

Early-career Researchers Perspective in Hungary

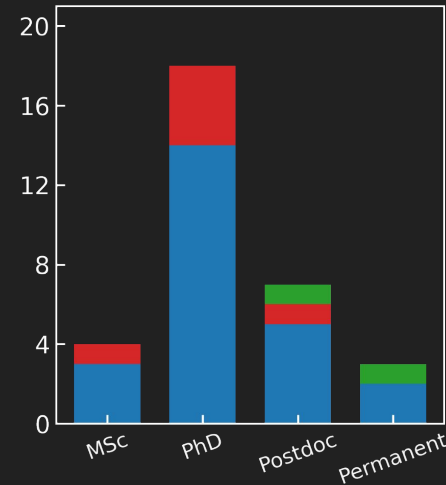
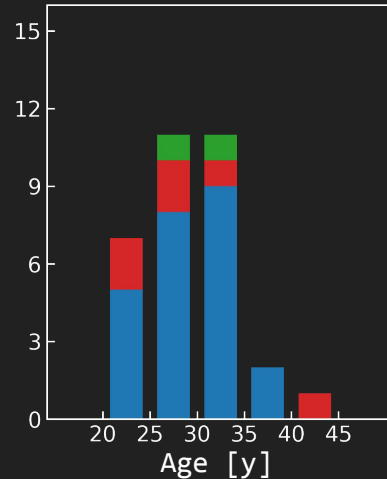
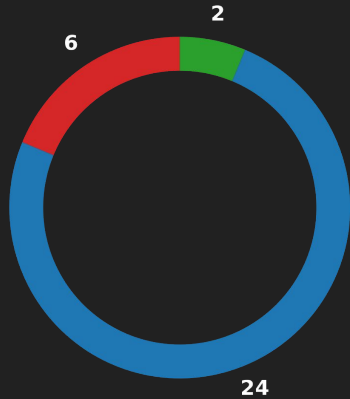
Peter Major

as the Hungarian representative of the ECFA ECR panel,
Eötvös Loránd University

R-ECFA visit
Budapest, 23 September 2022

Overview

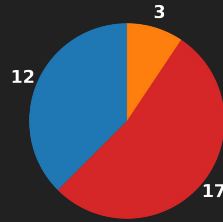
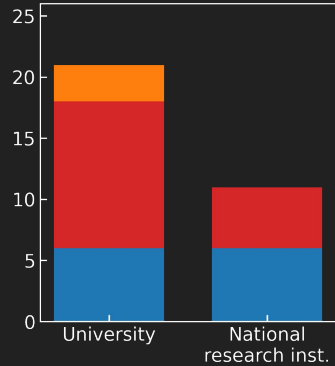
- Presentation based on a dedicated anonymous [survey](#)
- We asked those who
 - work in particle, nuclear, neutrino, detector, accelerator physics, or related fields
 - hold at least a BSc
 - have a non-permanent position or obtained their PhD at most 8 years ago
- 32 submissions in 14 days (Still a SMALL sample size!)



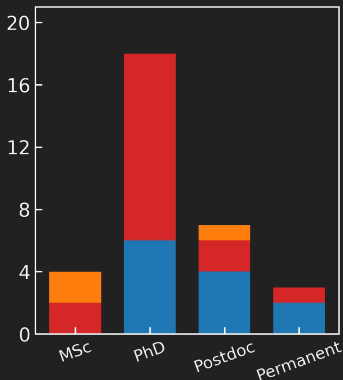
- Woman
- Man
- Other
- Rather not answer

Overview

Affiliation & Theory/Experiment

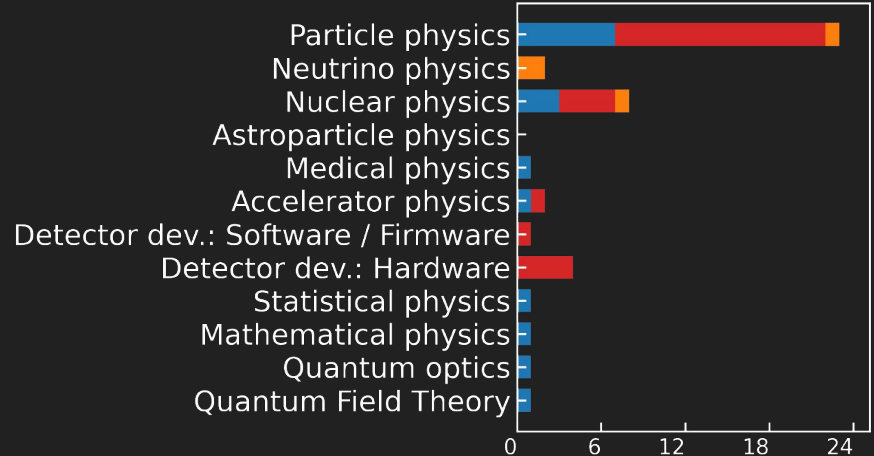


■ Theoretical physicist
■ Experimental physicist
■ I do both approximately evenly



- Balanced participation from the experimental and theoretical side
- Overwhelmingly
 - from universities
 - PhD students / candidates
 - particle physicists

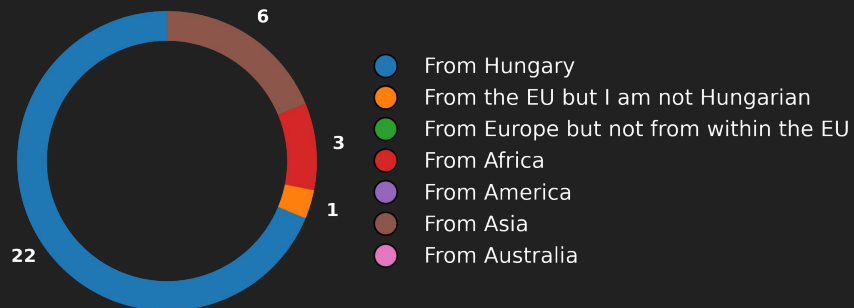
Main fields of research



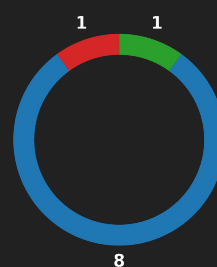
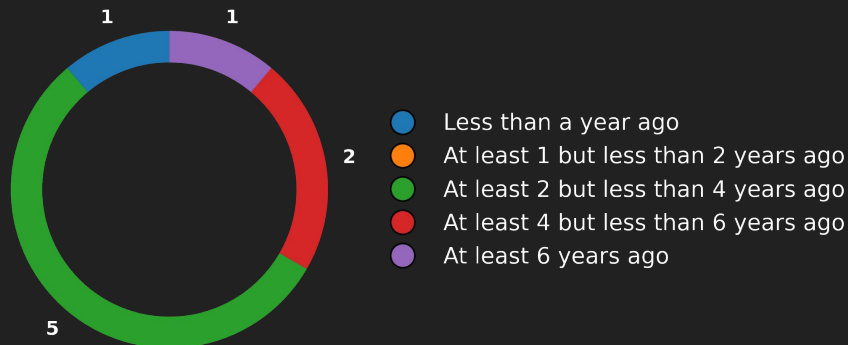
National composition

- $\frac{2}{3}$ of ECRs are of Hungarian nationality
- Very small portion from EU
- Only one new foreign ECR in the past two years → how to do better?
- Gender ratio in foreign subset is more biased

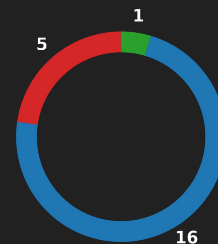
Where are you from?



How long ago did you arrive to Hungary?



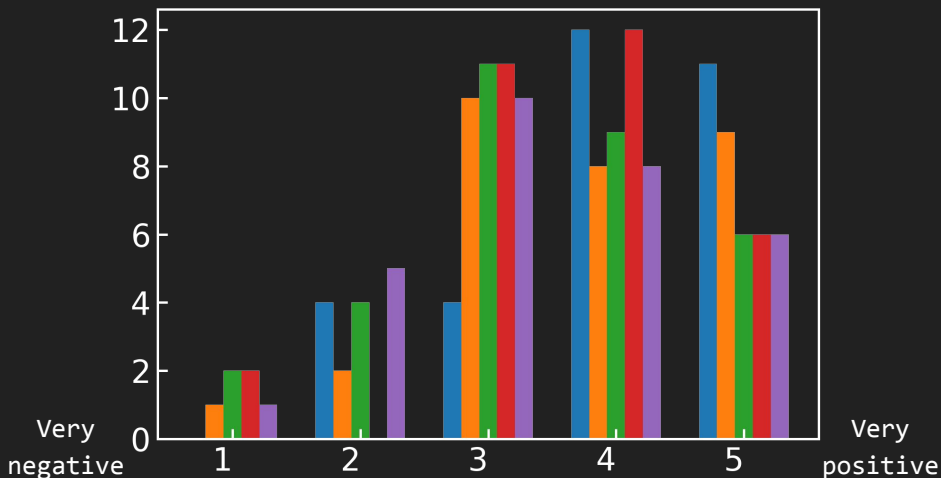
Foreigners



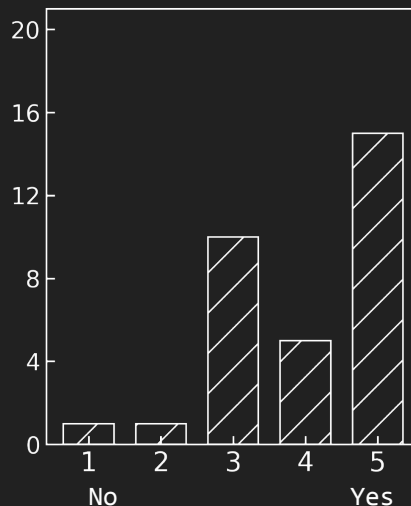
Hungarians

General sentiment

- ECRs like doing what they do



Would you choose your current field of research again?



How satisfied are you with the workplace culture? (3.97)

Do you get enough recognition from your colleagues? (3.73)

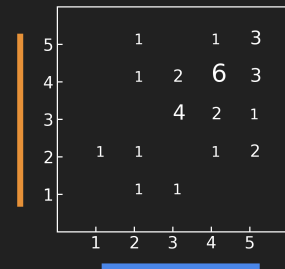
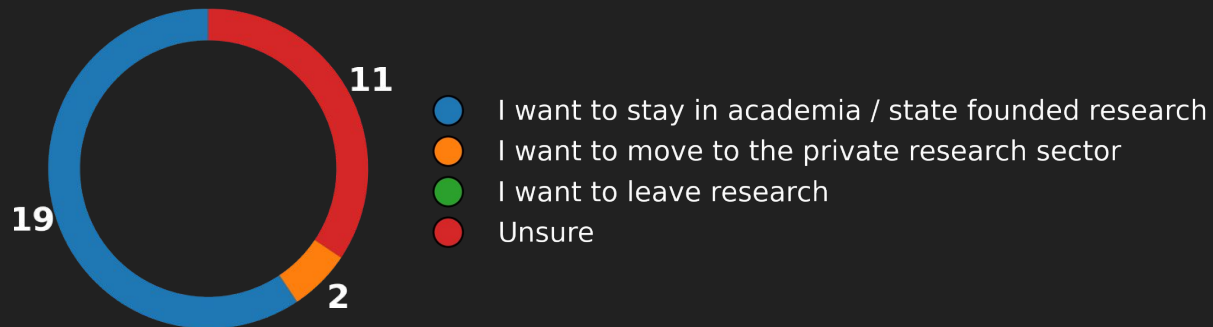
How valuable do you think your work for your field of research is? (3.4)

How fulfilling do you find your work? (3.65)

Globally, how satisfied are you with your job? (3.43)

Career prospects

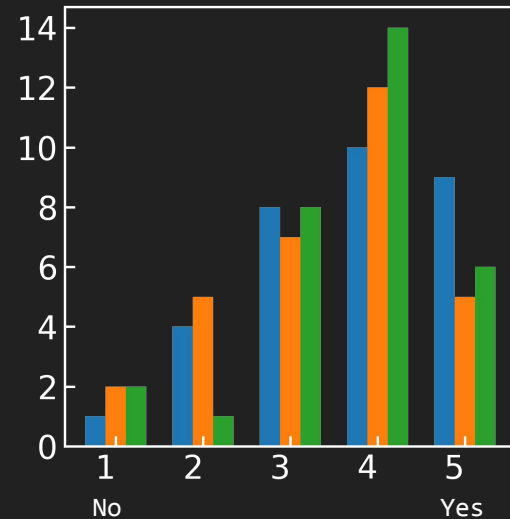
- Majority of ECRs wish to stay in research
- Strong correlation between optimism for career, opportunities and the vision to navigate the career path



Do you feel like you have an opportunity for a career in your current field?

Do you have a clear idea of next steps to advance career?

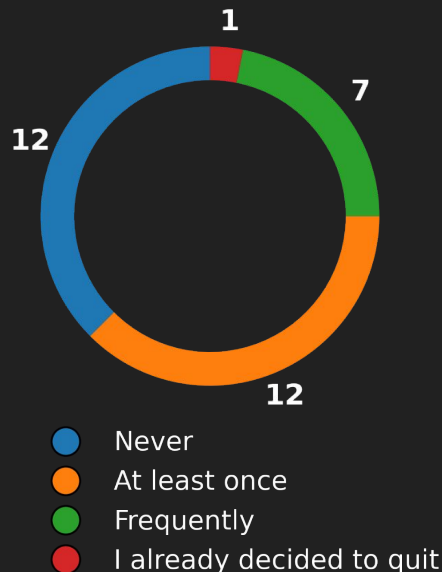
Do you get opportunities for professional growth?



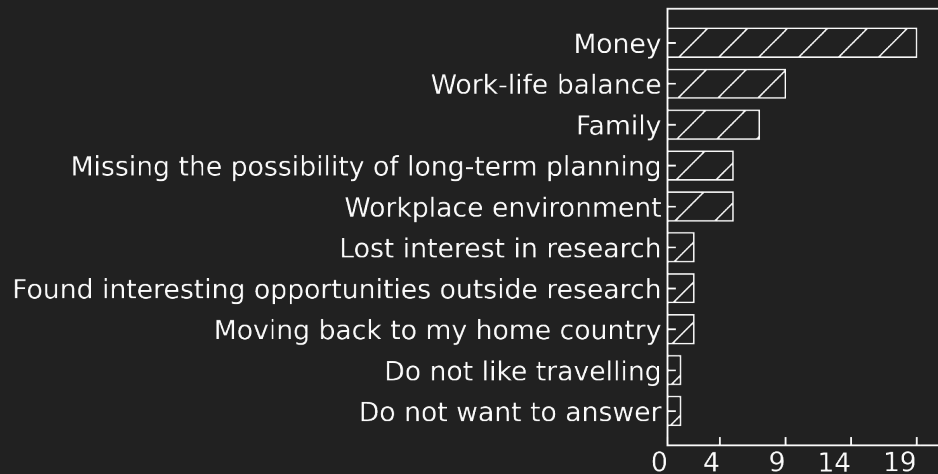
Career prospects

- Most ECRs seriously considered quitting at least once!

Have you ever seriously considered quitting physics? (e.g. searching for a job)

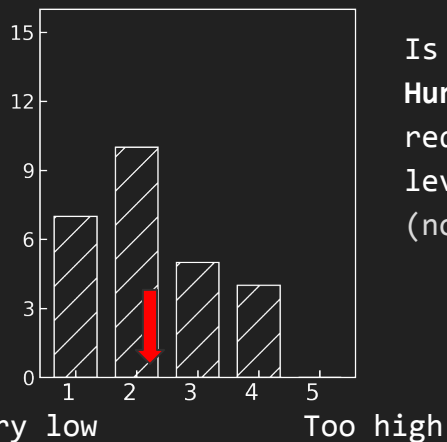
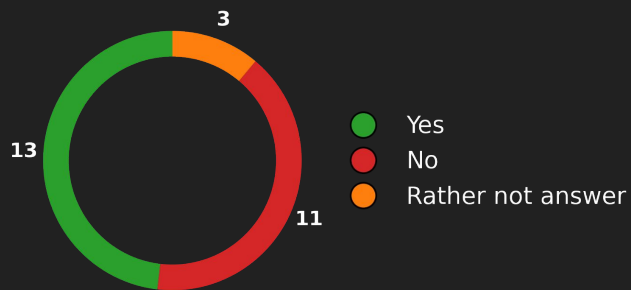


What are the main reasons of you considering changing careers? (+open field)



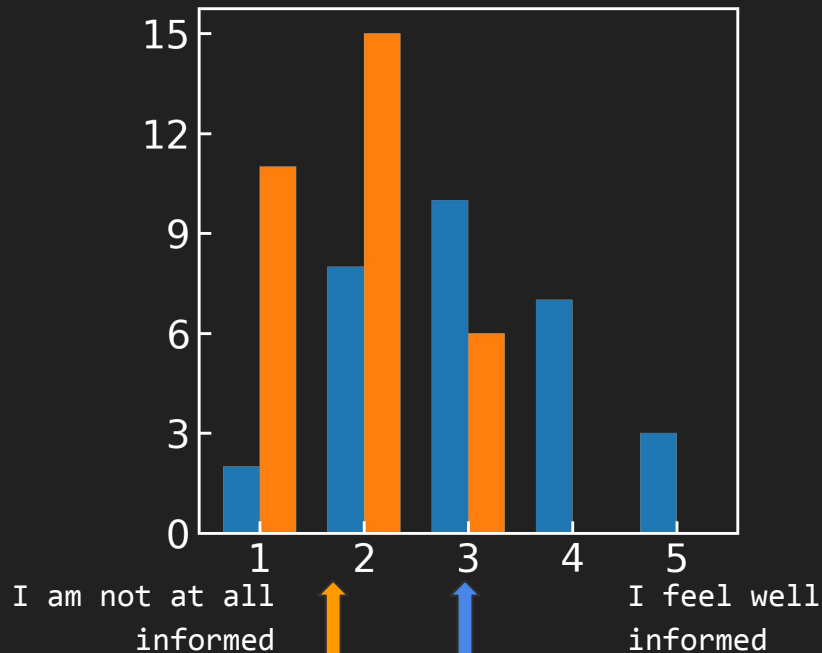
Material resources

Does your salary provide you financial independence? (no MSc students)



Is your salary appropriate wrt. Hungarian salaries for jobs requiring a similar level of education? (no MSc students)

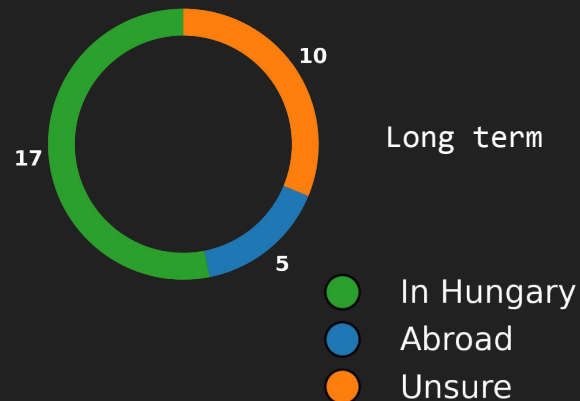
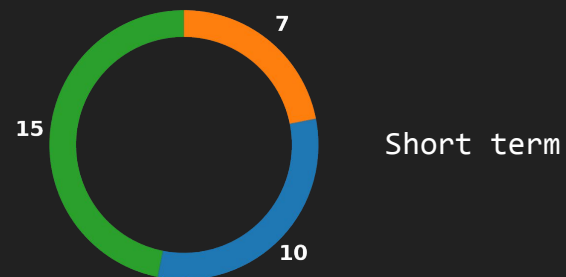
How well informed are you on funding opportunities in Hungary / the EU?



Material resources

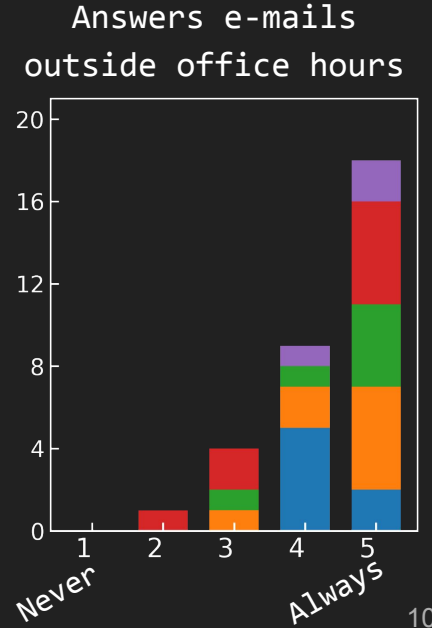
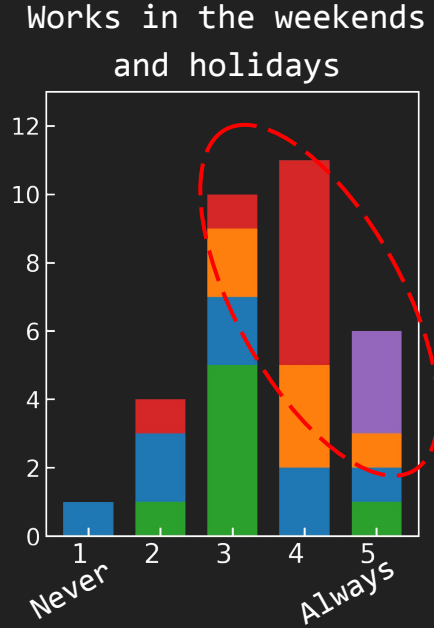
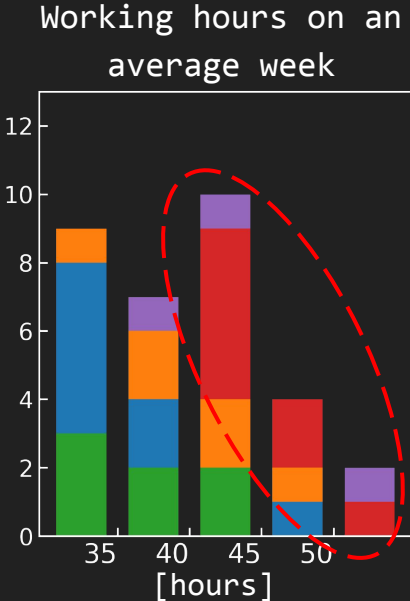
- Sentiment towards salary is very negative
- Funding / grant / scholarship opportunities are not well known
- Many want to stay, but also many are uncertain

Where would you like to continue your career?



Workload

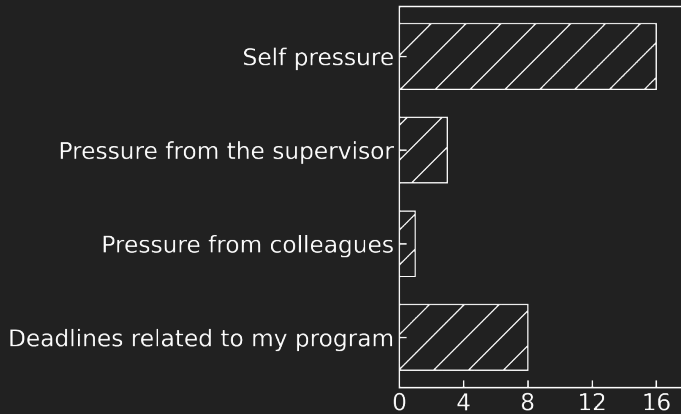
- Many ECRs work longer than normal hours even during weekends and holidays
- Over 1/3 of all ECRs feel overworked



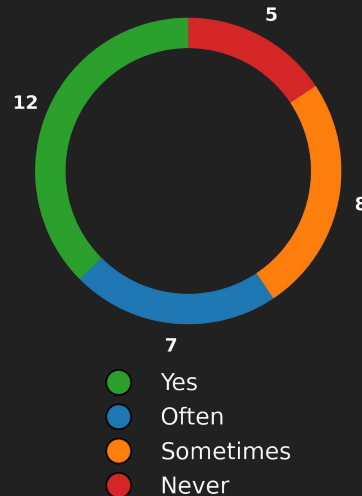
Workload

- ECRs often push themselves hard
→ Project management and soft-skill trainings could be beneficial
- More than half of ECRs feel work related stress on a weekly basis

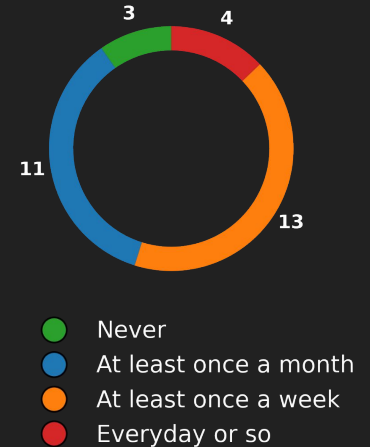
Reason for the overwork



Enough time for research activity

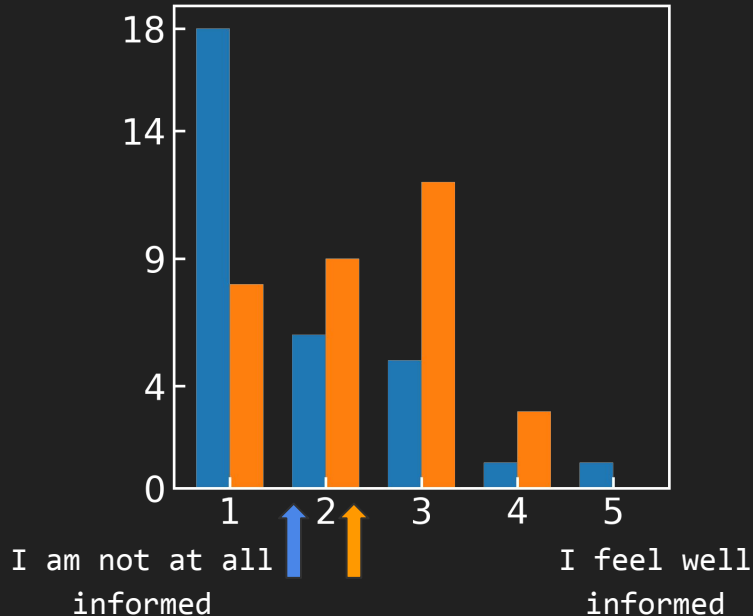


How often do you feel work related stress?
(not only workload!)



Trainings

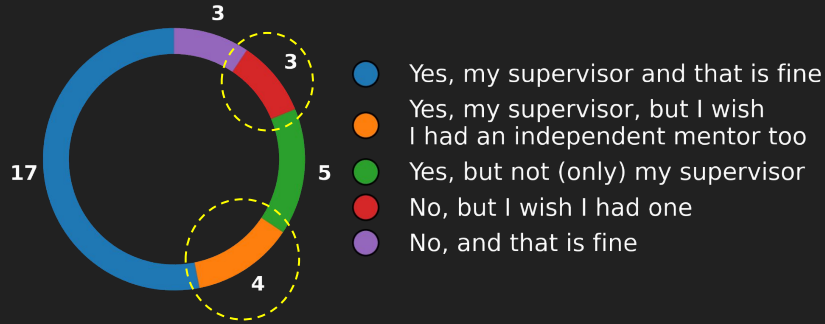
How well informed are you on
soft-skill / hard-skill
trainings?



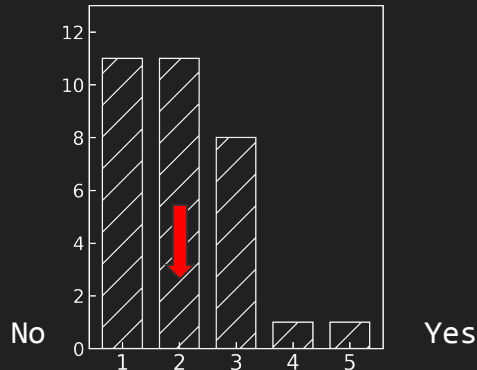
- Information does not reach ECRs
- Establishing a dedicated “channel” to communicate this without added noise could be the answer
- Soft-skill trainings are especially less known about, although very beneficial for career building
- With the online infrastructure such trainings should be easy to organize on a large scale
- N.B: Trainings distributed over several weeks provide better retention than condensed workshops [\[spaced learning\]](#)

Mentoring

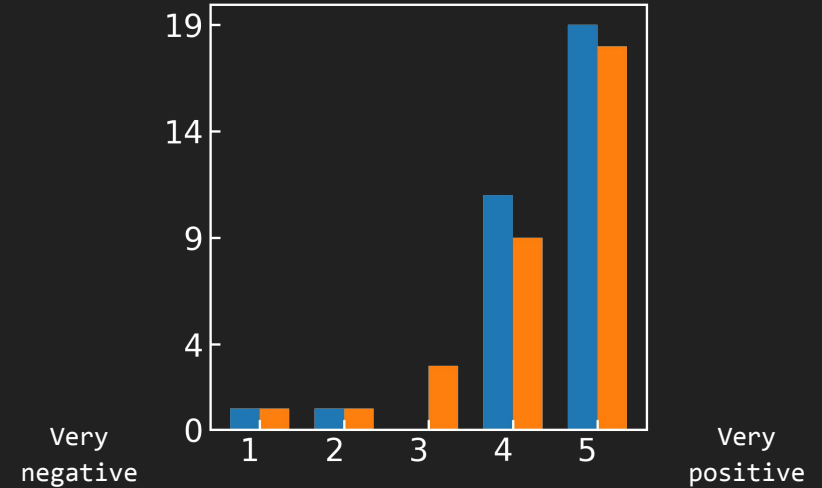
Do you have a mentor?



Do you feel well informed on mentoring programs?



Rate your relationship with your supervisor!
How satisfied are you with the guidance and support your supervisor provides?

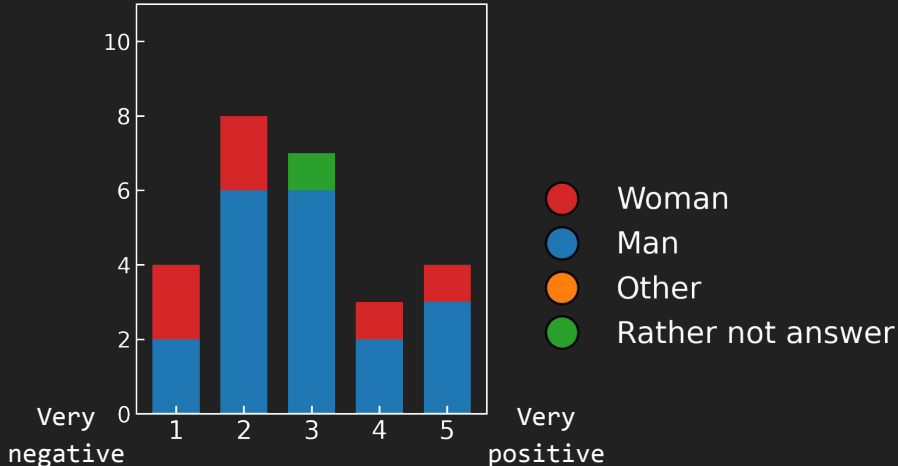


- Most ECRs have a good relationship with their supervisor and consider them their mentor
- There could be value in independent mentoring

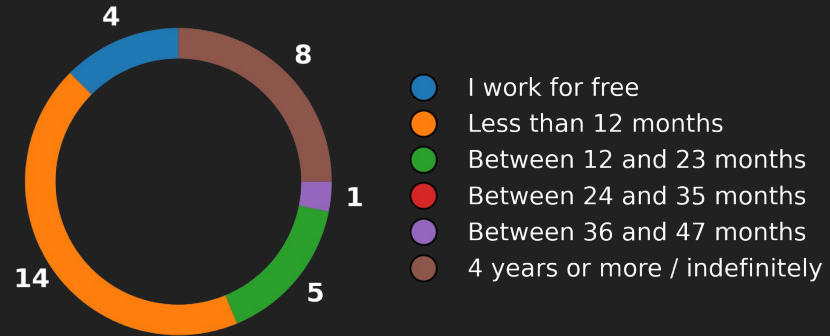
Family

- Requires time, money and planning
- No children before PhD in sample
- Men do not take paternity leave

What do you think the impact of having children on your career is / could be?



For how much time are you still covered by a contract?



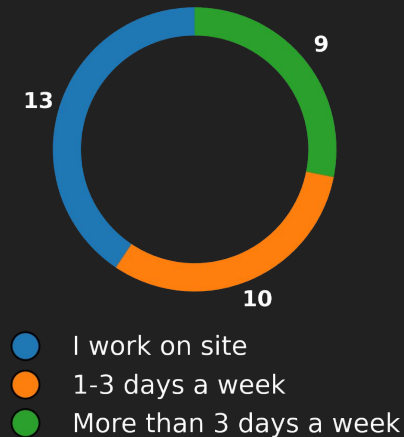
How difficult was it to find a daycare for your child?



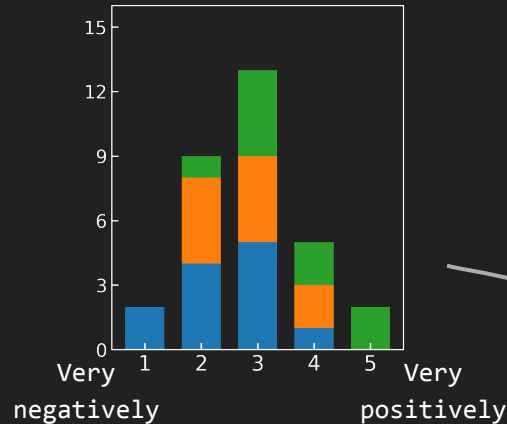
Home office and the pandemic

- Most ECRs do not experience a decrease in productivity in home office
- Many feel like their research was significantly hindered by COVID
- COVID: negative effects on conference participation, motivation, etc (backup)

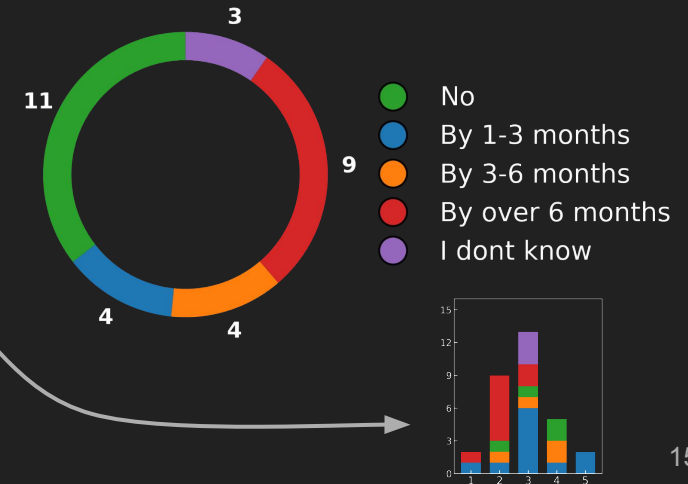
Do you work remotely?



How does home office impact your productivity?



Did COVID set back your research?

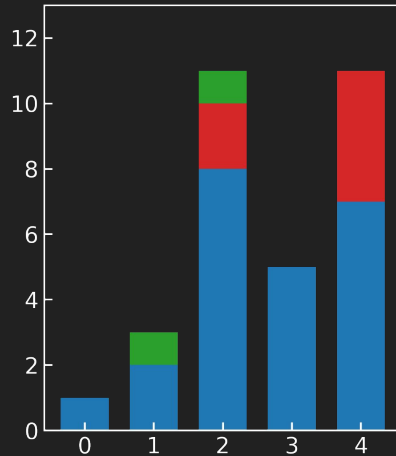


Inclusivity

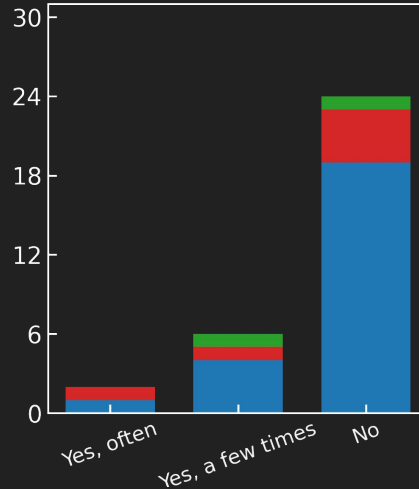
- Women find inclusivity more important
- Plots suggests that discrimination is only visible to the victims → no discussions?

| | | |
|--------------|------------|----|
| I don't know | 1 | 6 |
| Yes | 1 | |
| A little | 1 | 3 |
| Not at all | 2 | 17 |
| | Yes, often | No |

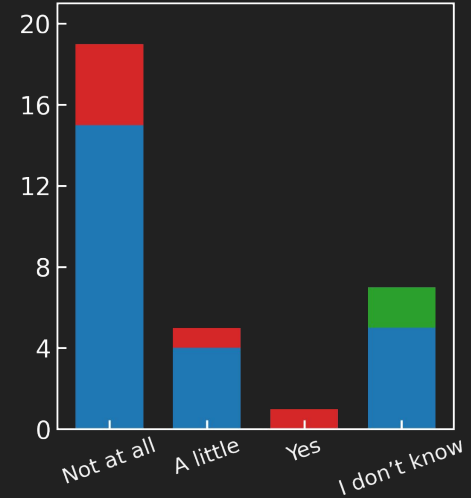
How important do you find inclusivity?



Have you ever personally faced negative discrimination in your profession?



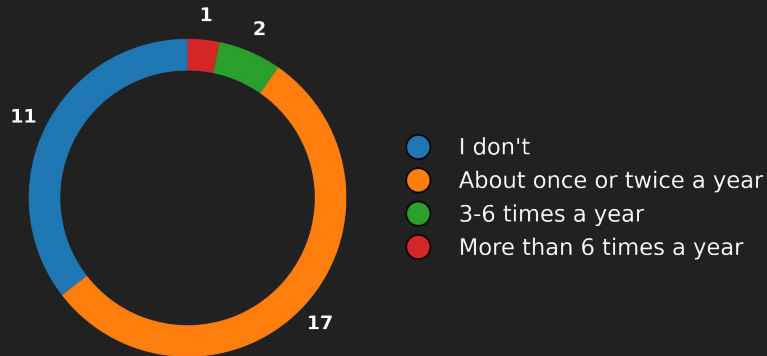
Is there gender based discrimination at your workplace?



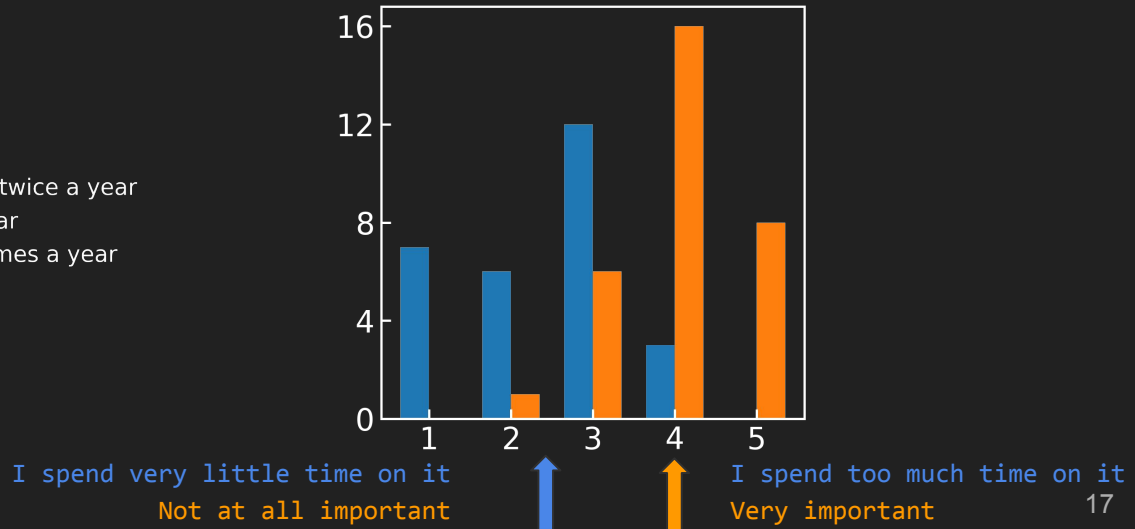
Outreach

- Almost $\frac{2}{3}$ of ECRs part take in outreach activities on a yearly basis
- Still much less time is spent here than how important ECRs find this topic
- Often no resources are available to cover expenses

How often do you take part in outreach activities?



Rate your **time involvement** with outreach!
How **important** do you find outreach?



Conclusion

- International environment, but the majority is Hungarian
- Much less submissions from Postdocs than from PhDs.
 - Are they so much fewer?
 - How can we retain them?
- ECRs enjoy their work and like their topics, but have issues with
 - Salary
 - Achieving work-life balance
 - Finding scholarships, trainings and, for some, mentors
- Half of the ECRs with children had difficulty finding daycare
- Women are
 - Underrepresented, especially in the foreign subset
 - Are more subject to discrimination, which might not be discussed
- ECRs are find outreach important, but spend less time on it than what they see as optimal.

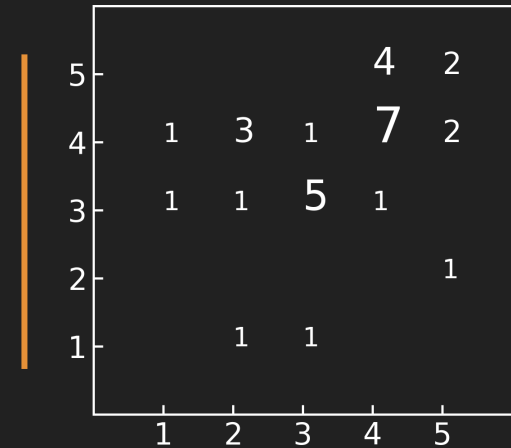
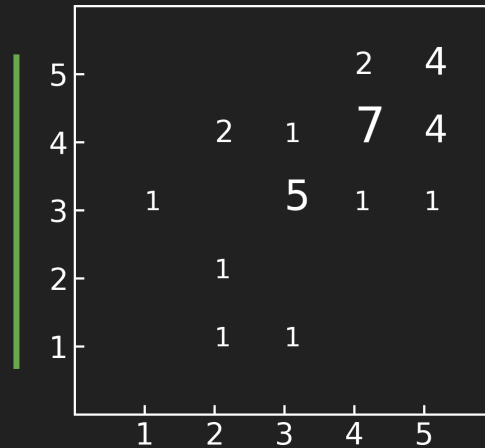
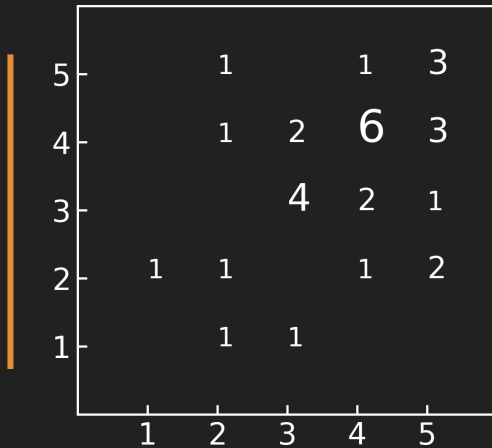
Career prospects

- Strong correlation between optimism for career, opportunities and the vision to navigate the career path

Do you feel like you have an opportunity for a career in your current field?

Do you have a clear idea of next steps to advance career?

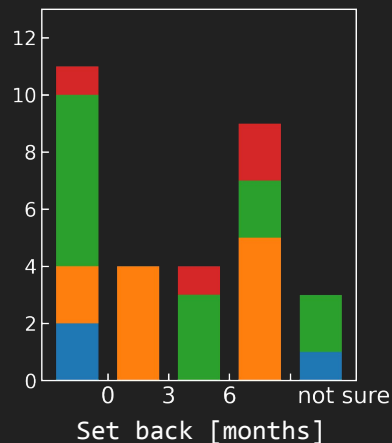
Do you get opportunities for professional growth?



Home office and the pandemic

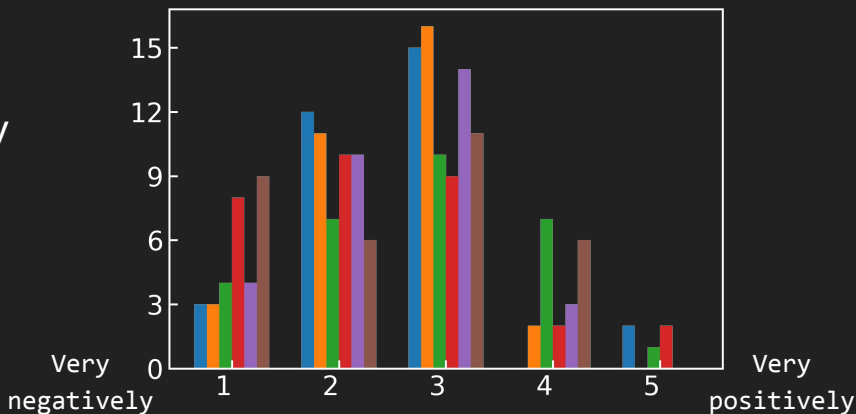
- Set back caused by COVID does not seem to explain work related stress
- But shows negative impact on relationships and motivation in many areas

Did COVID set back your research?



How often do you feel work related stress?
(not only workload!)

- Never
- At least once a month
- At least once a week
- Everyday or so

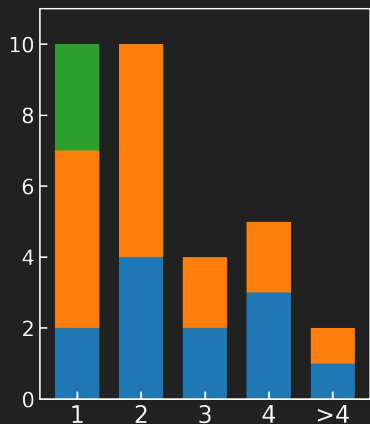


How did COVID impact your

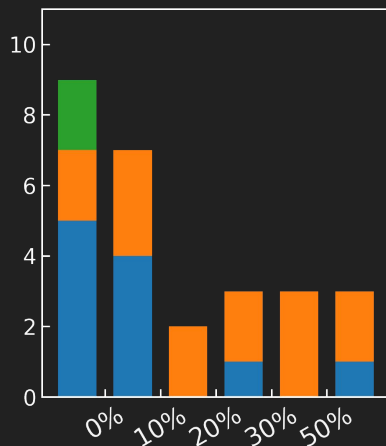
- relationship with your colleagues? (2.59)
- motivation for research? (2.53)
- motivation to teach? (2.79)
- participation in conferences? (2.35)
- happiness with work? (2.52)
- mental health? (2.44)

Workload

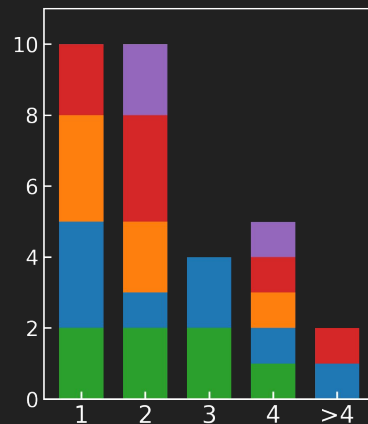
Number of topics



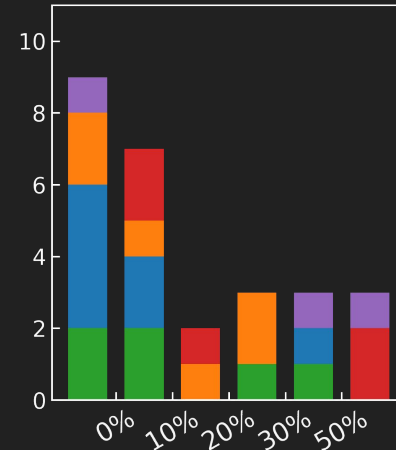
Time spent on service work



Number of topics



Time spent on service work



- Theoretical physicist
- Experimental physicist
- I do both approximately evenly

Perception of overwork:

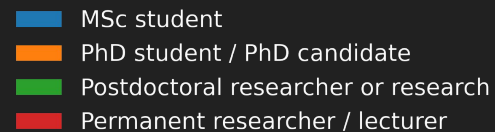


Not at all

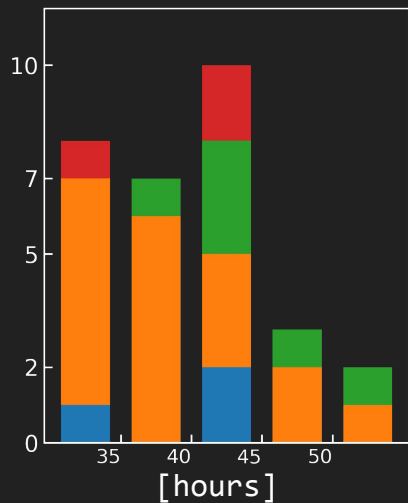
Very much so

Workload

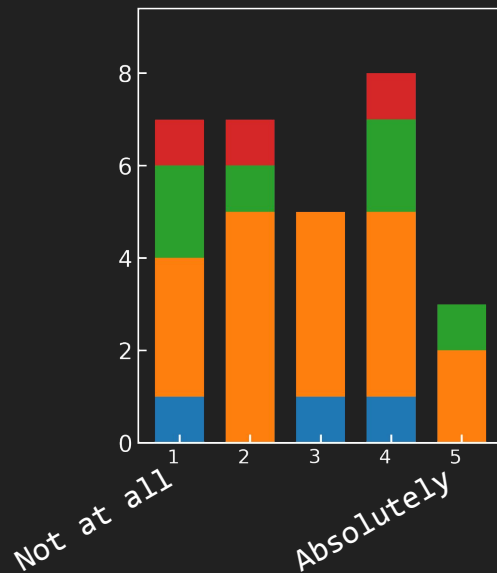
- Many researchers work longer than normal hours



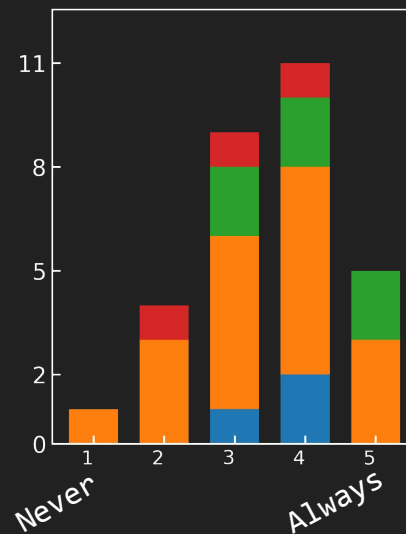
Working hours on an average week



Do you feel overworked?



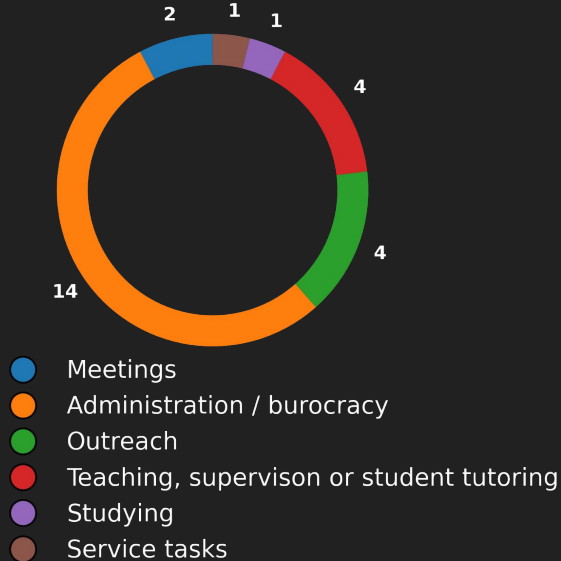
Do you work in the weekends?



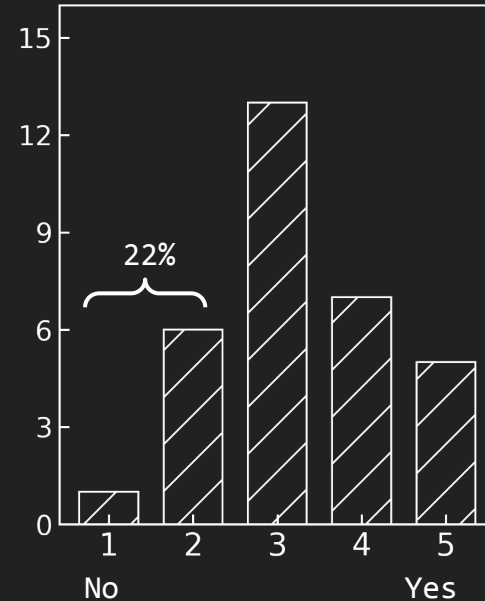
Workload

- Administrative load is surprisingly high (only 2 of 14 are foreigners!)

Most time consuming non-research activity

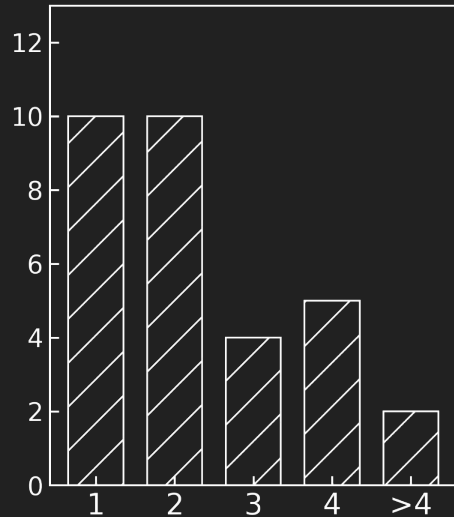


Do you think you have a good work-life balance?

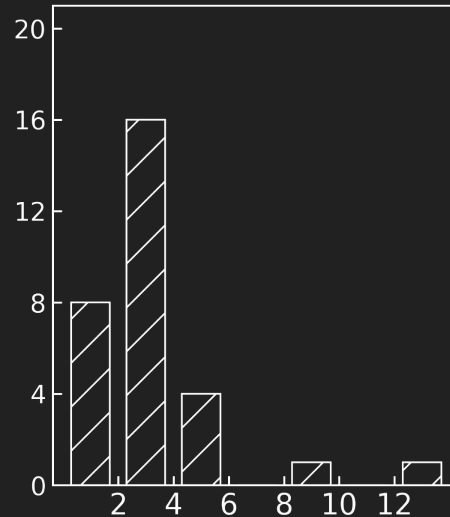


Workload

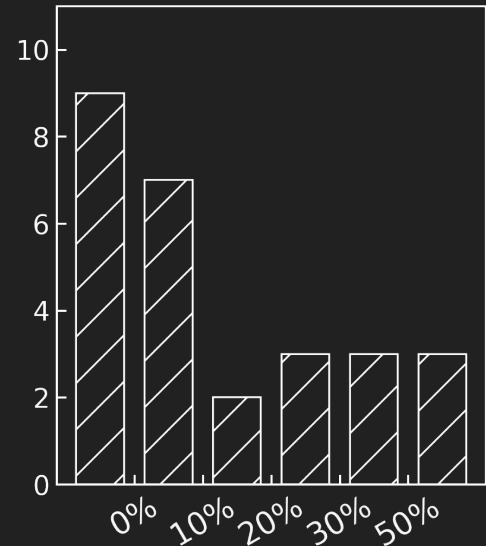
How many topics are you working on?



How many hours do you spend on meetings per week?

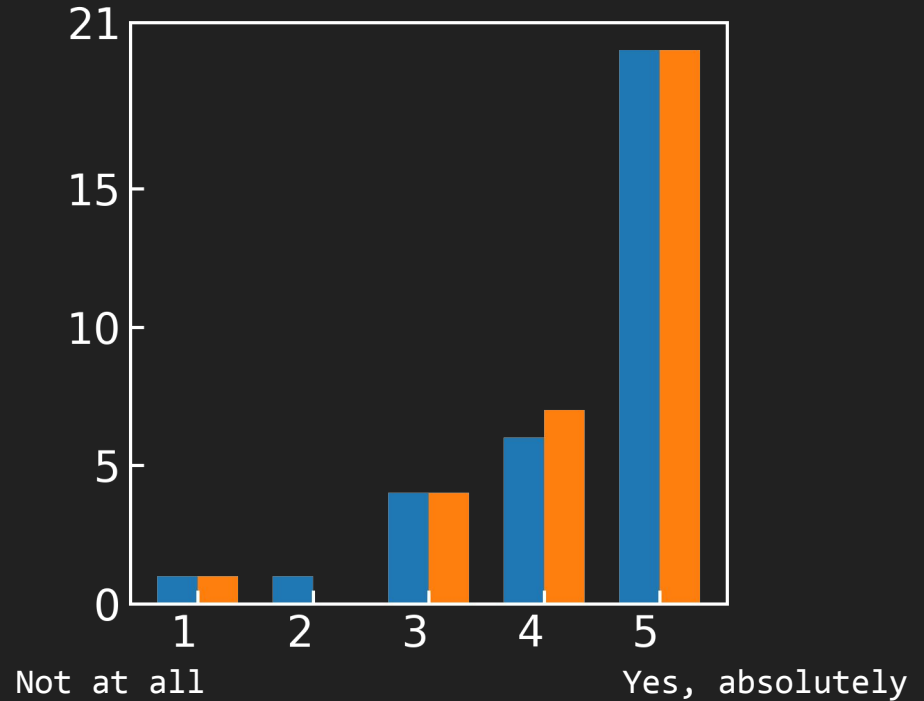


What portion of your work hours do you spend with service work?



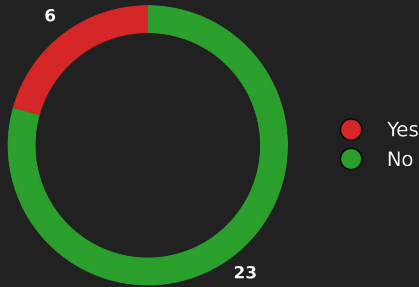
Workload

Do you feel like your **supervisor** / **boss** / **colleagues** respects your office hours and holidays?

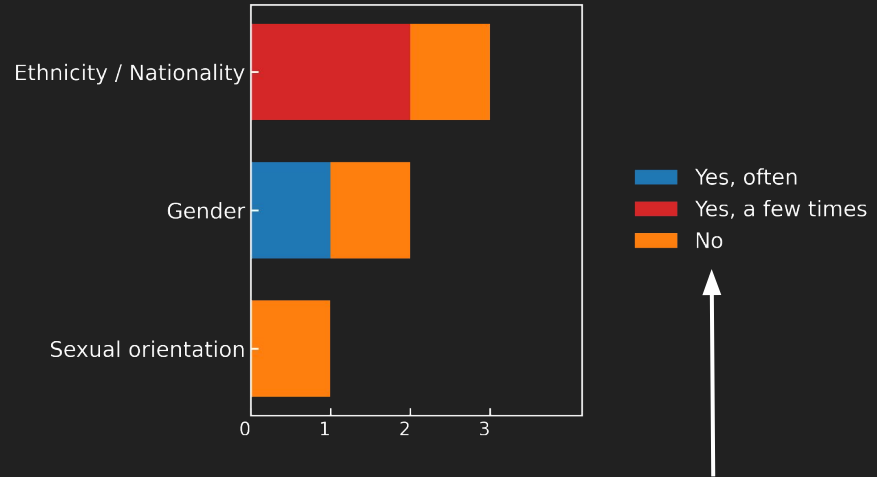


Inclusivity

Are you part of an underrepresented group?



Under which category are you part of an underrepresented group?

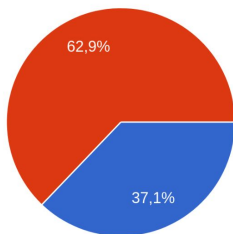


Have you ever personally faced negative discrimination in your profession?

Teaching

Do you have to teach as part of your current position?

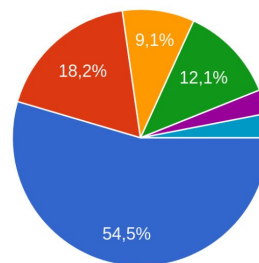
35 válasz



● Yes
● No

How much do you teach per week? (In contact hours.)

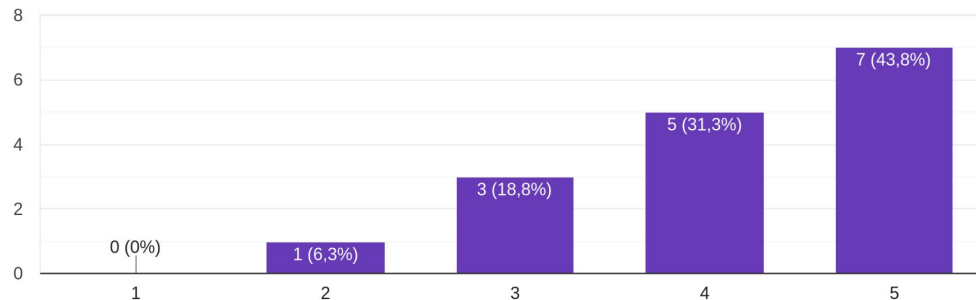
33 válasz



● I do not teach
● Less than 2 hours
● At least 2 but less than 4 hours
● At least 4 but less than 6 hours
● At least 6 but less than 8 hours
● At least 8 hours

Rate your overall experience as a teacher! (If applicable.)

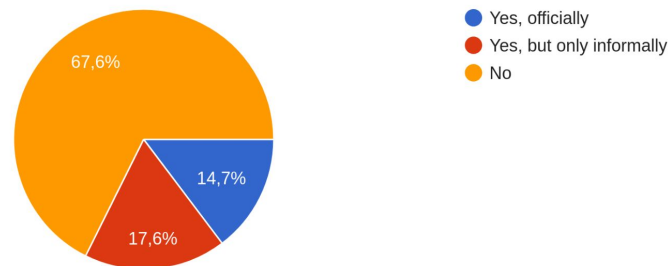
16 válasz



Teaching

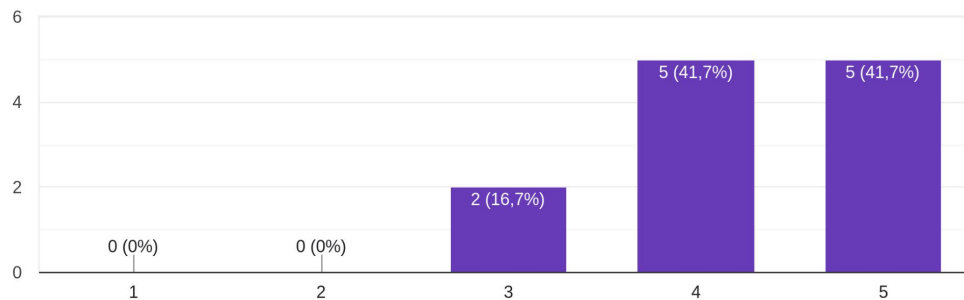
Do you currently supervise anyone?

34 válasz



Rate your overall experience as a supervisor! (If applicable.)

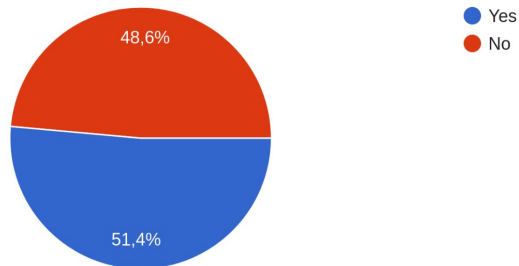
12 válasz



Health

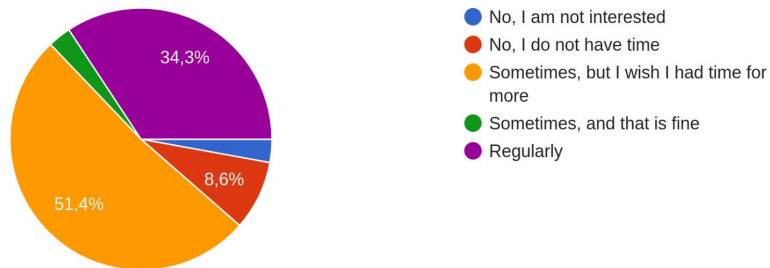
Do you have a regular sleeping schedule?

35 válasz



Do you exercise (sports)?

35 válasz



Does stress have an impact on your physical health?

34 válasz

