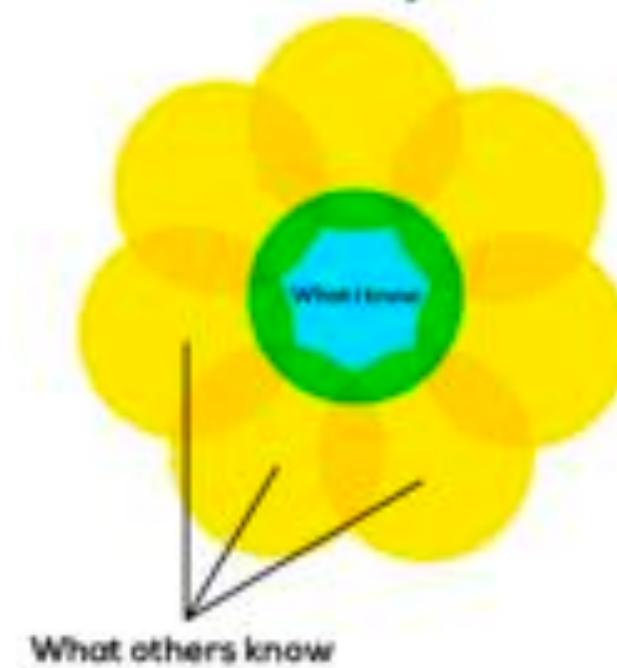
Experience
imposter
syndrome
among general
population
(female
academics).

Imposter Syndrome/Phenomenon

Imposter Phenomenon

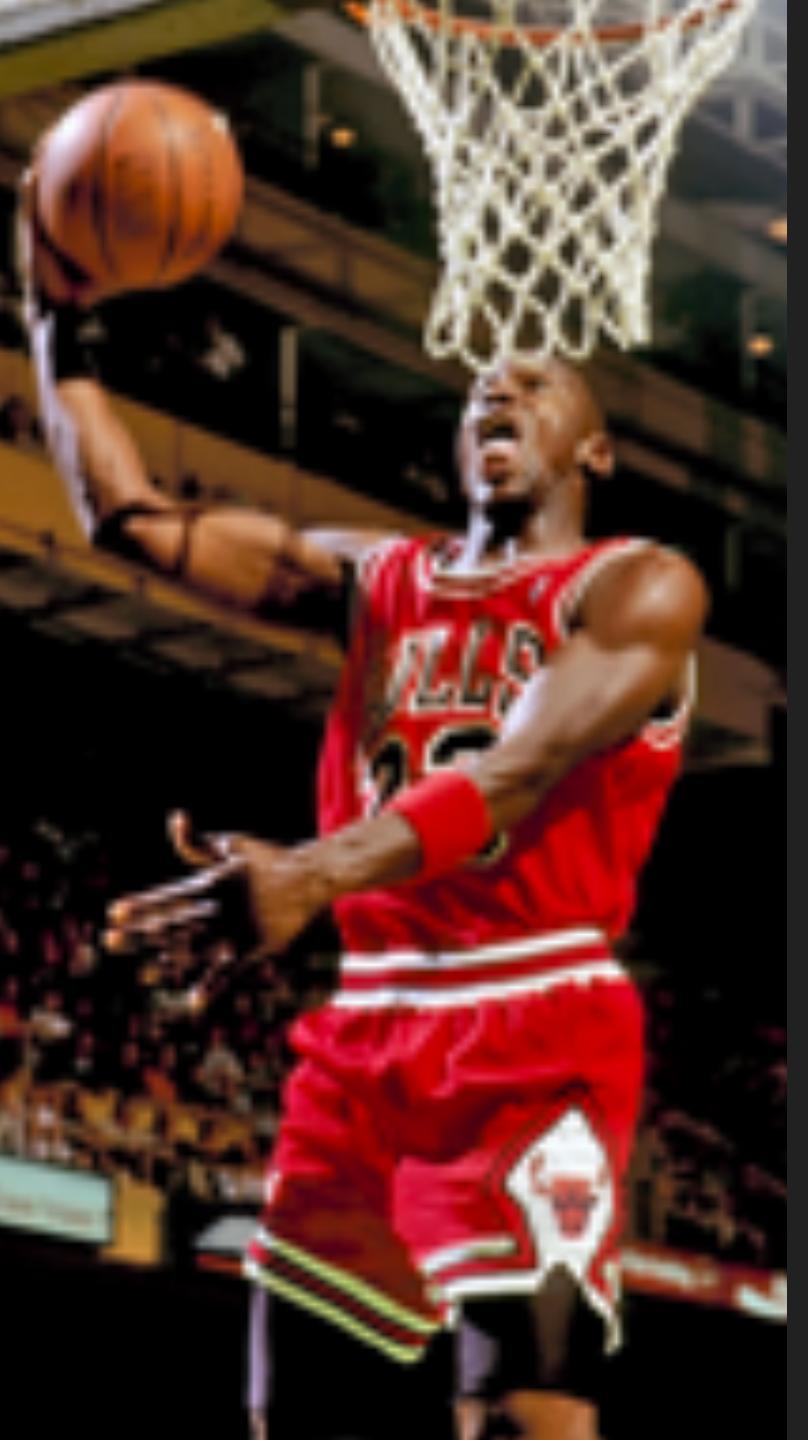


Reality



How to combat the Imposter Syndrome

- Recognize there will be sporadic failure
- We tend to trivialize our own achievements
- Support those around you who doubt themselves
- Have some trust in the system
- Challenge behaviors that empower self-doubt



Source: Lipofski Basketballphoto.com, Rjamie Smed, Richard Giles, Wikipedia

~40%

Have witnessed
or heard about
bullying to
someone else.

Source: *Nature* **563**, 616-618 (2018)

Bullying in Academia

I THINK YOU MIGHT GET MORE APPLICATIONS
TO WORK IN YOUR LAB IF YOU ADVERTISED
FOR GRADUATE STUDENTS, LAB TECHNICIANS
AND JUNIOR RESEARCHERS, RATHER THAN
LACKEYS, DOGSBODIES AND DRUDGES.

TOM GAULD for NEW SCIENTIST

Bullying in Academia

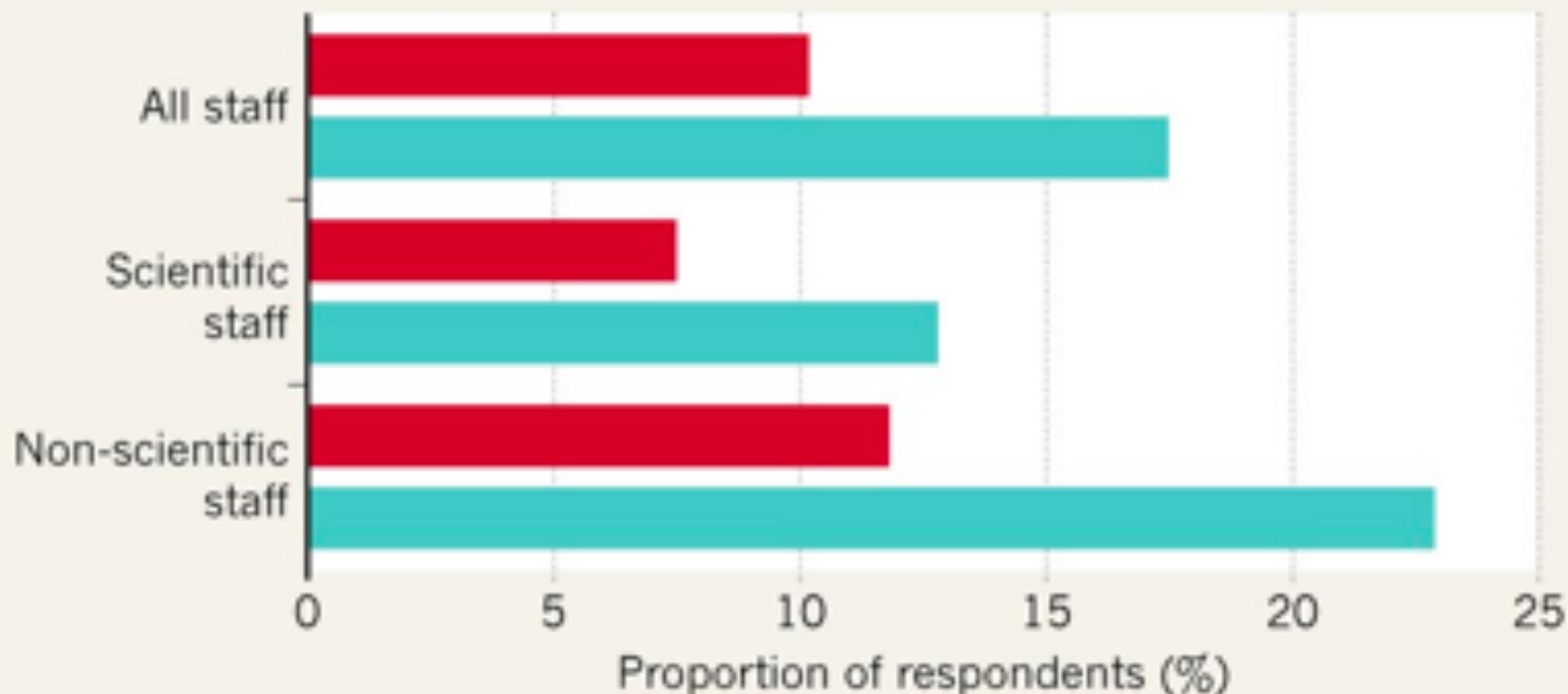
- Having your opinions ignored
- Being publicly humiliated/shouted at
- Having your work undermined
- Having necessary information withheld

WORKING CULTURE

The Max Planck Society in Germany conducted a huge social study of its staff and received more than 9,000 responses. The results will inform the development of policies on workplace issues including bullying.

■ In past 12 months ■ Longer than 12 months

Have you been bullied?



Bullying in Academia: Supervisors

- Being overbearing
- Assigning impossible workloads
- Giving unachievable deadlines
- Not being interested in helping advisees grow professionally
- Persistent demeaning and devaluing treatment

What to do about it

- Develop and include policies that prohibit bullying
- Apply these consistently and show the consequences
- Offer training to those with management roles

~40%

Are unsatisfied
with their work-
life balance.

Source: *Nature* PhD Study 2019

Work-Life Balance

ACADEMIA

PRO

YOU CAN WORK WHENEVER
YOU WANT! EVERY DAY
IS A SATURDAY!



CON

YOU WORK ON SATURDAYS.



JAMES O'LEARY © 2011

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Points to Consider

- Stress leads to decreased productivity and creativity
- Being a researcher is a single facet of your personality
- PhD programs shouldn't be thought of as matters or survival
- Our self-worth lies outside of our work

Work-Life Balance Tips

- Get into exercise, yoga, team sports
- Prioritize sleep
- Restructure day to prioritize activities that make you most productive
- Read books about how the mind works
- Work smarter, not harder
- Surround yourself with people who realize balance is important

Work-Life Balance Tips for the Institutions

- Enable time away from lab
- Create external incentives/validation
- Connect grad students with the public
- Expose students to non-academic job opportunities
- Facilitate research into grad student wellness

TIPS FOR SELF-CARE DURING YOUR DAY IN LAB

Change of scenery



Move around



Socialize



Practice Mindfulness



Refuel



Journaling



Source: Lauren Langbein, Jefferson University



Some Tips for Mental Health During the Pandemic

1. Manage your expectations
2. Proactively manage your stress threshold
3. Know your red flags
4. Routine is your friend
5. Be compassionate with yourself and others
6. Maintain connections
7. Manage uncertainty by staying in the present

Resources

- Advice from PhD students for PhD students: <https://www.york.ac.uk/research/graduate-school/support/survive-your-phd/>
- Astrobites Tips: https://astrobites.org/2019/08/23/mental-health-in-grad-school/?fbclid=IwAR3IRT2B8w8cw_La6ozWao49K-_3Mm8QE9GKipZZTAO7jdMtkmqFK4EzJR8
- PhD Balance: <https://www.phdbalance.com/>
- UVA CAPS: <https://www.studenthealth.virginia.edu/caps>
- SilverCloud: <https://www.studenthealth.virginia.edu/silvercloud>

**“You are a person long before
you’re a PhD researcher.”**

- Robert Seaborne

Questions?

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