

How to foster a **Supportive Research Environment**

A thematic analysis of open responses from
the CACTUS Mental Health Survey 2020

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Background

In recent years, many studies have uncovered systemic issues in academic and commercial research work environments, particularly surrounding the pressure to work long hours; an erosion of work-life balance; high stress levels; and experiences of discrimination, harassment, and bullying (for example: Evans et al., 2018; Nuffield Council on Bioethics, 2014; Royal Society, 2017; Van Noorden, 2018; Woolston, 2018).

Cactus Communications set out to understand what aspects of their work bring researchers joy, what aspects cause them stress, and what research institutions can do to create a more supportive and nurturing research culture. The survey was launched on October 10, 2019, and closed on July 20, 2020. It garnered responses from 13,000 researchers representing 169 countries, with strong representation from the top 10 research-producing countries and diverse minority groups, making it the largest and most diverse survey of this kind.

This report follows on from a [full comprehensive report of the survey findings](#), and serves to explore the themes arising from responses to an open question in the survey: **“Do you have any suggestions for organizations within academia or other related stakeholders on what they can do to ensure a great work environment for researchers?”**

This question received 5,434 responses. Of these responses, 1,000 were randomly selected from a mix of countries to reflect the regional distribution seen in the overall survey sample. The survey had been completed in 7 languages; therefore, of the 1,000 responses selected for analysis, 375 were translated into English before being thematically coded. The code frame was created collaboratively between Shift Learning and Cactus Communications. The findings from this analysis are presented in this report.

What can stakeholders do to ensure a great work environment for researchers?

5,434

responses received

1,000

responses analyzed

October
2019

13,000
respondents

July
2020

A文

7 languages



How to read this report

This report draws heavily on findings presented and elaborated on in the original comprehensive survey report.

Statistics mentioned in this report have come from various other question areas of the survey, which are presented fully in the original report.

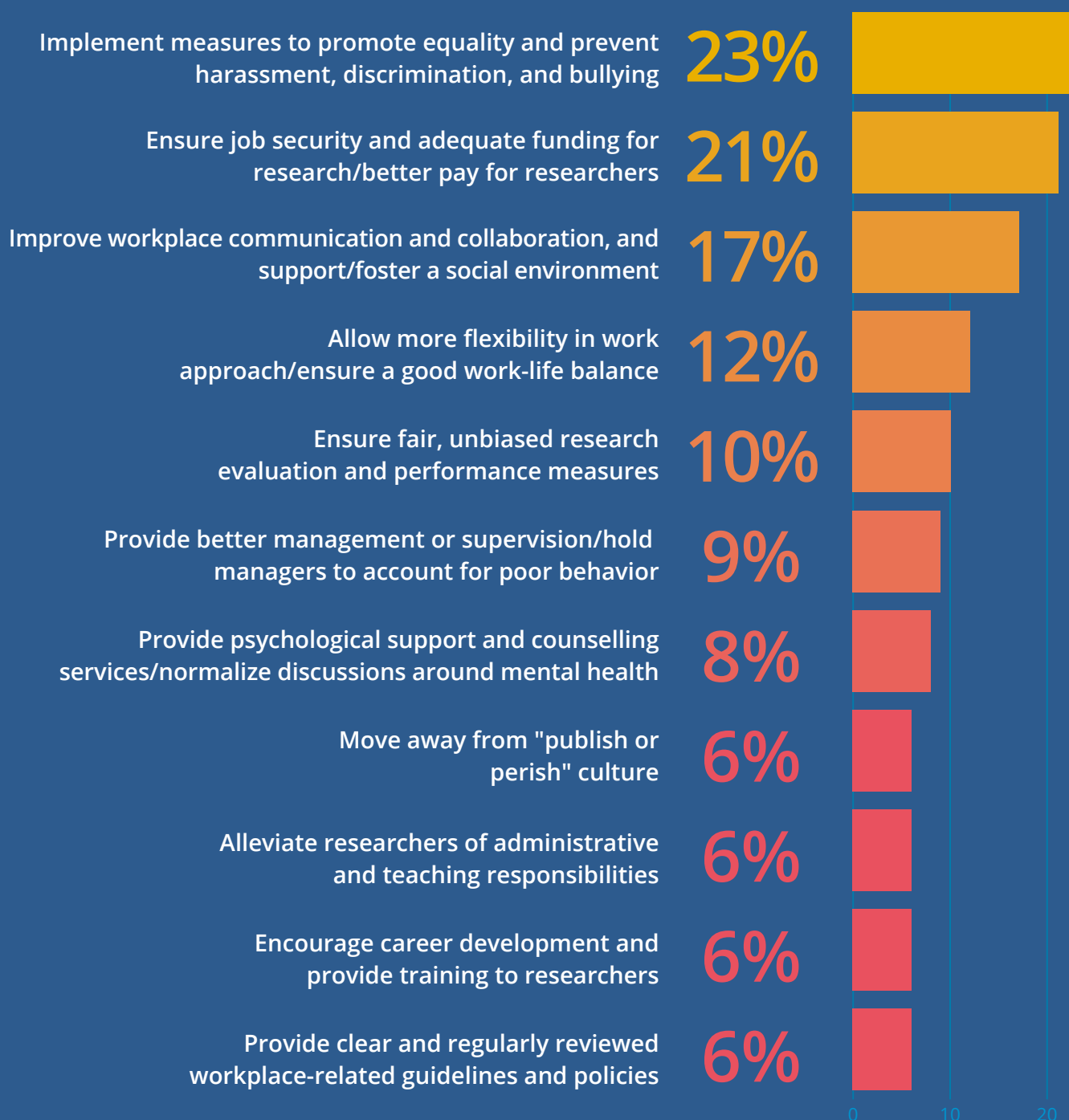
Respondent comments shared here are taken from the representative sample of 1,000 comments that were analyzed for this follow-up report.

Where needed, comments have been edited for grammatical accuracy and ease of reading, without changing the underlying meaning.

Ideally, this report should not be read in isolation, but alongside the full comprehensive report of survey findings.

Overview of the findings

One thousand responses to the question “Do you have any suggestions for organizations within academia or other related stakeholders on what they can do to ensure a great work environment for researchers?” were coded into the following **11 distinct themes**:



The vast majority of researchers surveyed gave detailed suggestions for improving research work environments that covered several of these themes; thus, most responses were coded into multiple different themes.

The responses largely reflected findings from other themes covered in the survey questionnaire and therefore support the conclusions drawn from the full report. These themes are explored in more depth through this report.

Key themes

1 Implement measures to promote equality and prevent harassment, discrimination, and bullying

As indicated in their responses to the open question, almost a quarter (23%) of the researchers in the sample wanted to see more equality and less harassment, discrimination, and bullying in the workplace.

Respondents spoke of a lack of equality and respect towards certain groups, particularly students and early career researchers, women, and minority groups. This is reflected in other areas of the survey, which found that incidents of discrimination, harassment, or bullying were more commonly experienced by minority groups. Many respondents described their own experiences of harassment, discrimination, and bullying, whilst others spoke of inequality in a more general sense as something that is innate and embedded within research institutions.

Students and more junior researchers were frequently reported to be under excessive amounts of pressure to perform, heavily criticized and even bullied by senior members, including their supervisors and managers. This type of harassment creates a particularly challenging situation for victims as they are unable to follow the usual procedure of escalating the matter to senior members within their organizations, because they are the source of the harassment or bullying.

A number of respondents described experiences of sexual harassment as a normalized occurrence at work, and that attempts to report these incidents were often not taken seriously or adequately acted upon by those in positions of authority. Racial bias and discrimination was also highlighted by some as an issue that is ingrained within the research work culture.

The issue of inequality was said to impact individuals' chances of getting promoted, having work reviewed, and even having their grievances heard and pursued. Almost half (48%) of those who felt that their organization did not have strict policies against discrimination, bullying, and harassment reported having frequently felt overwhelmed at work over the month before they completed the survey.

Take people seriously. I experienced harassment and bullying and I was brushed off and not listened to until it got severe. Then the department said "why didn't you say anything" when I had been the entire time. What seems inconsequential to some may be harmful to others. Reputation is too important to some programs.

PhD student, Europe

Address sexual harassment at every level using a survivor-focused lens; address implicit bias; address the "motherhood penalty."

Lecturer, North America

Racism is still very prevalent in academia. Advisors should not "play favorites" in determining which papers from their lab to read and work on first. I have been waiting on my Master's advisor to read my papers for 3 years while she has continued to prioritize other students' papers over mine. It makes no sense and it shouldn't be happening like this. I have done nothing except be the only non-white student in the lab group.

PhD student, North America

Percentage of researchers who reported experiencing discrimination, harassment, or bullying at work

60%

of mixed-race researchers

45%

of researchers identifying as homosexual

42%

of female researchers

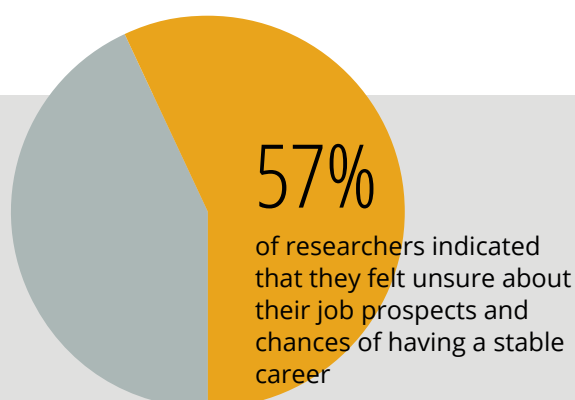
2 Ensure job security and adequate funding for research/better pay for researchers

“More pay” was a common request from surveyed researchers. Several comments appeared to draw links between finance-related stress and overall poor mental health of those working in research. In particular, pay was highlighted as an issue for PhD students and early career researchers. Results from other question areas in the survey found that 38% of the researchers surveyed disagreed to feeling satisfied with their financial situation.

As per numerous responses to the open question, many researchers commented on how they had frequently worked past their contracted hours without being financially compensated. Other areas of the questionnaire found that 31% of researchers reported working more than 50 hours in a typical week.

Another prominent concern that many expressed in the open comments was anxiety around job security. For many respondents, the comments reflected dissatisfaction with the short-term nature of work contracts in the research sector, and several respondents described feeling worried about their longer-term financial stability. This was strongly linked to concerns around the availability of funding and resources that tend to be insufficient for research projects on the whole. This mirrors the findings from other questioning in the survey, which showed that over half of the researchers agreed they were unsure about their job prospects and the chances of having a stable career.

Some complained of the difficulty in acquiring funds and mentioned that governments should invest more in research. It was also indicated that some institutions may be channeling funding into the wrong areas, for example, new building construction, where research expenses should be prioritized.



Don't expect people to work full time in a half position, payment should be appropriate. Over hours should be paid.

Teacher, Europe

Create job security by reducing fixed term contracts, don't use hourly paid workers whenever possible, do not require staff to work vastly more hours than they are contracted to do and get paid for.

Research fellow/post-doctoral researcher, Europe

Research workers in academia lack stability in employment. Academia should separate research institutes and establish measures to stabilize employment. Professors and post-doctoral researchers are temporary project researchers, and they think that they can withdraw from research anytime due to job insecurity.

Research fellow/post-doctoral researcher, Asia

Ensure financial stability for research work. The biggest stress comes from obtaining funds and all the work associated with it.

Associate Professor, North America



3 Improve workplace communication and collaboration, and support/foster a social environment

Of the surveyed researchers, 17% asked for improved communication between colleagues, collaborative working, and fostering of a more social environment, as per their responses to the open question. Many researchers indicated that they were currently working in very competitive environments, in which their colleagues felt more like rivals than allies. It was frequently suggested that better communication could lead to better cohesion in the workplace, which in turn could have a positive impact on the mental health of researchers. Additionally, more open communication could provide an opportunity for coworkers

to discuss concerns and feel more confident about reporting and preventing harassment, bullying, and discriminatory behavior.

A more supportive and collaborative environment was also seen to be desirable. Many respondents described their wishes for “transparency” and “openness” in the workplace and that respect should be given to all opinions, regardless of position or seniority. A sense that many researchers are subdued into following the wishes and views of the most powerful members at their institution emerged in the comments.

It was also suggested that institutions should make more effort to provide opportunities for researchers to socialize, such as networking events. This appeared to be a particular concern for researchers who were working in a different country to where they were originally from.

Make it clear that it's common to feel overwhelmed and encourage folks to talk to each other and their supervisors. Encourage students and peers to talk to each other. Many of the negative things people feel are very common, but they don't realize that. Realizing others were feeling the same things I was, always helped me. Maybe host department social events that are designed for this. Just call them lounge or chat events, or find some other way for people to share their feelings.

PhD student, North America

1. Communicate more 2. Communicate with empathy and intention to understand others' situation and make others understand their own 3. Understand that each problem (however big or small) is unique and hence not brush it aside as a norm 4. Inculcate extracurricular activities.

PhD student, Asia

Be supportive and collaborative rather than highly competitive.

PhD student, Europe



4 Allow more flexibility in work approach/ensure a good work-life balance

Another sought-after change to researcher workplaces was more flexibility in terms of work hours and work approach. This reflected findings from other parts of the survey, which revealed that 43% of surveyed researchers agreed or strongly agreed that their organization does not have effective policies or facilities to help them achieve a good work-life balance. Additionally, 31% of those that strongly agreed with this statement reported having felt overwhelmed at work frequently in the previous month. It is therefore understandable that a large proportion commented on the need for their organizations to emphasize the importance of work-life balance. Many also said they would benefit from more flexibility with their working hours, in order to fit these around external commitments. In particular, several female respondents felt that more flexibility in work schedules should be made available to those with childcare duties, or at least childcare facilities should be provided onsite by the institution.

Flexibility was also mentioned in terms of work approach. Several respondents proposed that moving away from a pressurized, results-driven approach could improve the quality of work output.



Distribute the work. Don't overburden them with various other responsibilities. Don't pressurize them for personal gains. Keep them working only for 8 hours as per the country's labor laws and time duration for working... It only leads to burnout.

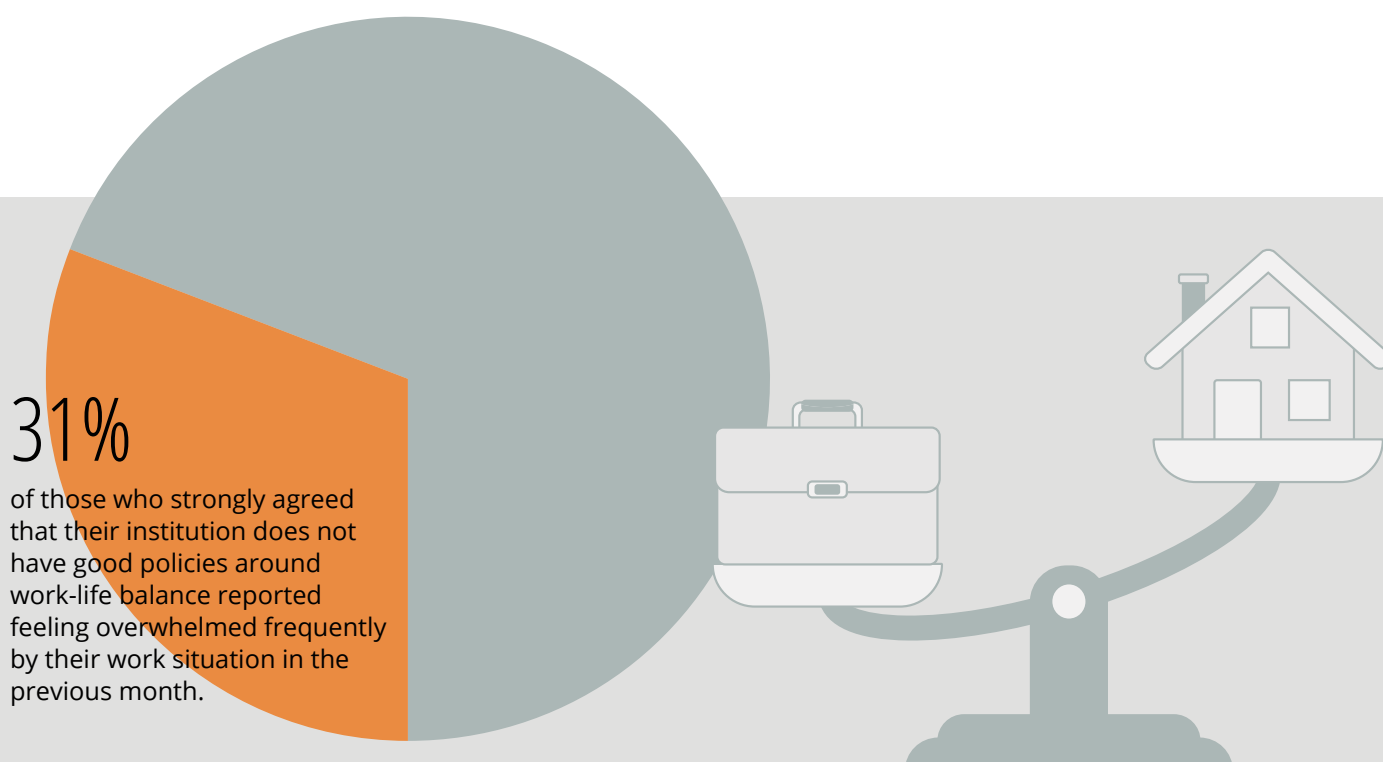
Research fellow/post-doctoral researcher, Asia

To care more about women researchers, especially when they have kids. Could be cool if they can find a way to have nurseries at research institutes.

PhD student, Europe

Balance work and life and adopt the free and efficient working pattern!

Graduate student, Asia



5 Ensure fair, unbiased research evaluation and performance measures

A tenth of the surveyed respondents suggested that more should be done to ensure that work and individuals are assessed fairly and without bias. This was mentioned with regard to researchers' performance evaluation, funding applications, as well as staff recruitment.

Many respondents indicated a need for clear, structured performance indicators that take all aspects of work responsibilities into account, as opposed to focusing solely on publication output. Findings from the other areas of the survey revealed that 45% of researchers agreed or strongly agreed with the statement '*I think it's unfair how research performance is evaluated in my organization*'. This was more likely to be reported by those with 6–20 years' experience than by those with under 5 years' or over 20 years' experience.

In the open question, many also commented on the existence of nepotism and general bias in hiring processes and allocation of research funding. A number of respondents proposed that these important decisions should be made by an impartial external organization, to ensure objectivity.

“

I want the work environment to be less competitive; e.g. projects should be chosen for funding by lottery and not by evaluation because there is no objectivity in evaluation.

Associate Professor, Europe

It is hoped that the academic community should be wary of research and papers that are accepted through personal relationships, such as school ties, regional ties, and family ties.

Research fellow/post-doctoral researcher, Asia

A third party who can give fair and impartial evaluation.

Assistant Professor, Asia



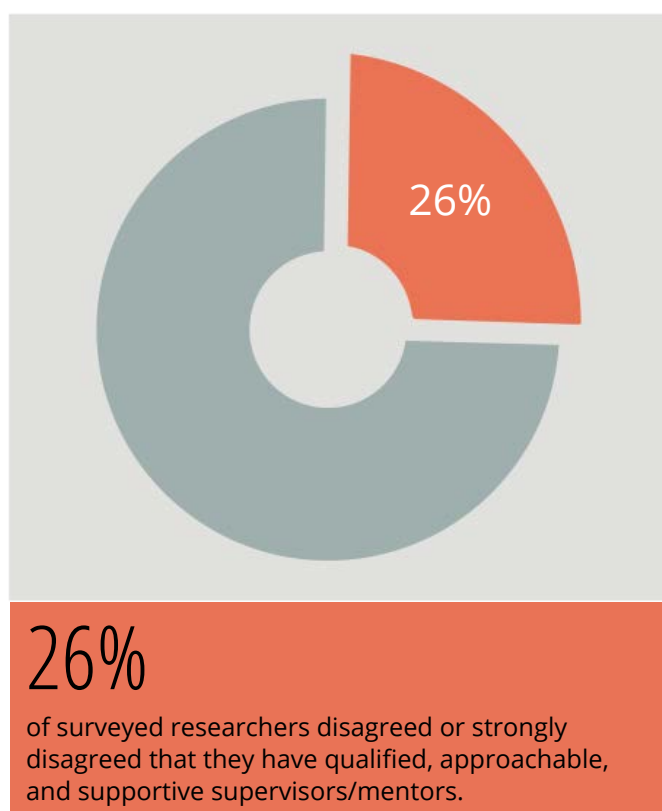
Only 40%

of postdoctoral researchers agreed or strongly agreed that their work was evaluated fairly within their organization and that they received due credit and recognition.

6 Provide better management or supervision/hold managers to account for poor behavior

Dissatisfaction with the provision of management and supervision at work was mentioned by 9% of surveyed researchers. A large proportion of these felt that their current managers or supervisors were ill-equipped for the role and would benefit from training in this area. In many corporate environments, it is often considered normal procedure to provide training for those who are progressing into managerial positions from other roles. This training may include ways of effectively communicating with people, monitoring others' workloads, and managing teams. However, comments received in this survey indicate that managers and supervisors in academic research are commonly given managerial responsibilities on the basis of their successes in publishing research papers, rather than their possession of people skills. Consequently, many academic researchers may not be receiving adequate support from their managers or supervisors.

In line with comments linked to workplace inequality, many individuals spoke of experiencing harassment and bullying by their managers and supervisors. A common frustration amongst researchers seems to be the lack of opportunity to report these incidents, so senior staff are therefore never held accountable for their actions.



“

Professors are always in control and take advantage of students. The behaviours of professors are protected on campus. I wish there was something to keep the professors in check.

Assistant Professor, Asia

Hold PI's and others accountable for how they treat students and trainees. Create avenues for reporting bias, bullying or other activity even if the PI brings in the most money in the whole department.

Research fellow/post-doctoral researcher, North America

I have been constantly threatened by my supervisor that he would give me a negative recommendation if I do not perform my work in the way he wants and all that he wants.

Research fellow/post-doctoral researcher, Asia

Be more professional and ensure that all managers, i.e. principal investigators/group leaders have proper training in actually managing people. Many researchers become group leaders because of a successful grant application and high impact publication but do not necessarily have the proper skills to actually lead a research group.

Research fellow/post-doctoral researcher, Australasia

7 Provide psychological support and counselling services/normalize discussions around mental health

Another common suggestion was to make counselling and psychological support services more available to researchers. Several responses suggested that mental health support should be adopted as mandatory for all researchers, in a bid to help reduce the stress levels among this group. Some felt that this should exist as a service within institutions, whilst others felt that this support should ideally come from independent sources, in order to ensure confidentiality and protect workers from further discrimination. In fact, 49% of researchers surveyed said they would not discuss feelings of severe stress or anxiety with relevant people or authorities at work, and of these, 46% attribute this hesitation to fears that discussing these issues within their organization would reflect poorly on them.

Stigma surrounding mental health was highlighted as an issue in the research work environment. Consequently, many suggested that more should be done to normalize conversations around mental health.

49%

of researchers surveyed said they would not discuss feelings of severe stress or anxiety with relevant people or authorities at work.

Suggest in the first place that you may at times feel lost and that there's no shame in saying so. Being honest about mental health and this being a widely shared problem in academia is the first step towards recovery.

PhD student, Europe

Have a person of contact in place for employees to check in with mental health, who is completely separate from supervisor/PI [Principal Investigator], and will maintain confidentiality.

Research fellow/post-doctoral researcher, Europe

Must have an in-house counsellor. Take efforts to understand and normalise conversation around mental health.

PhD student, Asia

Access to counselling from somebody independent from your work situation.

PhD student, Europe



8 Move away from “publish or perish” culture

A substantial number of responses indicated that researchers are under great pressure to get their work published. Many felt that emphasis should be placed on quality of research over quantity of published papers, particularly with regard to researcher performance evaluations.

Stop looking at numbers of published papers as a measure of productivity ... stop the culture of glorifying overwork.

PhD student, North America



9 Alleviate researchers of administrative and teaching responsibilities

Whilst many researchers reported that they enjoy non-research responsibilities, some level of support with these was commonly requested, such as an assistant to help with administrative tasks. Others felt that researchers should be relieved of all non-research responsibilities, to allow them time to focus solely on their research.

Teaching should not be combined with research. Research takes much time and concentration.

Associate Professor, Europe



10 Encourage career development and provide training to researchers

Many researchers appear to feel that there is a lack of opportunities for career progression, including a lack of information about research careers outside of academia. Several also said they would like to receive more training and skills enhancement as part of their jobs.

When I was doing my undergrad and honours, I didn't realise it was possible to do good research outside of academia. I feel very lucky for getting my current job and not pursuing a PhD. Highlighting these opportunities to students following a research pathway is important!

Research Assistant, Australasia



11 Provide clear and regularly reviewed workplace-related guidelines and policies

Clear institutional policies and guidelines for good practice were recommended, to provide transparency and some protection to researchers. Respondents proposed that these should be continually reviewed and that measures should be taken to ensure they are adhered to.

I wish they would establish clear and detailed standards, with a less intrusive direction, and set them properly so that they can last for a long time. Establish and promote good policies.

Principal Investigator, Asia





Concluding thoughts

The key themes that emerged in the analysis of researchers' responses to the question "Do you have any suggestions for organizations within academia or other related stakeholders on what they can do to ensure a great work environment for researchers?" largely reflect findings from the full comprehensive report of the CACTUS Mental Health Survey, as well as other recent studies in this area.

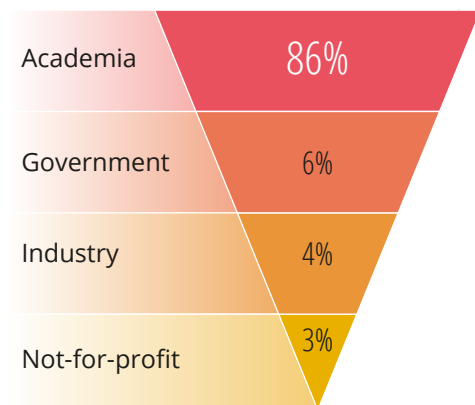
These key themes paint a complex picture of interwoven issues and grievances with the current state of research work environments. Interestingly, there were few differences found in the types of responses between different regions, career stages, and other

demographic groups, indicating that these key themes are common to the experiences of researchers at all career positions and all over the world.

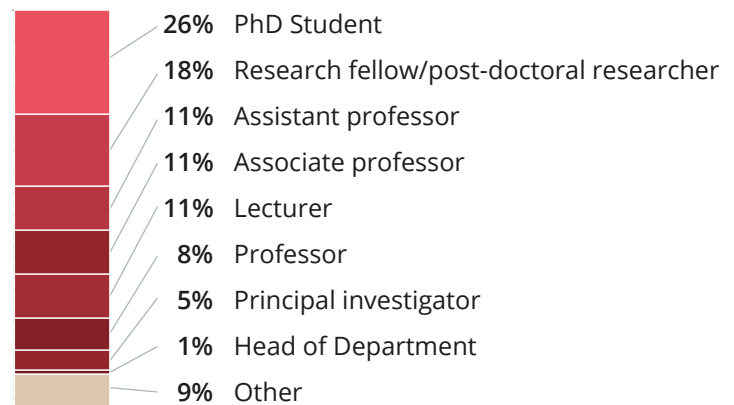
This report highlights some key areas where changes need to be implemented in order to improve researcher work environments, in particular, measures to improve equality and prevent discrimination, harassment and bullying; a guarantee of some level of job security for researchers; improvements to workplace communication and collaboration; and the implementation of measures to ensure that researchers maintain a healthy work-life balance.

Appendix | Respondent profile

Which of the following sectors do you currently work in?



Which of the following most closely describes your current academic designation?



n = 1,000, total adds up to 99% due to rounding error

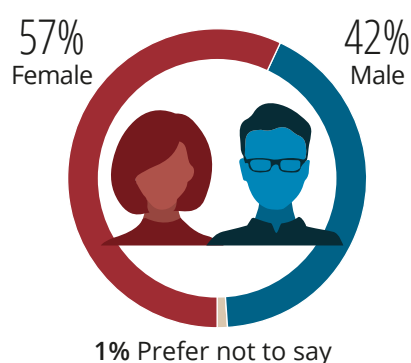
How many years have you spent as a researcher?



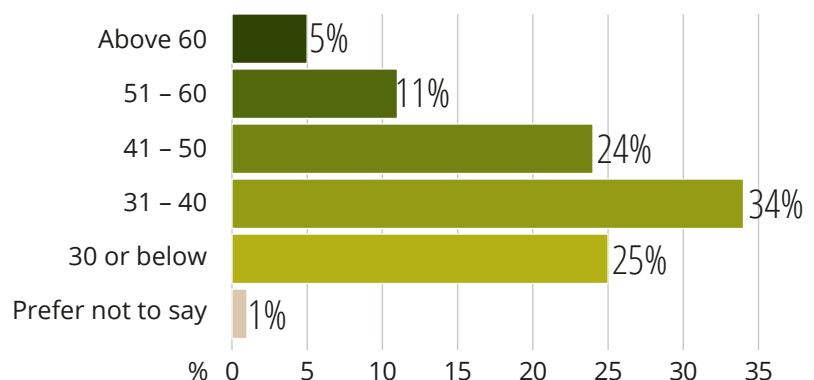
What is your broad field of study?



What is your gender?



What is your age?



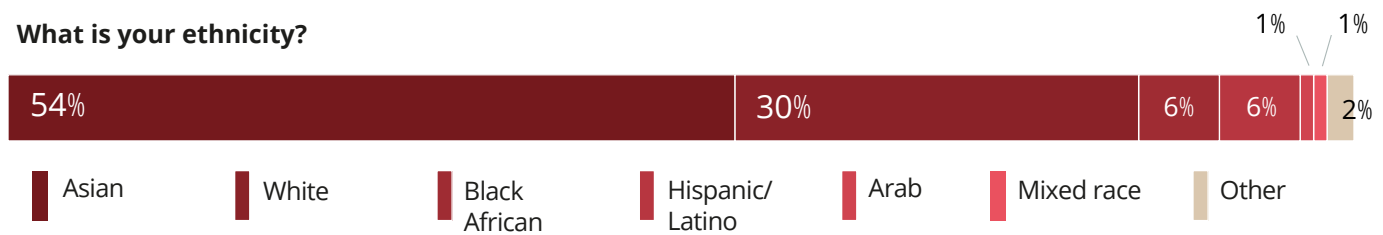
What is your sexual orientation?



n = 1,000, total adds up to 101% due to rounding error


n = 1,000 for all graphs


What is your ethnicity?

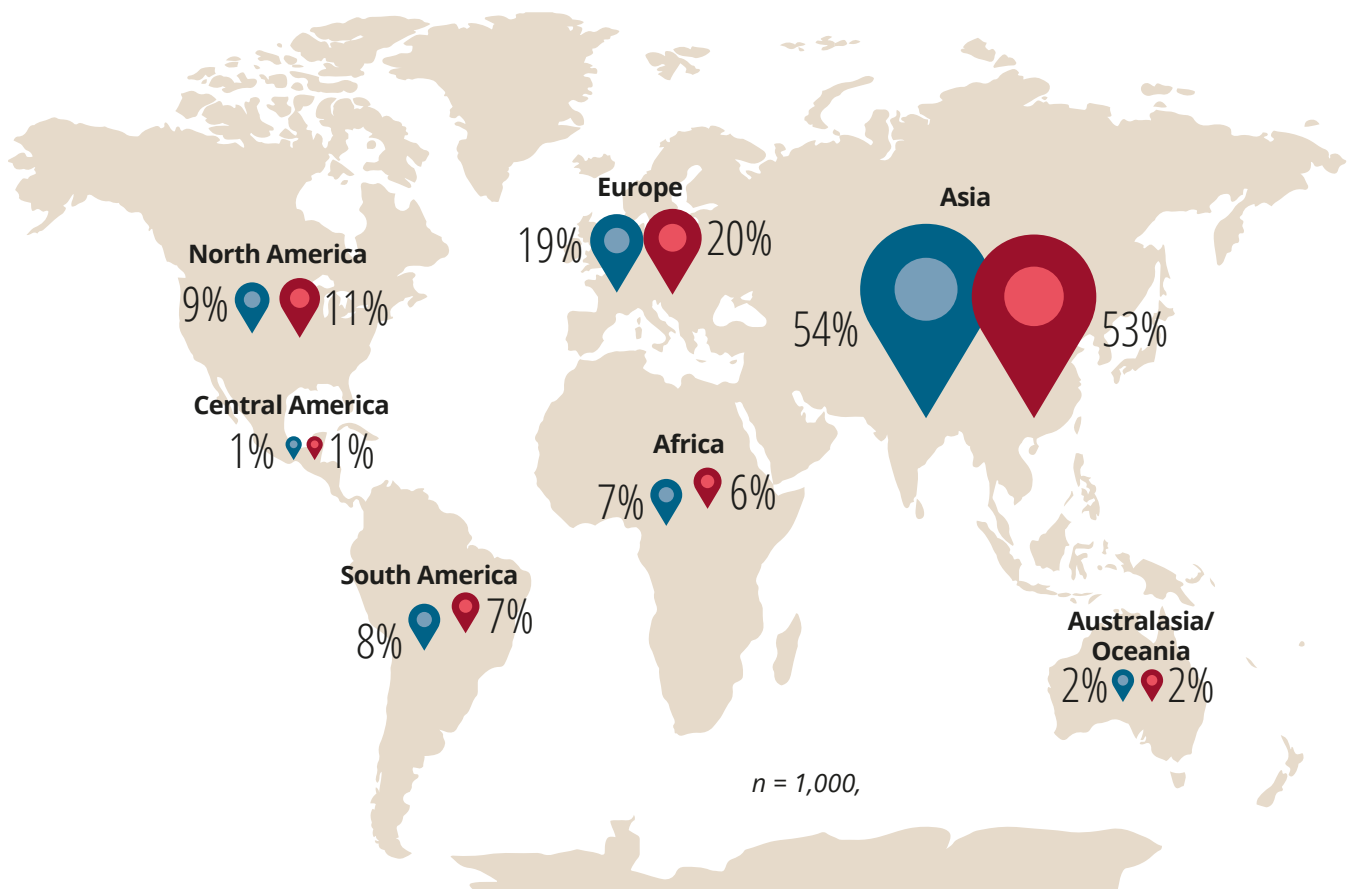


n = 1,000

Regional distribution

 Which country are you originally from?
(Grouped into regions)

 Which country do you currently work in?
(Grouped into regions)



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What comes next?

The CACTUS Mental Health Survey Report 2020 is just the beginning!
There's still much to do and talk about in our journey towards initiating and shaping a much-needed change in the global research culture.

**Join the conversation about mental health in academia and
discuss findings from the survey report on R Voice**

JOIN THE CONVERSATION



R Voice is a safe space created for researchers to come together and be themselves, be it bringing forth their academic side or sharing some of their personal achievements and struggles.

R Voice - *A magnetic, thriving, nurturing community of researchers growing together and supporting each other*

About

About Cactus Communications

Founded in 2002, [Cactus Communications](#) is a technology company accelerating scientific advancement. CACTUS solves problems for researchers, universities, publishers, academic societies, and life science organizations through innovative products and services developed under the brands [Editage](#), [Cactus Life Sciences](#), [R](#), [Impact Science](#), [UNSILO](#), and [Cactus Labs](#). CACTUS has offices in Princeton, London, Aarhus, Singapore, Beijing, Shanghai, Seoul, Tokyo, Hyderabad, Bengaluru, and Mumbai; a global workforce of over 3,000 experts; and customers from over 190 countries. CACTUS is considered a pioneer in its workplace best practices and has been consistently ranked a great place to work over the last several years.

About Cactus Foundation

[Cactus Foundation](#) is an initiative by Cactus Communications aligned with the United Nations Sustainable Development Goals, and it aims to help researchers grow and create global impact through their research. It was established to build a more just, equal, and inclusive society by providing grants, business support, education, and other initiatives to the global research community as well as to aspiring next-generation researchers. Our aim is to contribute to improvements in the quality of life and the greater prosperity of human society. Our commitment to society compels us to create meaningful change that is not only based on appearances but on enabling real impact to solve society's problems.

