

An international Exploration of post-PhD Careers

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22 August 2023 / EARLI 2023 / Thessaloniki, Greece

24 August 2023 / ECER 2023 / Glasgow, UK

20 November 2023 / Amsterdam, NL

Bristol Conversations Talk, online seminar, 13 December 2023



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International Developments



Bologna Proces: Bachelor, Master, Phd-Trajectory

More PhD-trajectories, Less academic positions

Results into



Post PhD-careers outside academia,



Different expectation from employers vs PhDs,



Content and organization of doctoral trajectories

Findings

Hancock (2023), UK, Survey (n=4731) about 66% enter non academic employment, substantial differences between types of universities, Russell group more academic career, more satisfaction.

Marini (2023), UK, earnings of PhD-holders, Labour Force Survey data, evidence that having a PhD pays off (modestly), but leadership role and STEM matter.

Rasmussen (2023), Denmark, social science & humanities, interviews, increased attention for transferred knowledge.

Galimberti (2023), Italy, interviews, importance of tacit knowledge and academic habitus

Jones (2023), UK, Post doctorate career breaks, significant gender differences, specially stressful for postdocs

Postdoctoral Researchers and Wellbeing at Work Precarious Careers

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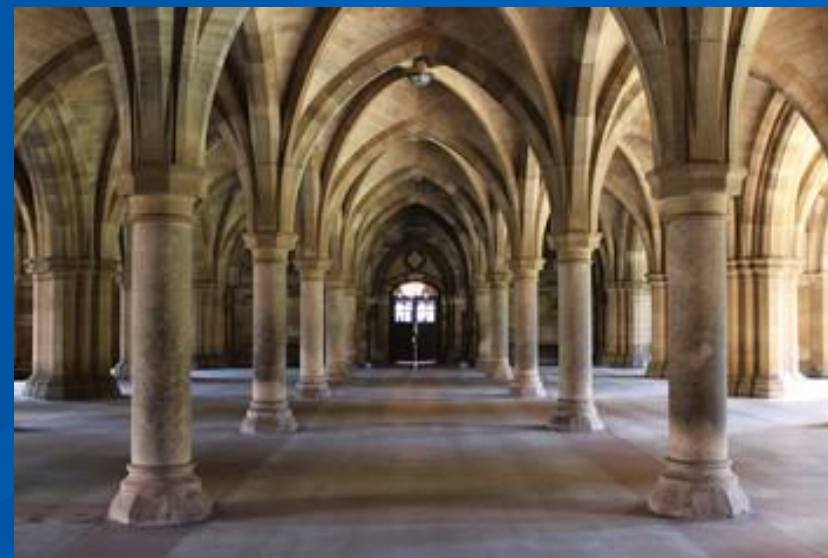
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Aim

The purpose of our research is to understand how postdoctoral researchers at Dutch universities experience their working conditions and their prospects and opportunities, in relation to their wellbeing.

***Postdoctoral researchers are holding fixed-term positions or positions without permanent or continuous employment prospects -
Research Precariat (OECD, 2019)***

Postdocs in The Netherlands

No official position in the Dutch university collective labour agreement

Part of “other academic staff,” including lecturers and other researchers on temporary contracts

Increase in numbers: 3,810 fte in 2023 vs 2,146 fte in 2005

Highly dynamic academic job market: only 18% of PhD holders will move to a senior position

Dual Controversy

**Lack of clarity concerning their career prospects and developments
Invisible and weakly connected with the organisation**

While the postdocs' formal position seems weak, our previous study in the Netherlands revealed several compensation factors, including that their situation in terms of academic socialising is much stronger and active than appears at first sight, particularly due to their personal agency (Teelken & van der Weijden, 2018).

Wellbeing of Postdocs in an International Perspective

Literature review: 6 empirical studies published between 2019-2023

North-America (4); North America & Europe (1); Asia (1)

Methods: survey (3); interviews (2); mixed (1)

Our literature overview (re)confirms the dual controversy, since several of the studies (*Van Bethem et al., 2019, Ysseldyk et al., 2019, Song & Yang, 2023*) endorse the link between lack of (clarity about) career prospective and wellbeing of the postdocs.

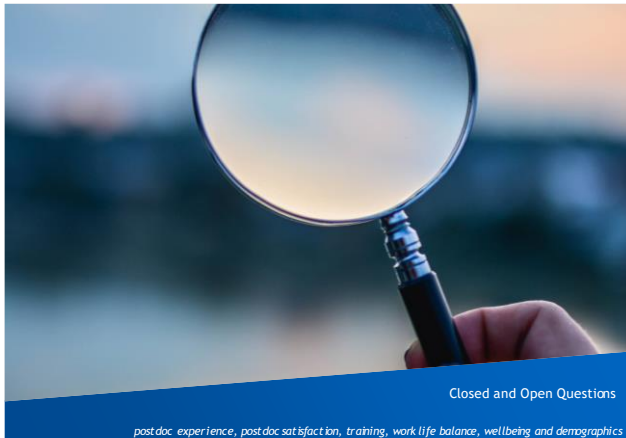
***Morin et al. (2022) & Pitt et al. (2021)* reemphasize the link between the invisibility and weak connection with the organization of the postdocs and their wellbeing.**

Study Design

Online Survey

N=676

9 universities



Recommendations



Personal Characteristics

- 49% Female
- 46% Dutch Nationality
- Mean Age: 35 years
- Fields
 - 31% Natural Sciences
 - 31% Social Sciences & Humanities
 - 21% Medical & Health
 - 17% Engineering & Technology
- 32% Children

676 respondents

Wellbeing of Postdocs



General Health Questionnaire: most widely used screening instrument



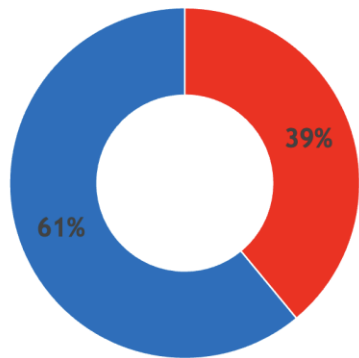
12 items



At risk: minimal 4 symptoms (GHQ4+)



Example: in the last two weeks have you been able to concentrate on your work?



Better than usual; as good as usual: 0 / Worse than usual; a lot worse than usual: 1

Symptoms



47%

Feel under constant strain



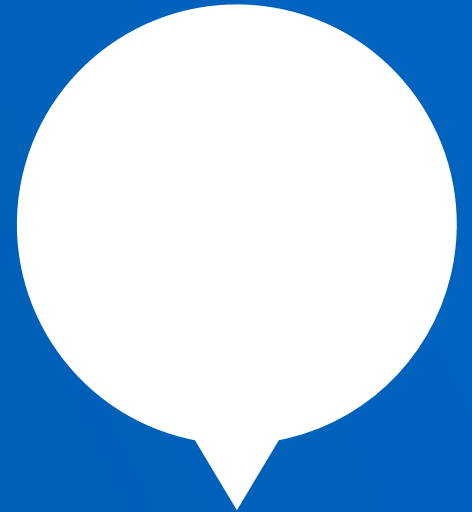
35%

Not able to concentrate



33%


Sleeping Problems



30%

Feel unhappy and depressed

Risk Factors

- 
- ✓ Less satisfied with Career Prospects in Academia
 - ✓ Work-family conflict
 - ✓ International Postdocs

Compensating Factors

- ✓ Satisfaction with Supervisor
- ✓ Satisfaction with Colleagues

No Associations

- ✓ Postdoc Experience
- ✓ Satisfaction Employment Conditions
- ✓ Postdoc Training (academic skills & transferable skills)
- ✓ Demographics: Gender, Age, Research Field

Open Answers (1)

Positive Experiences (74 out of 372 responses, 20%)

‘I have a very good relationship with my colleagues. My supervisors are very supportive; they help me with my research and grant writing, thinking about not only my current research output, but also my future career’. (64, male, non-Dutch, medical sciences)

‘So far, I have been able to balance my work and life reasonably well, I have a great group of colleagues with whom I am able to collaborate on a broad range of related topics. I am writing some grants, but there is no real pressure yet’. (653, female, Dutch, natural sciences)

Open Answers (2)

Ambivalent Experiences (137 out of 372 responses, 37%)

'I am happy to be a researcher, my work gives me an incredible energy and motivation in life and to be a role model for my children. The uncertainty of postdoctoral life, is of course, a constant worry. But I keep going'. (234, female, non-Dutch, natural sciences)

'I love my work, and I have the feeling I can arrange a good life-work balance most of the time. However, the career perspective is very depressing: you know you have to work very hard to compete for grants to stay in academia with unbelievable low chances of obtaining funding (and even worse: luck seems to play the biggest role in getting funding)'. (285, male, Dutch, social sciences)

Open Answers (3)

Negative Experiences (161 out of 372 responses, 43%)

‘...I am expecting to put in ridiculously long hours and disregard my personal life. ...I seem to have poor chances of staying in academia...not what I was hoping for at all! (223, male, non-Dutch, natural sciences)

‘Large pressure on publication and grants (especially highly competitive personal grants) in a period of life that is already exhausting (2 young children). Feeling that if I do not do this now, I am too late while in practice I would prefer to have a few more quiet years until I at least sleep during the night...’ (118, female, Dutch, medical sciences)

Conclusions

Our analyses suggest that a sizeable group of postdocs experienced psychological distress (56%) or is at risk of having or developing a depression (39%).

These prevalence rates in our postdoc population are even higher than reported in previous studies (which also used the GhQ4+) among PhD candidates (e.g. *Levecque et al., 2017; 32%*).

Our analyses showed that work-family conflict and dissatisfaction with academic career prospects are the strongest predictors of wellbeing problems. In addition, dissatisfied relationships (competition, loneliness) could severely affect postdoctoral experience, including negative wellbeing symptoms. Resonates with international findings

We found several compensating factors, which resulted in an ambivalent, more balanced situation. Our findings show the importance of the supervisor-postdoc and colleagues-postdoc relationships, which was supported by our qualitative analyses. Positive supportive experiences (collaboration, peer support) protect them to a certain extent against the stressful aspects of being a postdoc.



<https://osf.io/preprints/socarxiv/cfxm9/>

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Additional Slides

Prevalence of Symptoms

Postdocs in NL: GHQ4+=39%

PhD candidates at Leiden University:
GHQ4+=38%

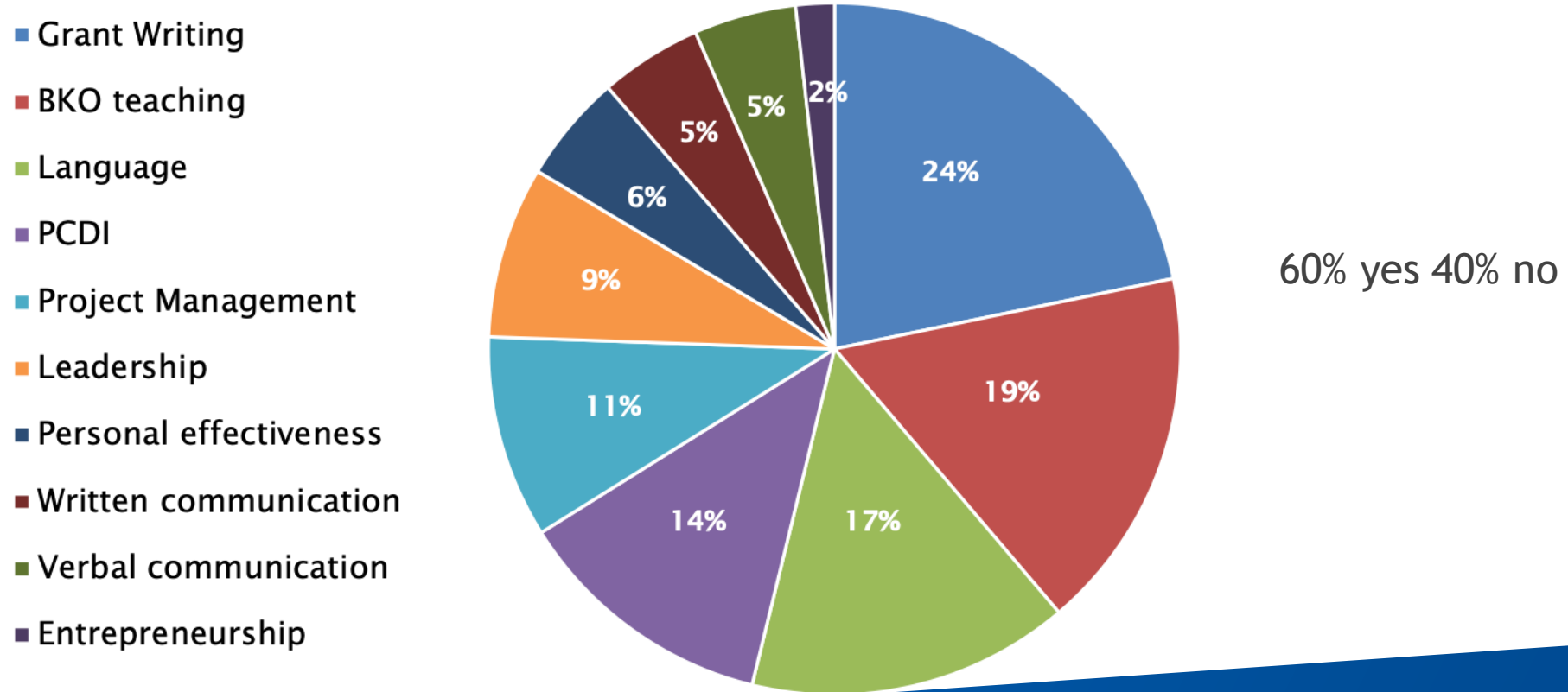
VS

Feel under constant strain 47%
Not able to concentrate on PhD work 35%
Sleeping problems (due to worries) 33%
Feel unhappy and depressed 30%
Not overcome difficulties 30%
Not enjoying day-to-day activities 29%
Lack of self-confidence 28%
Not playing a useful role 25%
Not happy, all things considered 24%
Could not make decisions 21%
Could not face problems 22%
Feel worthless 15%

47% Feel under constant strain
31% Not able to concentrate on PhD work
32% Sleeping problems (due to worries)
32% Feel unhappy and depressed
31% Not overcome difficulties
26% Not enjoying day-to-day activities
28% Lack of self-confidence
23% Not playing a useful role
24% Not happy, all things considered
21% Could not make decisions
20% Could not face problems
15% Feel worthless

Training and Career Preparation

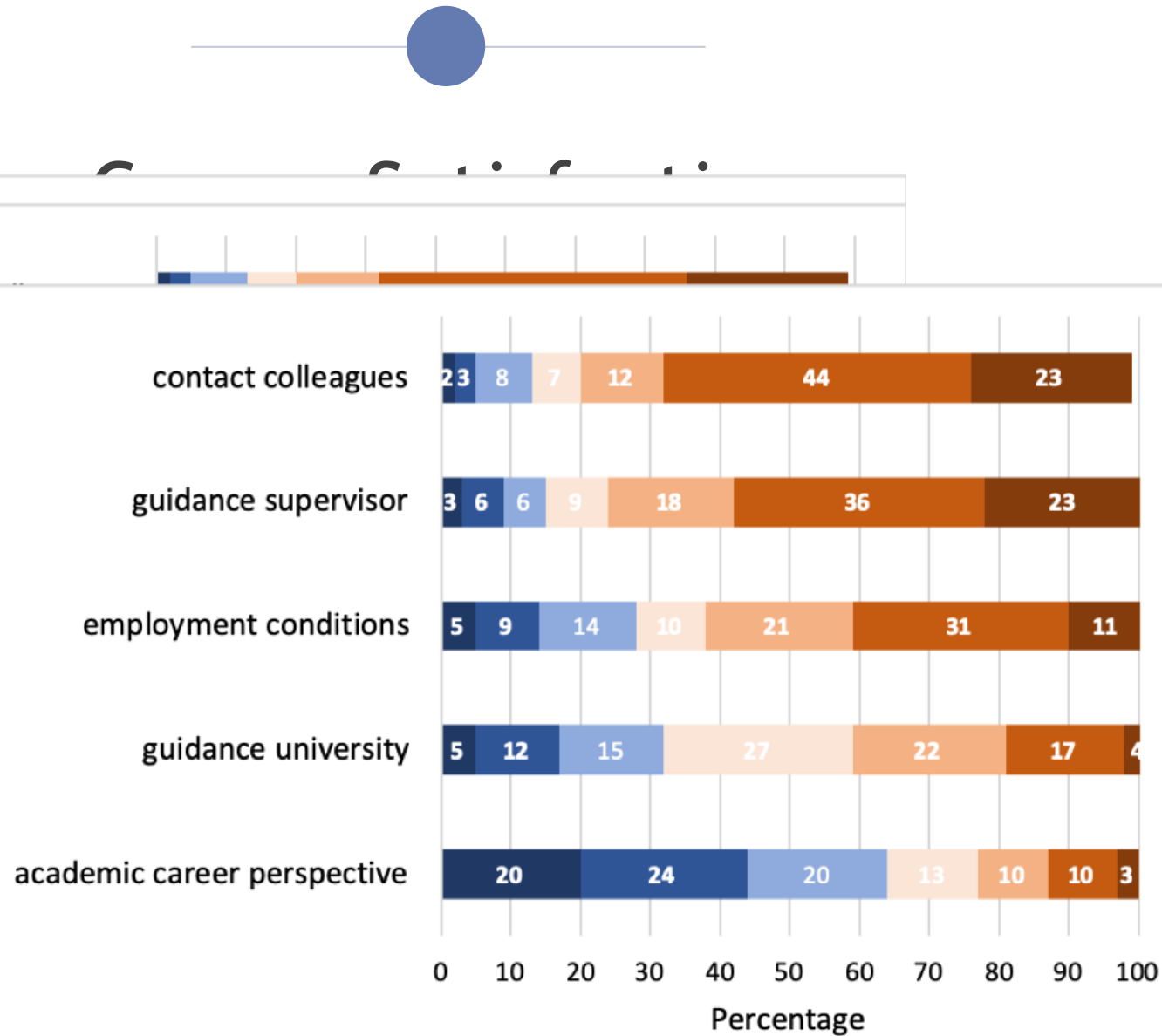
Training Modules



“At department X I feel very much supported. People are really motivating me to pursue certain goals. It’s a great atmosphere”

- very dissatisfied
- dissatisfied
- somewhat dissatisfied
- neutral
- somewhat satisfied
- satisfied
- very satisfied

- very dissatisfied
- dissatisfied
- somewhat dissatisfied
- neutral
- somewhat satisfied
- satisfied
- very satisfied



“The uncertainty is killing. The constant pressure to produce science and to formulate your own research questions without outside help, and the constant pressure to build up a resume, and the pressure to collect your own money for your research is often too much to bear”

Recommendations

Multi level Perspective



- Postdoc Community
- Training Modules
- Career Coaching
- Alumni Postdocs & Organisations
- Wellbeing Support



- Increase awareness of complexity of postdocs' position
- Recognize wellbeing issues
- Attend supervisor training program



- Postdoc as separate staff category in University Job Classification System

Responses



Leiden University



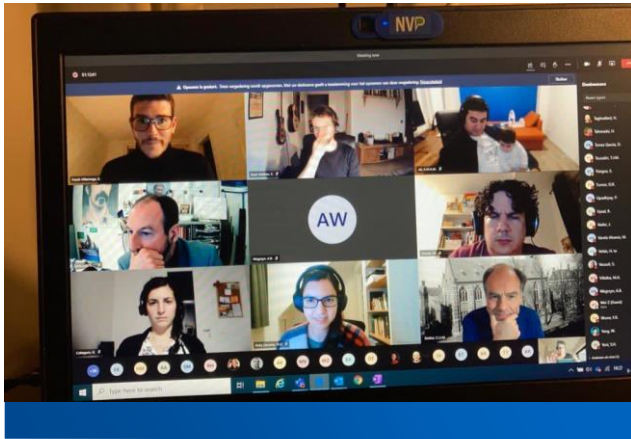
VU Amsterdam



National Developments

Leiden University Response

Three examples



Evaluation Postdoc Training Program





VU Amsterdam Response

Three examples



Postdoc network, special provisions/support for international postdocs



National Development: Room for everyone's talent

Towards a new balance in the recognition and rewards of academics

- From uniformity to diversity
- More opportunities for collaboration, often across disciplinary boundaries in various financial instruments.
- A national framework for assessment, development and promotion, including a recalibrated University Job Classification System (UFO).

One of our postdoc respondents:

'I would like to move to a more permanent positions (assistant professor), but the way science is organized makes this almost impossible: publication / grant pressure and the metrics that are used to 'assess' researcher are based on number of publications & grant instead of work in broader sense (including e.g. teaching, impact)'

