

LHCP 2023

11th Large Hadron Collider Physics Conference
Belgrade, 22-26 May, 2023

EXPERIENCES FROM MENTAL HEALTH WORKSHOPS FOR LHC SCIENTISTS

Petra Loncar¹

on behalf of the ALICE, ATLAS, CMS, and LHCb Collaborations

¹ ALICE Junior Ambassador of Croatia, Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, University of Split



“Mental health is a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community.”

“Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.”



IMPORTANCE OF MENTAL HEALTH

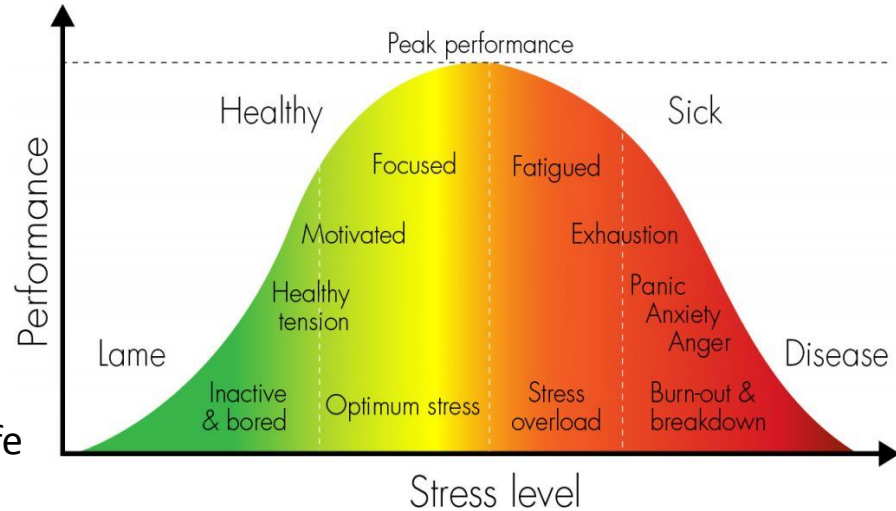
- important aspect of health
- prerequisite and determinant of quality of life
- personal, community, and socio-economic development

RISK FACTORS

- **stress** - negative impact on mental and physical health
 - **work** - the biggest stress trigger
 - **Academia** - very stressful
- **COVID-19 pandemic** - many changes in everyday life

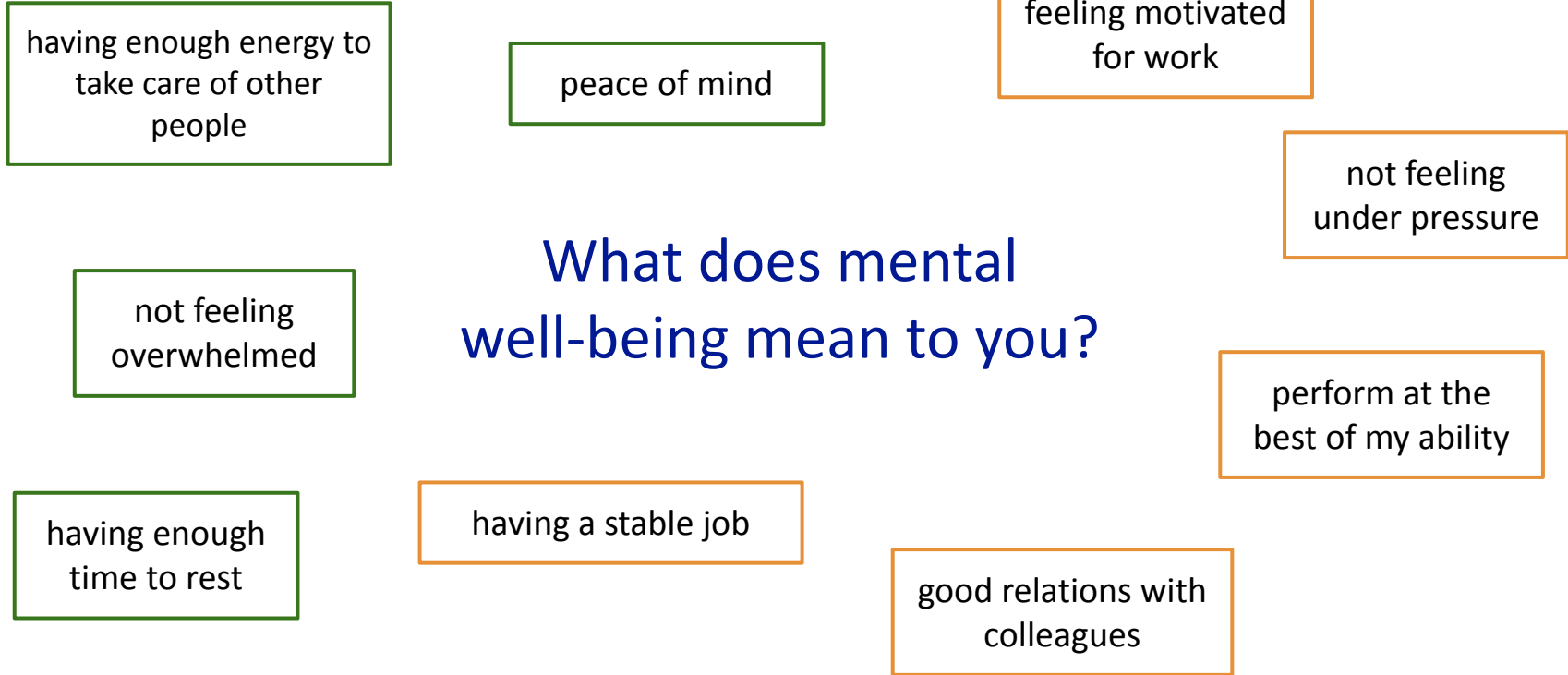
WORKSHOPS' PURPOSE

- raising awareness of the importance of investing in mental and physical health



Source: Yerkes-Dodson law, mental health workshop materials, February 2023

MENTAL HEALTH AND WELL-BEING AT THE LHC



MENTAL HEALTH AND WELL-BEING AT THE LHC

Are you currently facing any mental well-being challenges?

fears about impact of war and crises

worries about uncertain future

high workload and lack of time

depression

sadness

inefficiency during working hours

mental exhaustion

constantly being under pressure

being forced to move to another country

anxiety

struggling with choice between family and career

phobia

high stress level

burnout

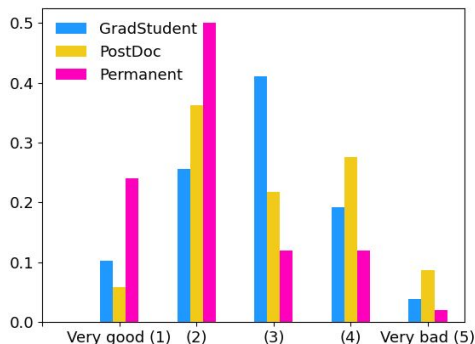
MENTAL HEALTH AND WELL-BEING AT THE LHC

- survey about self-assessment of mental health among LHCb scientists (Dec 2020 vs. pre-pandemic)

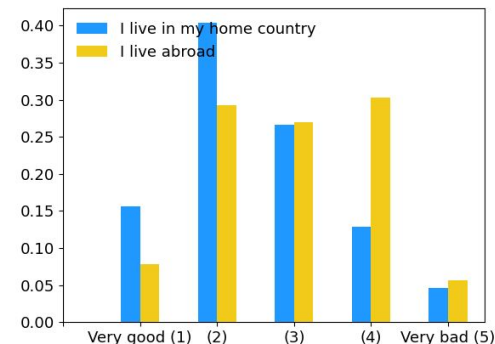
KEY RESULTS

- big decline in the mental health state
- larger impact on graduate students and post-docs and those living abroad

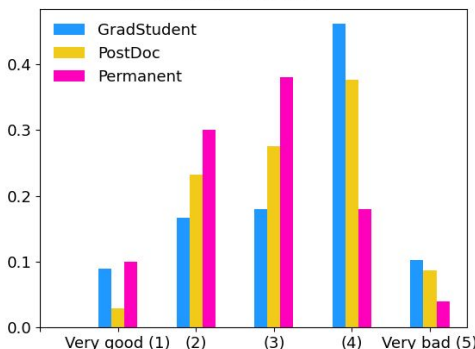
How would you rate your mental health ?



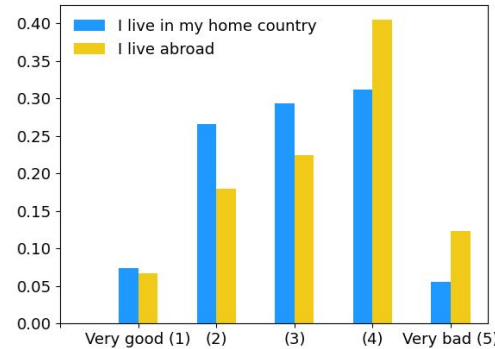
How would you rate your mental health ?



How would you rate your mental health compared to pre-corona ?



How would you rate your mental health compared to pre-corona ?

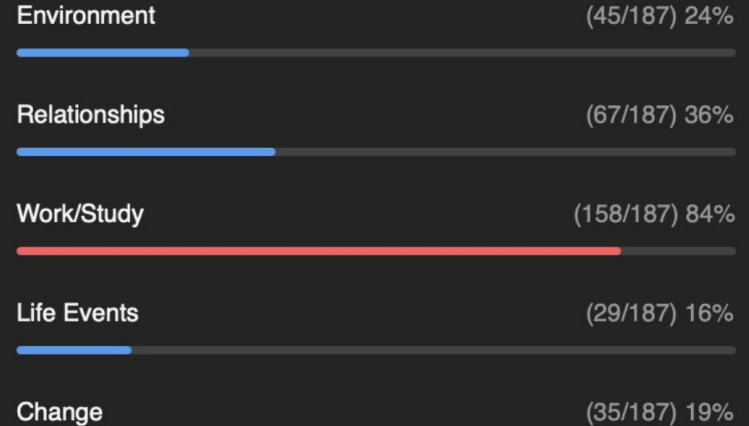


MENTAL HEALTH AND WELL-BEING AT THE LHC

1. How are you really feeling today?



1. What are your main stress triggers?(Multiple Choice)



Source: Anonymous survey among early career scientists of ALICE, ATLAS, CMS, and LHCb carried out during Covid (2021)

COLLABORATION'S DESIRES

learn how to ...

- find a **balance between work and other activities** and “switch off” the brain
- cope with self-doubt, **work-induced stress, depression**, career-related **anxiety**
- cope with the **competitive environment** we work in and **work under pressure**
- promote mental health and create a **safe environment** in a big collaboration
- help people with mental health issues
- **talk about mental health** with colleagues

learn about...

- time management, productivity, and self confidence
- the effect of national or global crises/wars on the mental health
- the importance of mental health and therapy and how to spot **warning signs**

MENTAL HEALTH WORKSHOPS AT THE LHC

- [May 2021](#)

Mental health and well-being workshop for early-career scientists at the LHC

Organised by the Early Career Scientists Fora (ECSF)



- [ALICE Week, June 2022](#)

Fostering mental well-being workshop for ALICE scientists

Organised by the ALICE Junior Representatives and ALICE management



- [ATLAS Week, February 2023](#)

Mental health and well-being workshop for early-career scientists at the LHC

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MENTAL HEALTH WORKSHOPS AT THE LHC

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All workshops were conducted by **Sarah Speziali**, a therapist and life coach specialised in workplace mental well-being.

www.sarahspeziali.com

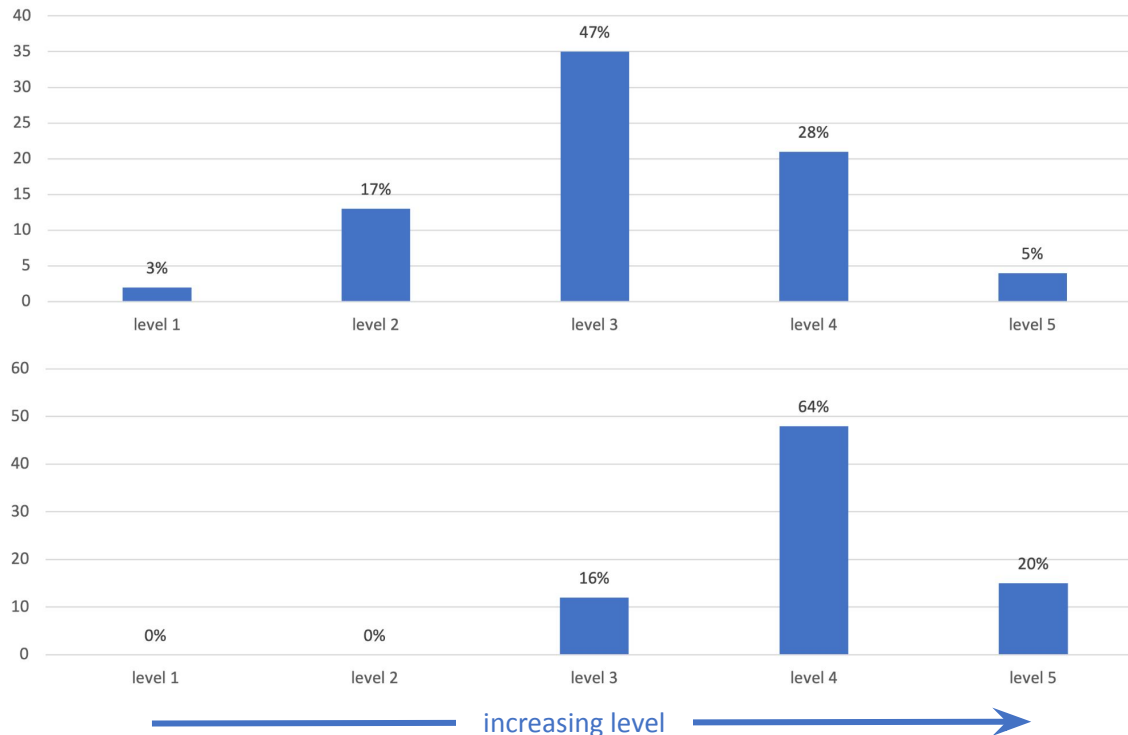
WORKSHOPS' GOALS

- understand the differences between **good and poor mental health**
- identify factors that influence mental health
- **spot signs** of mental health issues
- build mental resilience and well-being **routines**
- **integrate strategies** for coping with stress, anxiety, and depression
- discover your **inner resources**
- practice **self-care**
- improve **work-life balance**



WORKSHOPS' OUTCOME

Participant's knowledge of the subject

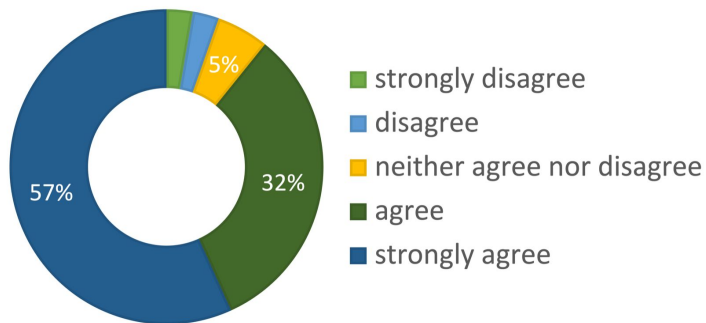


BEFORE
attending the
workshop

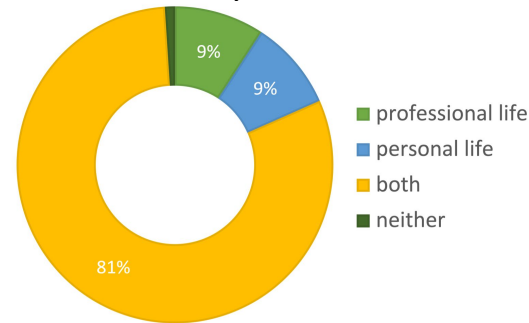
AFTER
attending the
workshop

WORKSHOPS' OUTCOME

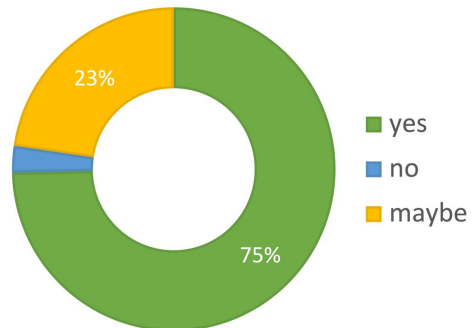
The content of the workshop was relevant to me.



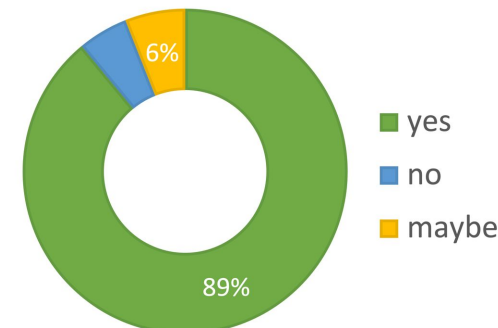
The workshop was useful for my...



Would you take part in a similar workshop in the future?

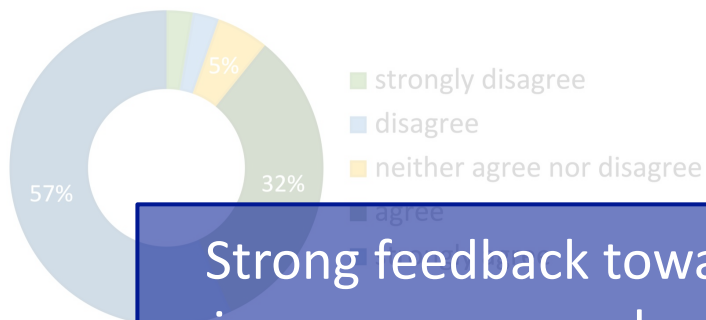


Would you recommend this kind of workshop to a colleague?



WORKSHOPS' OUTCOME

The content of the workshop was relevant to me.

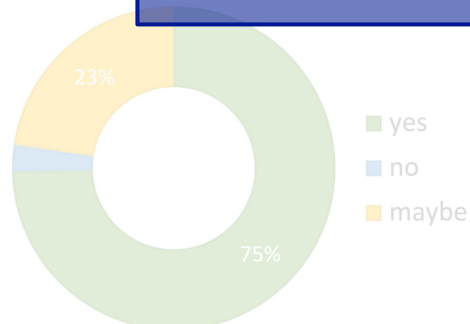


The workshop was useful for my...

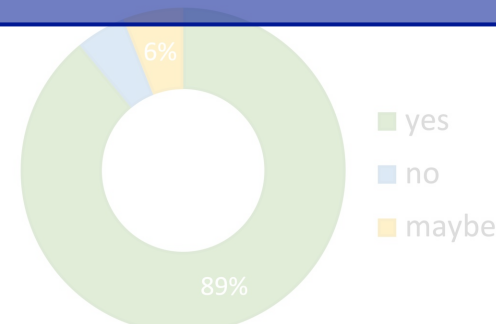


Strong feedback towards continuing the efforts to raise awareness and create community values around mental health!

Would you take part in a similar workshop in the future?

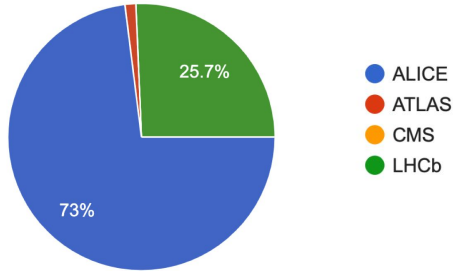


Would you recommend this kind of workshop to a colleague?



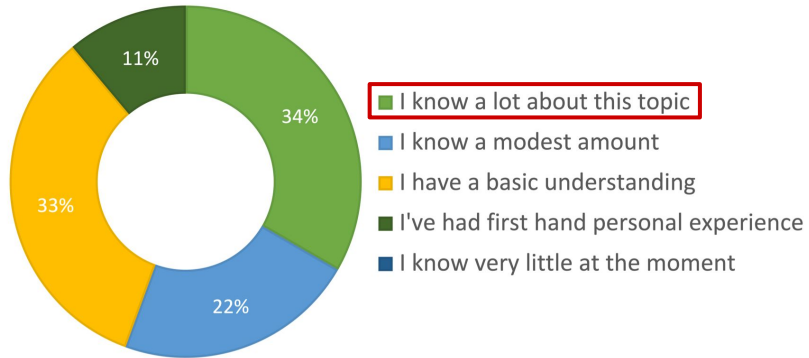
CURRENT STATE OF MENTAL HEALTH AT THE LHC

The current state was assessed via an anonymous survey among scientists from...

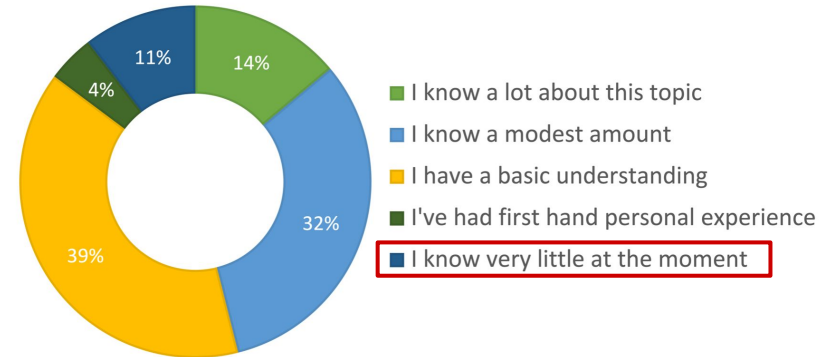


General knowledge about the topic among...

Workshop participants

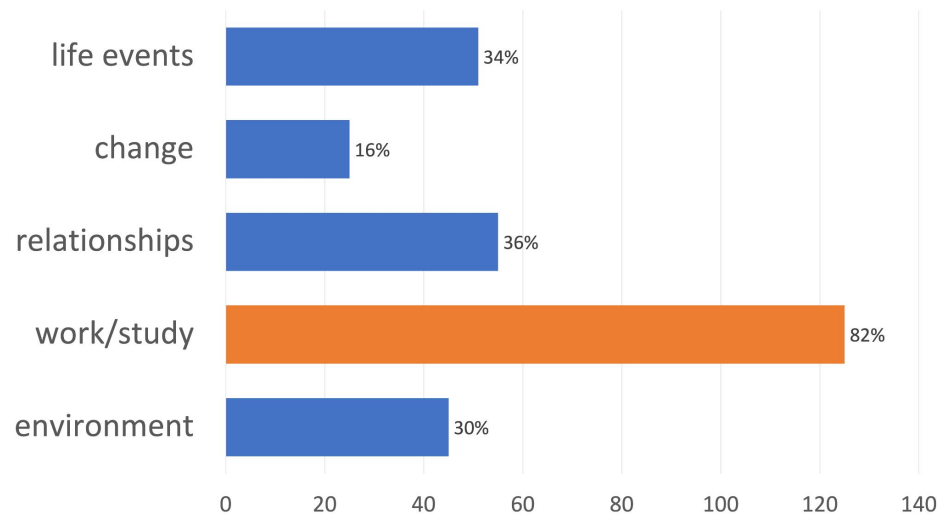


Others

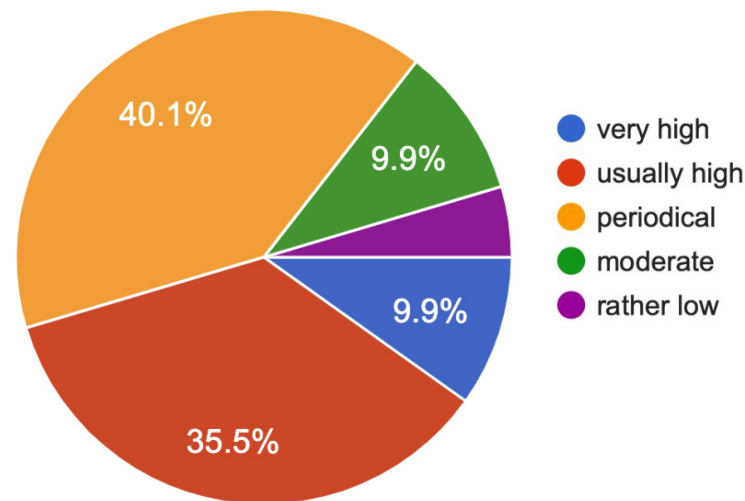


CURRENT STATE OF MENTAL HEALTH AT THE LHC

Main stress triggers

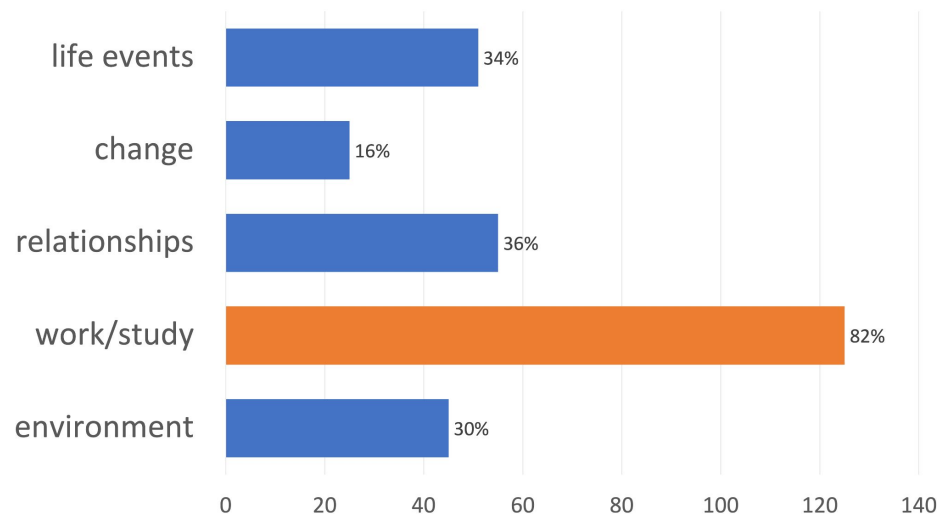


Stress level at work



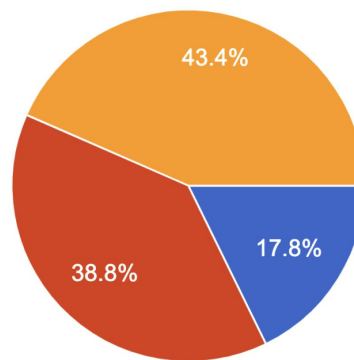
CURRENT STATE OF MENTAL HEALTH AT THE LHC

Main stress triggers

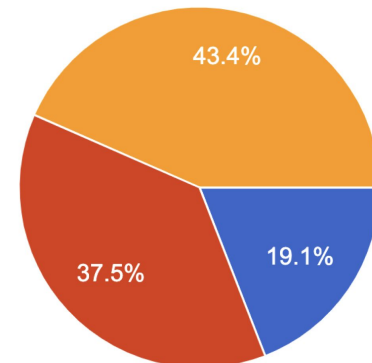


Short-term stress triggers

I often neglect tasks because I have too much to do.



It is considered normal to work on weekends.

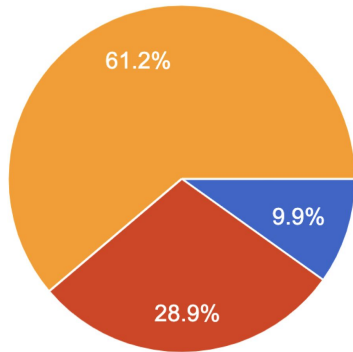


- I completely disagree
- I neither agree nor disagree
- I fully agree

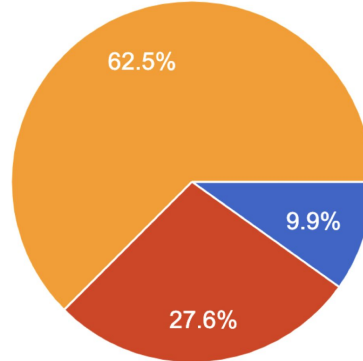
CURRENT STATE OF MENTAL HEALTH AT THE LHC

Long-term stress triggers

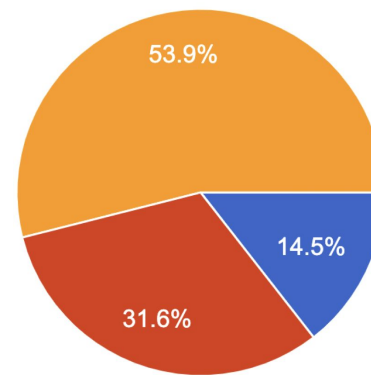
It is hard to find a maintain a work-life balance.



It is hard to plan my future career.



I am uncertain that I will achieve my career goals.



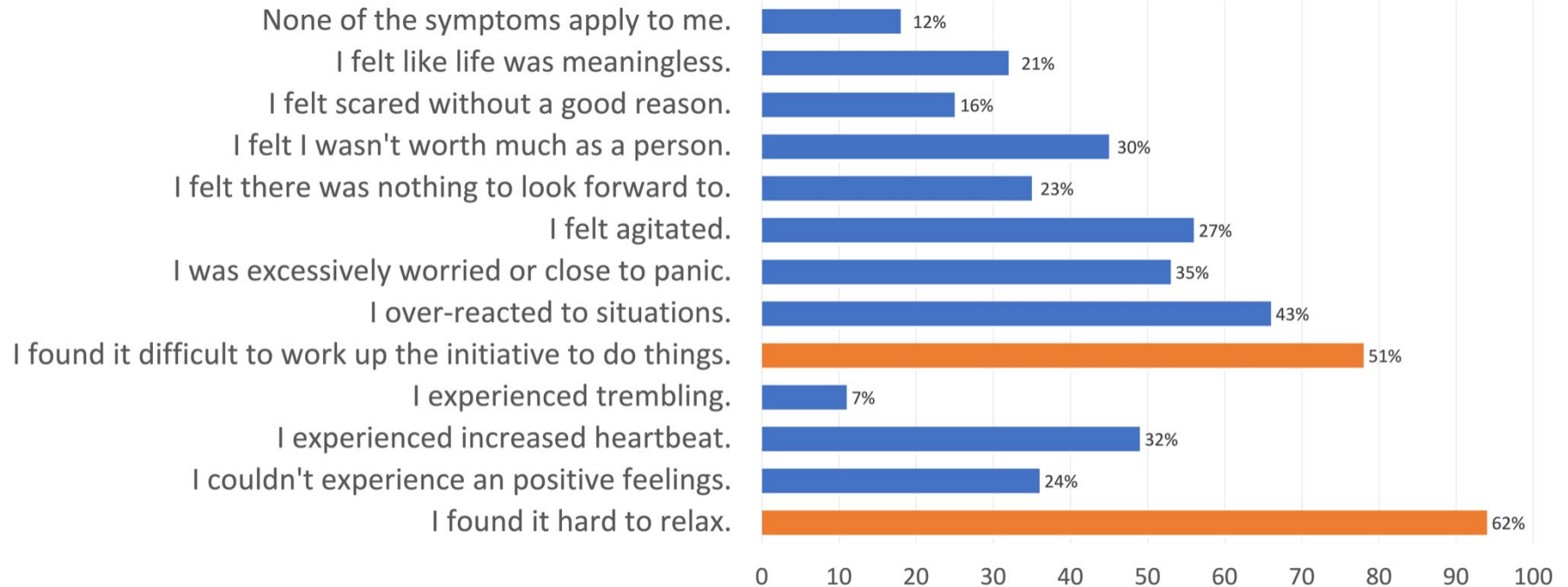
- I completely disagree
- I neither agree nor disagree
- I fully agree

Sources of stress

Workload which many scientists cannot cope with is paired with uncertainty about future career.

CURRENT STATE OF MENTAL HEALTH AT THE LHC

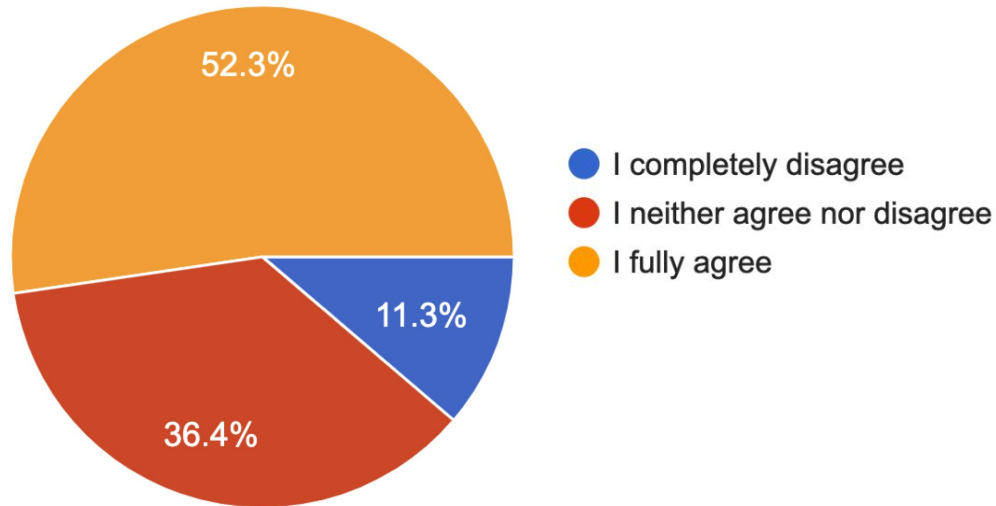
Symptoms LHC scientists experience regularly



Note: The participants were asked which of the listed symptoms they experienced in the past two weeks, at the time of the survey.

Awareness of work-related mental health challenges and colleagues as support network

My colleagues are willing to listen to my work-related problems.



There is a need and desire to raise awareness of mental health challenges and to keep the discussion ongoing.

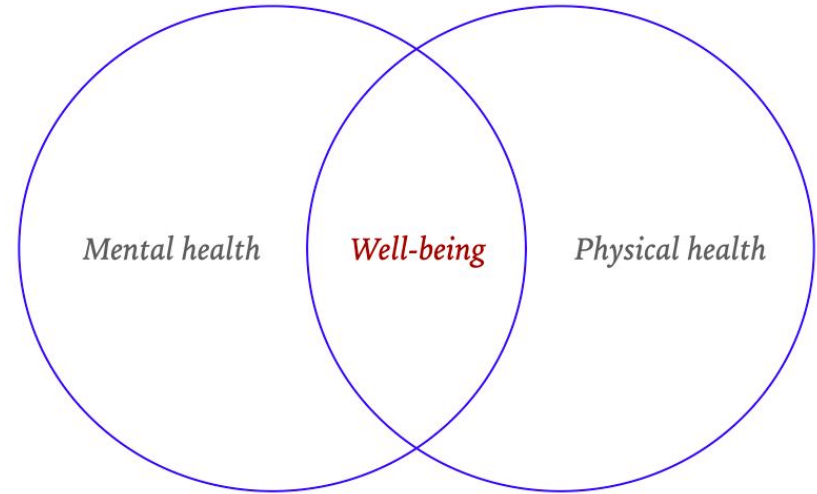
KEY TAKEAWAYS FROM MENTAL HEALTH INITIATIVES AT THE LHC

For individuals

- prioritize and practice self-care
- engage in moderate physical activity
- familiarize yourself with coping strategies

For collaborations

- there is a large desire to establish mental health as a community value
- mental health workshops are a good way to achieve that goal
- the topic should be a priority for management and collaboration members alike



Source: Healthy Minds for Master Minds workshop "Fostering mental well-being workshop" (ALICE Week, June 2022)

ACKNOWLEDGMENTS

- **Workshop organisation:** LHC Early Career Scientists Fora (ECSF)



- **Conducting the workshops:** [Sarah Speziali](#) (therapist and life coach)



- **Support:** ALICE and ATLAS management



- **All workshop participants!**



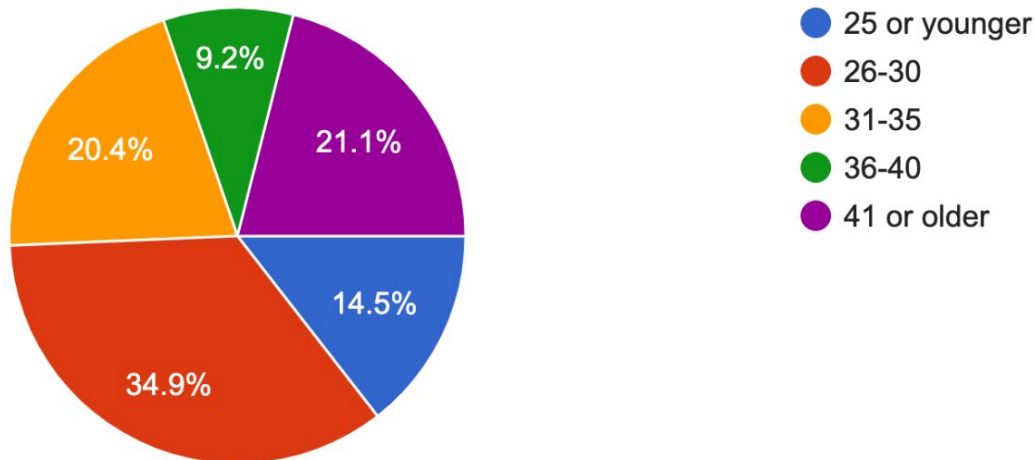
Thank you for your attention!

BACKUP

SURVEY DEMOGRAPHICS

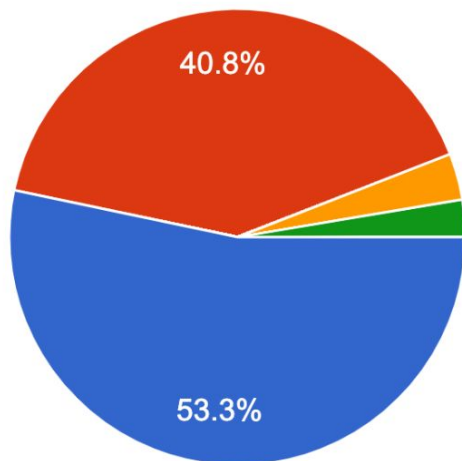
What is your age range?

152 responses



What is your gender?

152 responses

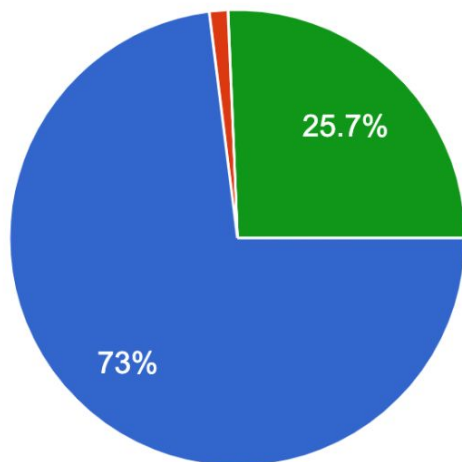


- male
- female
- non-binary
- I would rather not say

SURVEY DEMOGRAPHICS

What is your experiment affiliation?

152 responses

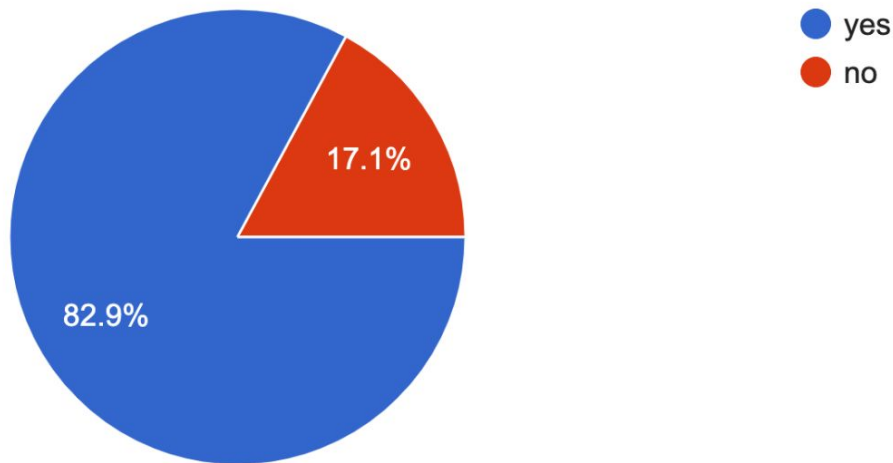


- ALICE
- ATLAS
- CMS
- LHCb

FUNDING AND WORK SITUATION

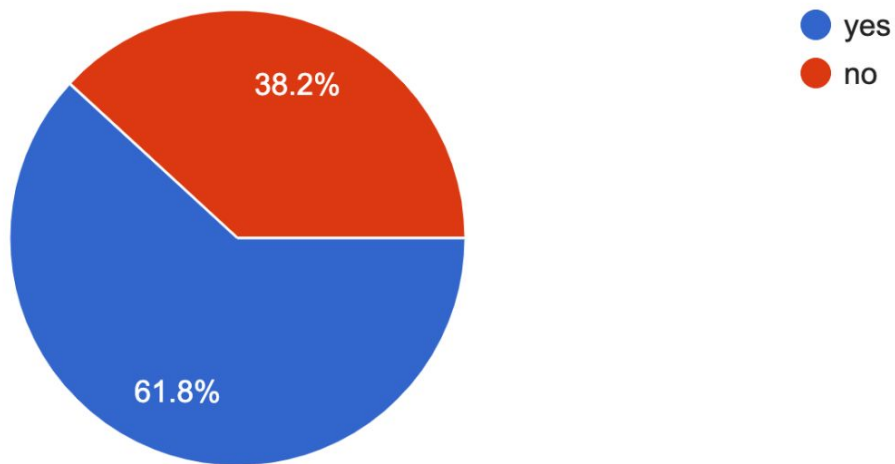
Is the funding sufficient to cover your living costs?

152 responses



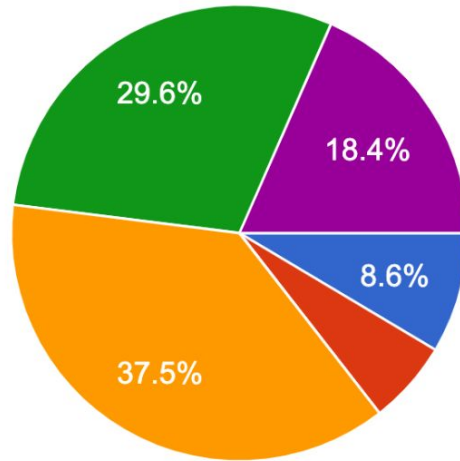
Do you feel you are living close enough to your family and support network?

152 responses



How much do you know about mental health?

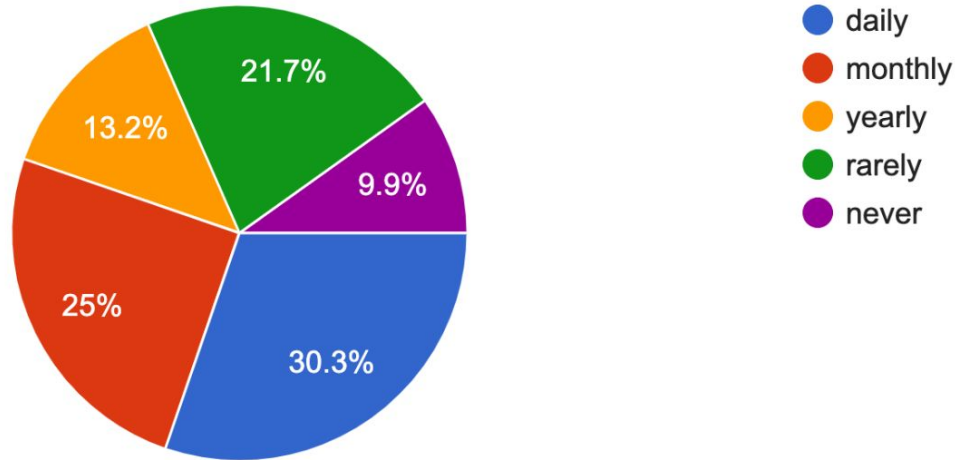
152 responses



- I know very little at the moment
- I've had first hand personal experience
- I have a basic understanding
- I know a modest amount
- I know a lot about this topic

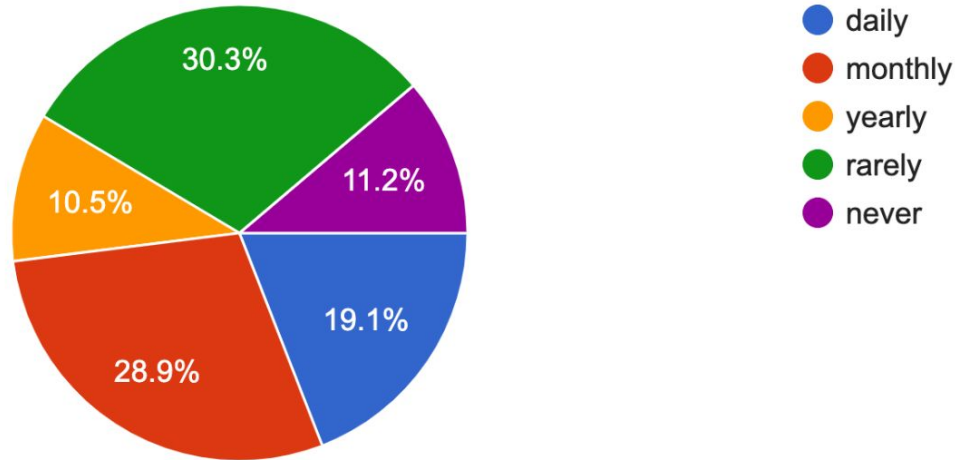
Do you have experience dealing with a mental health challenge?

152 responses



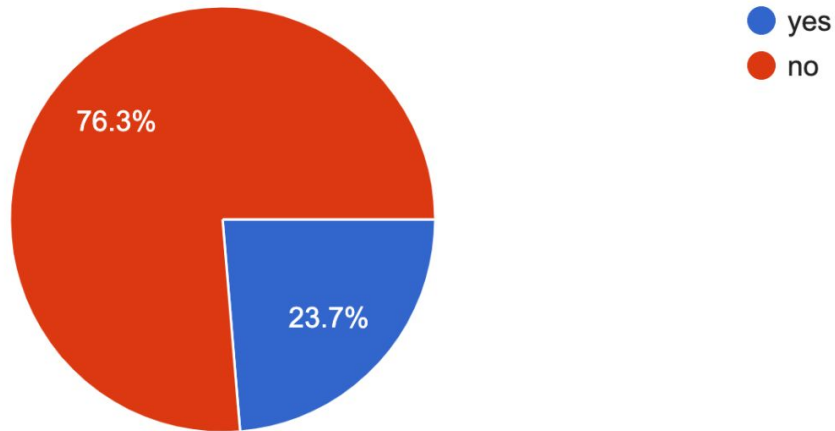
Do you have experience supporting someone with a mental health challenge?

152 responses



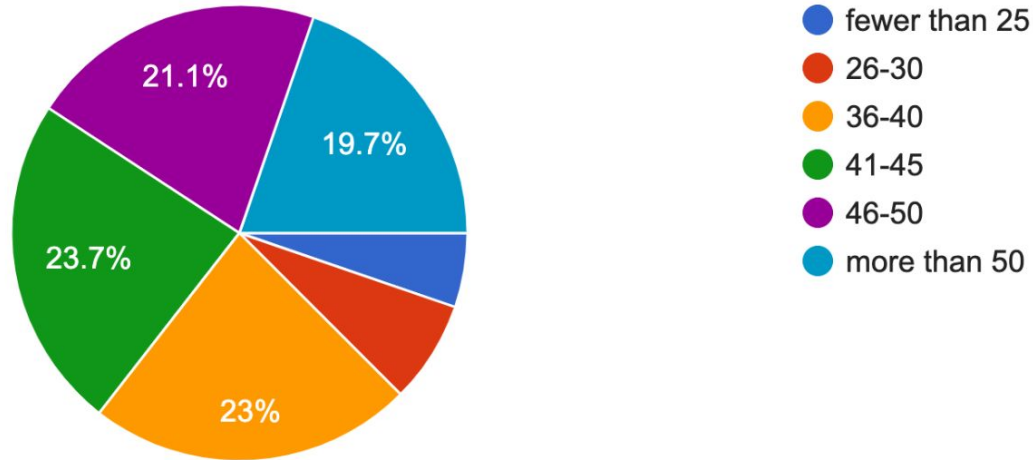
Did you attend one of the Mental Health Workshops which have been conducted at the LHC in the past two years?

152 responses



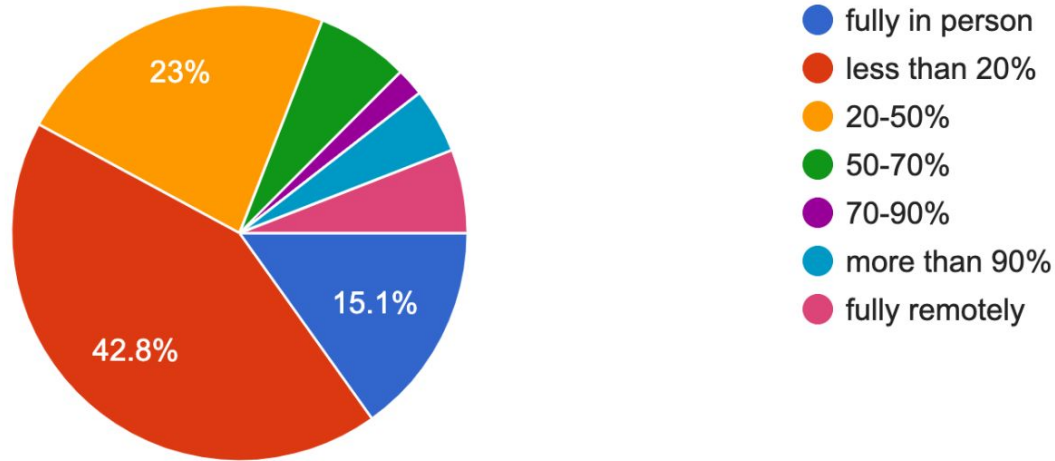
In the last month how many hours have you worked approximately per week?

152 responses



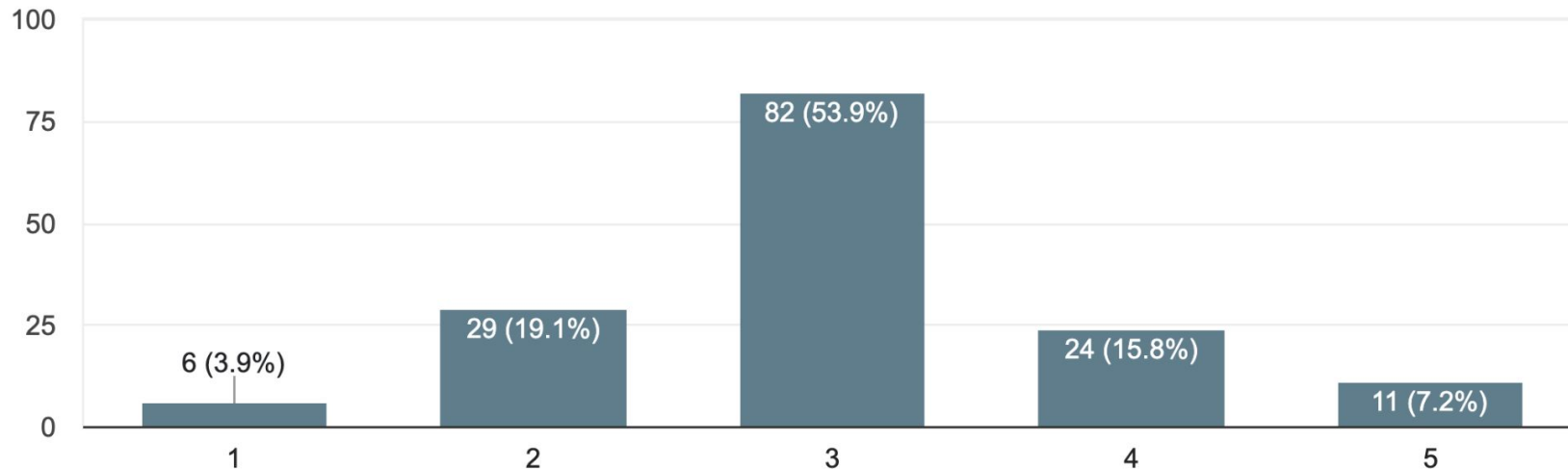
How much of your work has been done remotely?

152 responses



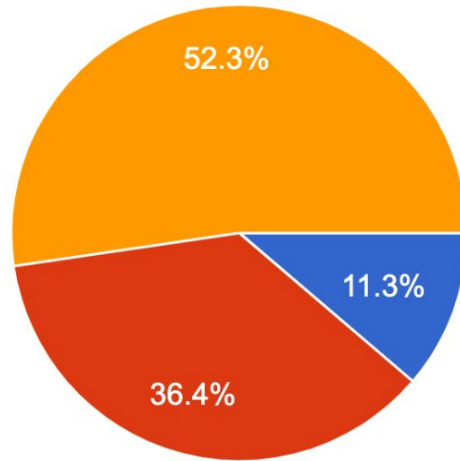
How does working remotely affect your workload?

152 responses



My colleagues are willing to listen to my work-related problems.

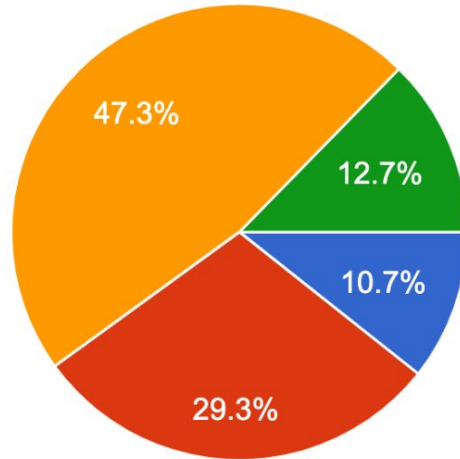
151 responses



- I completely disagree
- I neither agree nor disagree
- I fully agree

My supervisor helps me to achieve goals and find solutions to my problems.

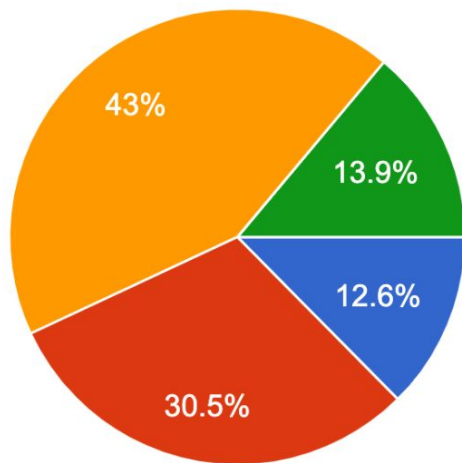
150 responses



- I completely disagree
- I neither agree nor disagree
- I fully agree
- I don't have a supervisor

My supervisor motivates me to do the best job I can.

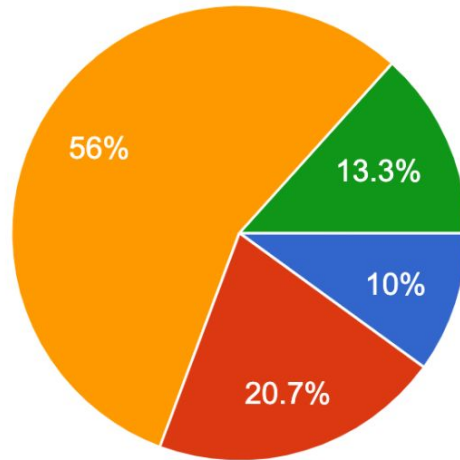
151 responses



- I completely disagree
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- I fully agree
- I don't have a supervisor

My supervisor cares about my needs and treats me fairly.

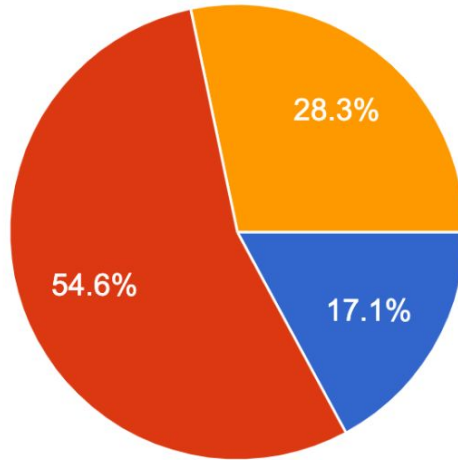
150 responses



- I completely disagree
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- I fully agree
- I don't have a supervisor

I have achievable deadlines.

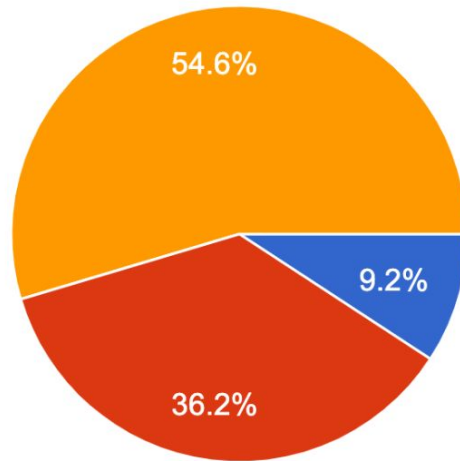
152 responses



- I completely disagree
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- I fully agree

I have a say in my work speed and how to do my work.

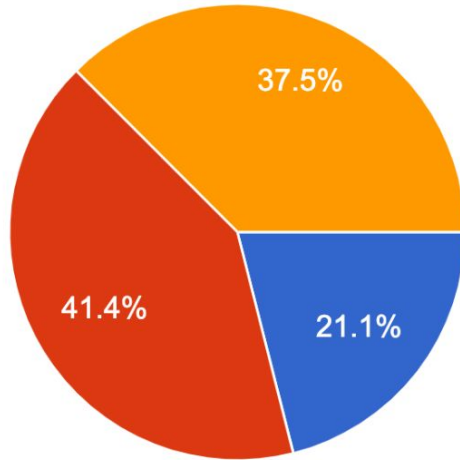
152 responses



- I completely disagree
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- I fully agree

I feel pressured to work long hours.

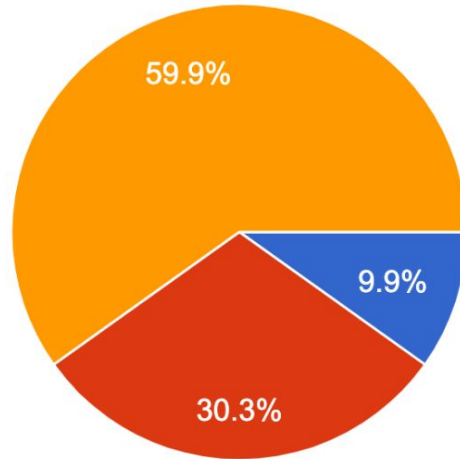
152 responses



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Most of my colleagues work beyond their official work hours.

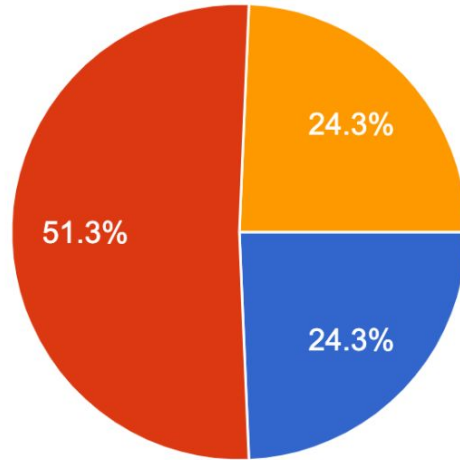
152 responses



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- I fully agree

Senior colleagues encourage overtime.

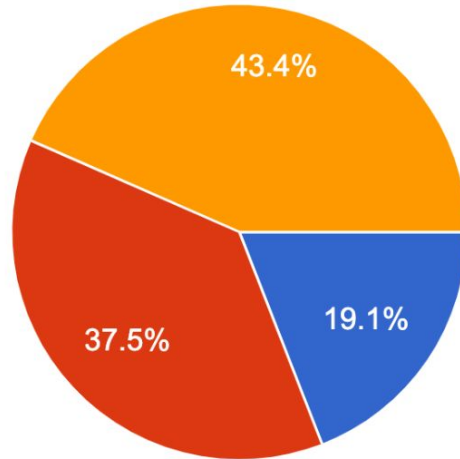
152 responses



- I completely disagree
- I neither agree nor disagree
- I fully agree

It is considered normal to work on weekends.

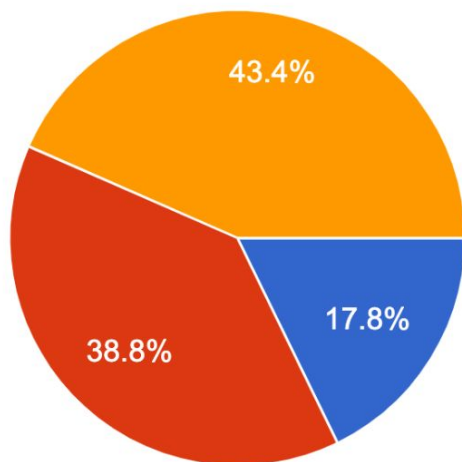
152 responses



- I completely disagree
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I often neglect tasks because I have too much to do.

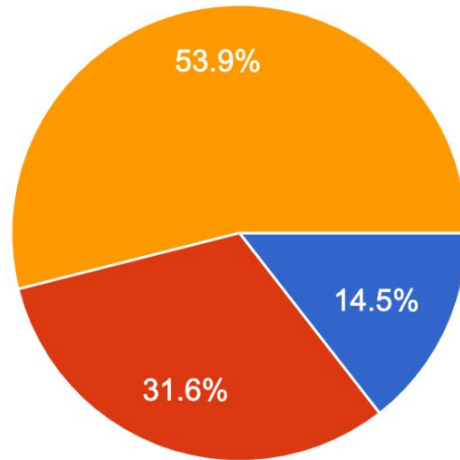
152 responses



- I completely disagree
- I neither agree nor disagree
- I fully agree

I am uncertain that I will achieve my career goals.

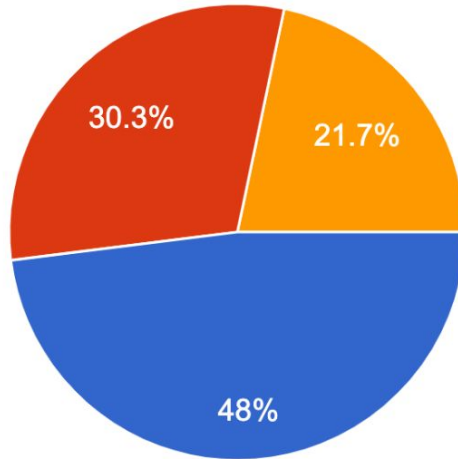
152 responses



- I completely disagree
- I neither agree nor disagree
- I fully agree

I am confident about my future professional development.

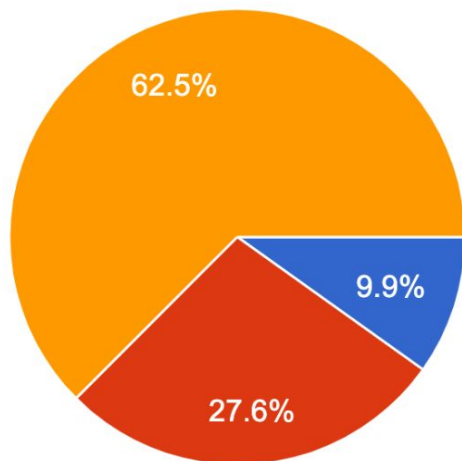
152 responses



- I completely disagree
- I neither agree nor disagree
- I fully agree

It is hard to plan my future career.

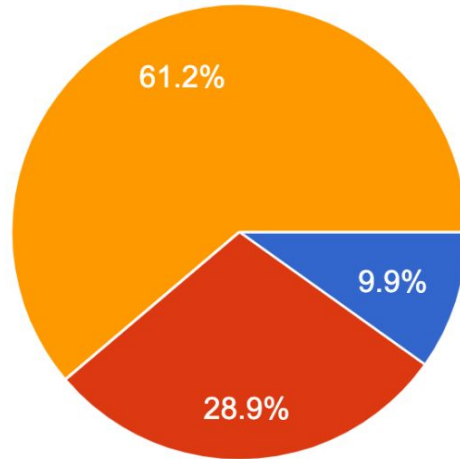
152 responses



- I completely disagree
- I neither agree nor disagree
- I fully agree

It is hard to find and maintain a work-life balance.

152 responses



- I completely disagree
- I neither agree nor disagree
- I fully agree

WORK ENVIRONMENT

Did you experience any of the following symptoms in the past 2 weeks? Select the symptoms which apply to you.

152 responses

