



Academia and the World Beyond

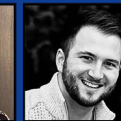
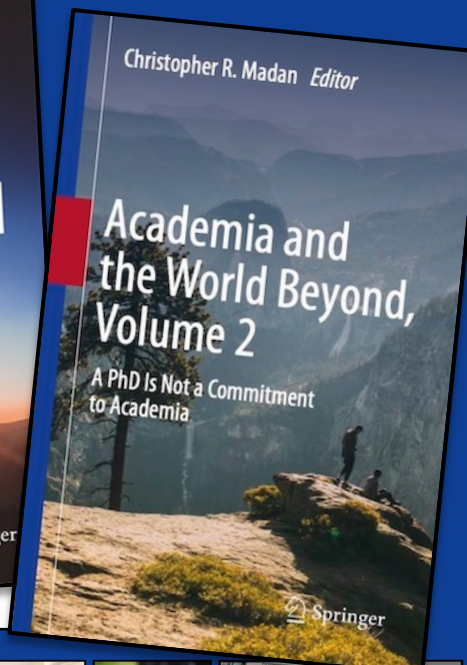
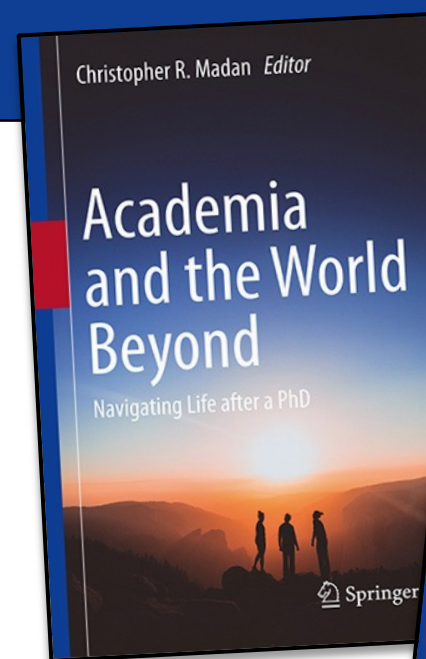
Christopher R Madan



“What will you do after?”

Is academia a good fit for you?
What non-academic job options are there?

Resources: <https://worldbeyond.ac>



Things People ask PhD students



Things People ask PhD students

What's your research on?

What's the point of that?

What will you do after?

Are you going to be a teacher?

Did you hear that <person your age> got a job?

Did you hear they're buying a house?

What do you mean you're no money?

Can't you get a summer job?

When are you finished your PhD?

Are you done Now?

How long can it take?

Now?

WHY ARE YOU SAD ALL THE TIME?

twisteddoodles.com



Things People ask PhD students

What's your research on?

What's the point of that?

What will you do after?

Are you going to be a teacher?

Did you hear that <person your age> got a job?

Did you hear they're buying a house?

What do you mean you're no money?

Can't you get a summer job?

When are you finished your PhD?

Are you done Now?

How long can it take?

Now?

WHY ARE YOU SAD ALL THE TIME?

twisteddoodles.com



How I got here



MADAN

How I got here

- Not too long ago...

I was a PhD student, then a research fellow

...and I wondered, what are my options other than academia? Where might I move to next?

(UK is country #4 for me)



How I got here

- Not too long ago...

I was a PhD student, then a research fellow

...and I wondered, what are my options other than academia? Where might I move to next?

(UK is country #4 for me)

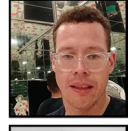
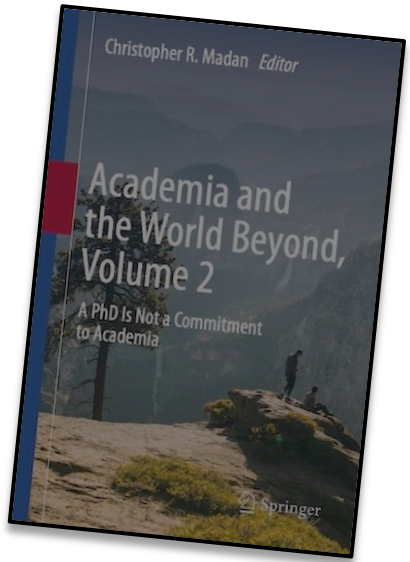
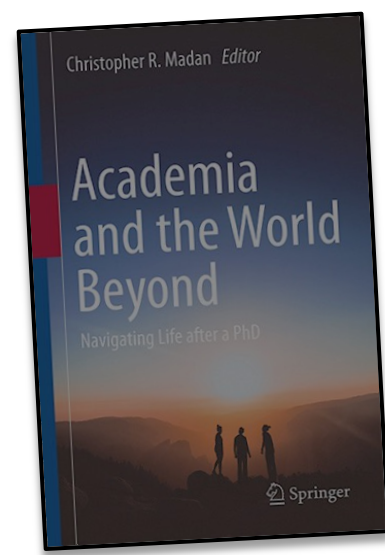
- Now I supervise PhD students, how can I best prepare them for what they want to do next?

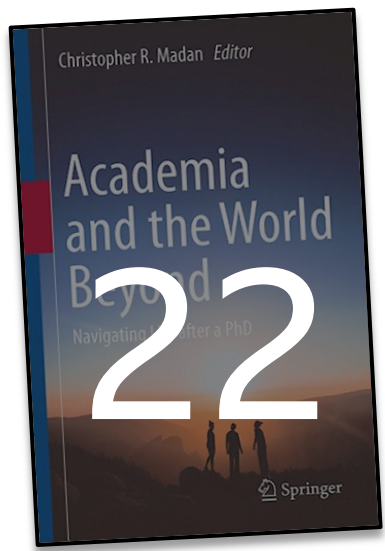


“What will you do after?”

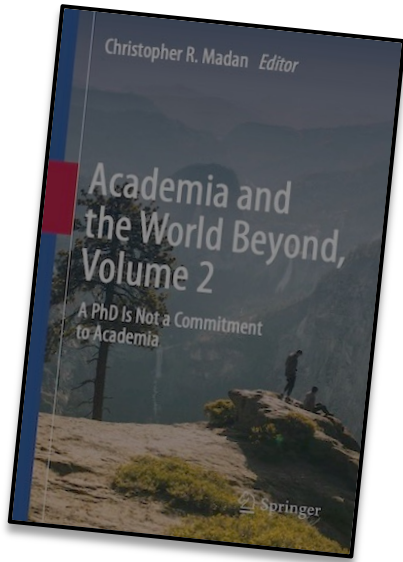
- Academic positions are few and often have requirements that aren't suitable for everyone, e.g., two-body problem, caring responsibilities
- Non-academic options are nebulous... they exist, but what are they?
- Informational interviews with PhD graduates in a book series, *Academia and the World Beyond*







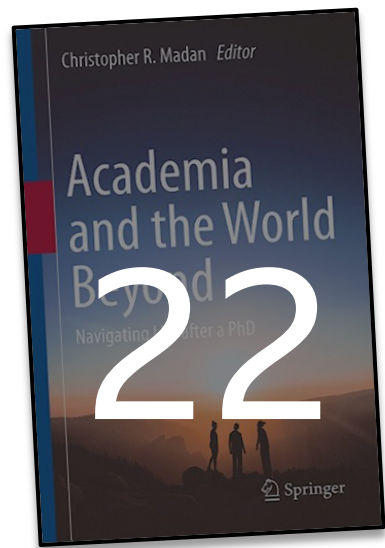
+



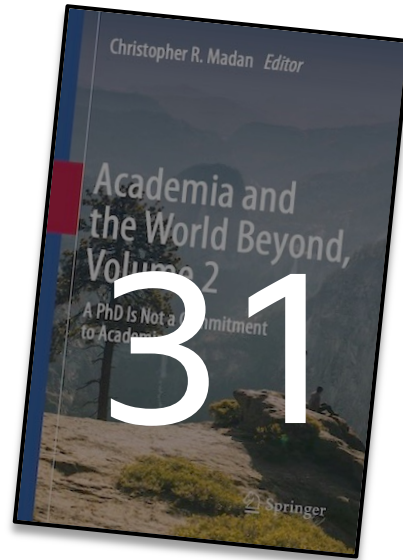
=

12 academics
10 non-academics





+

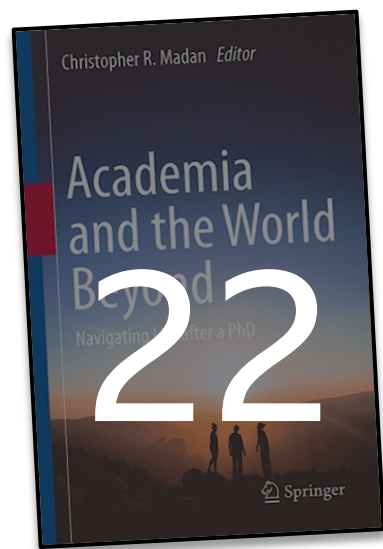


=

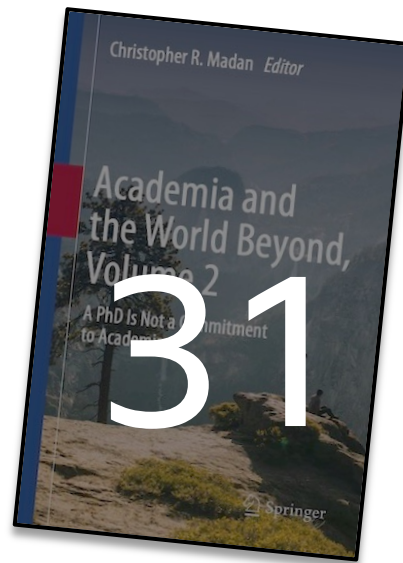
12 academics
10 non-academics

all non-academic!



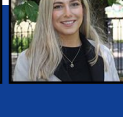
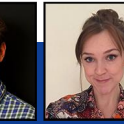


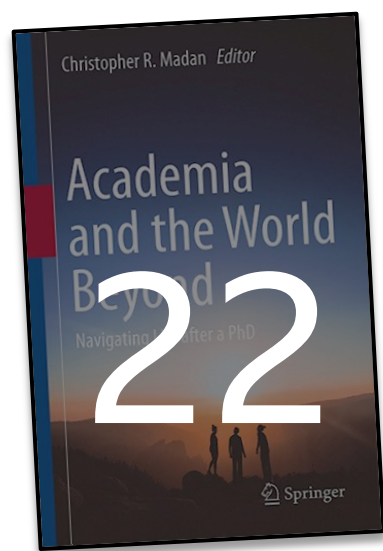
+



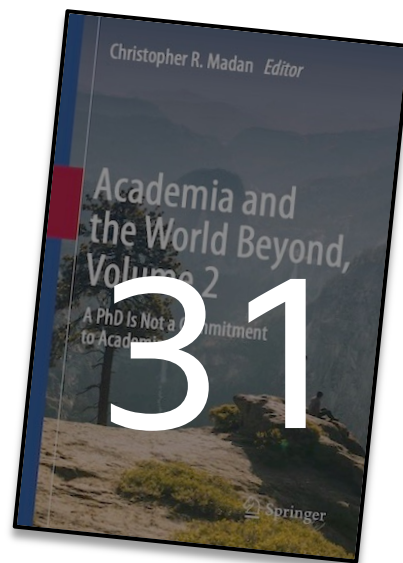
=

53 career interviews





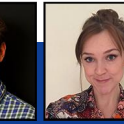
+



=

53 career interviews

...too many to read all of, which are relevant to me?



“What will you do after?”: Lessons from Academia and the World Beyond

Christopher R Madan 

Quarterly Journal of Experimental Psychology

1–6

© Experimental Psychology Society 2024



Article reuse guidelines:

sagepub.com/journals-permissions

DOI: 10.1177/17470218241236144

qjep.sagepub.com



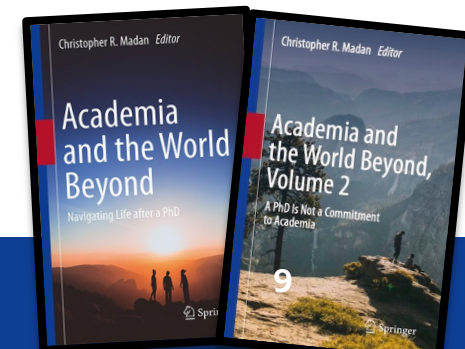
Abstract

Determining post-PhD career options is a challenge for many Psychology PhD graduates. Here I provide a comprehensive overview of the diverse career trajectories available to graduates, drawing from interviews with 53 PhD graduates conducted as part of the two-volume *Academia and the World Beyond* book series. From these, I conducted a hierarchical qualitative classification to categorise and characterise potential career paths. The findings reveal a spectrum of opportunities, from traditional academic roles to “academic adjacent” and “skill-transfer” careers. This work underscores the versatility of Psychology doctoral training, providing skills that can support a wide array of career possibilities. The results serve as a guide for current and prospective PhD students—and their mentors—emphasising the variety of professional contexts where doctoral training is beneficial.

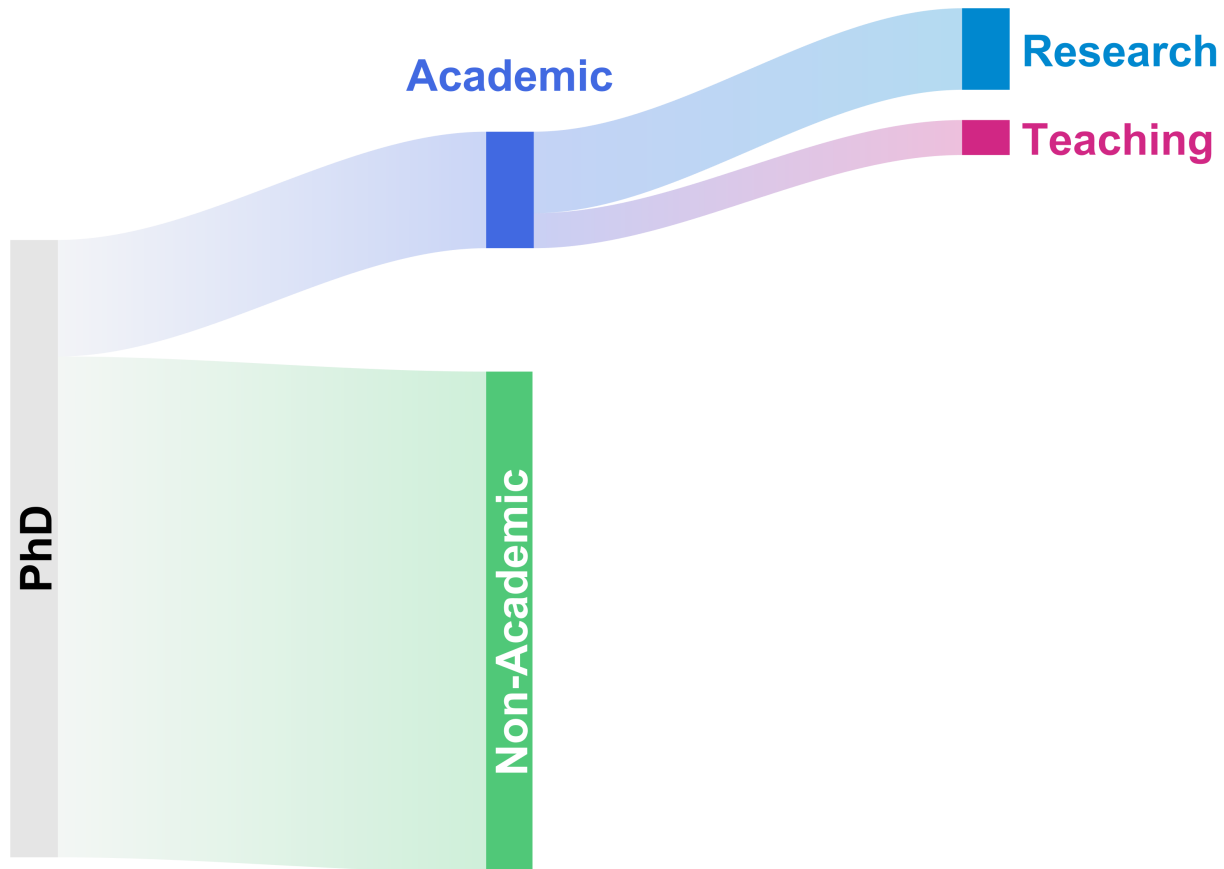
Keywords

Career paths; doctoral training; academic-adjacent roles; skill-transfer careers; career transition; psychology graduate careers

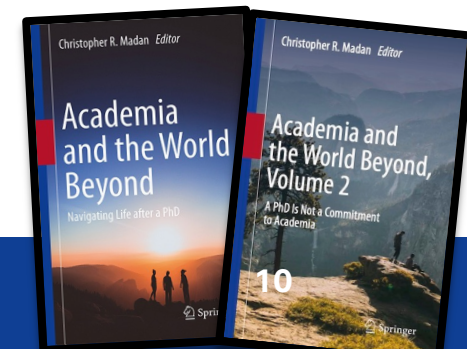
Received: 20 November 2023; revised: 9 January 2024; accepted: 22 January 2024

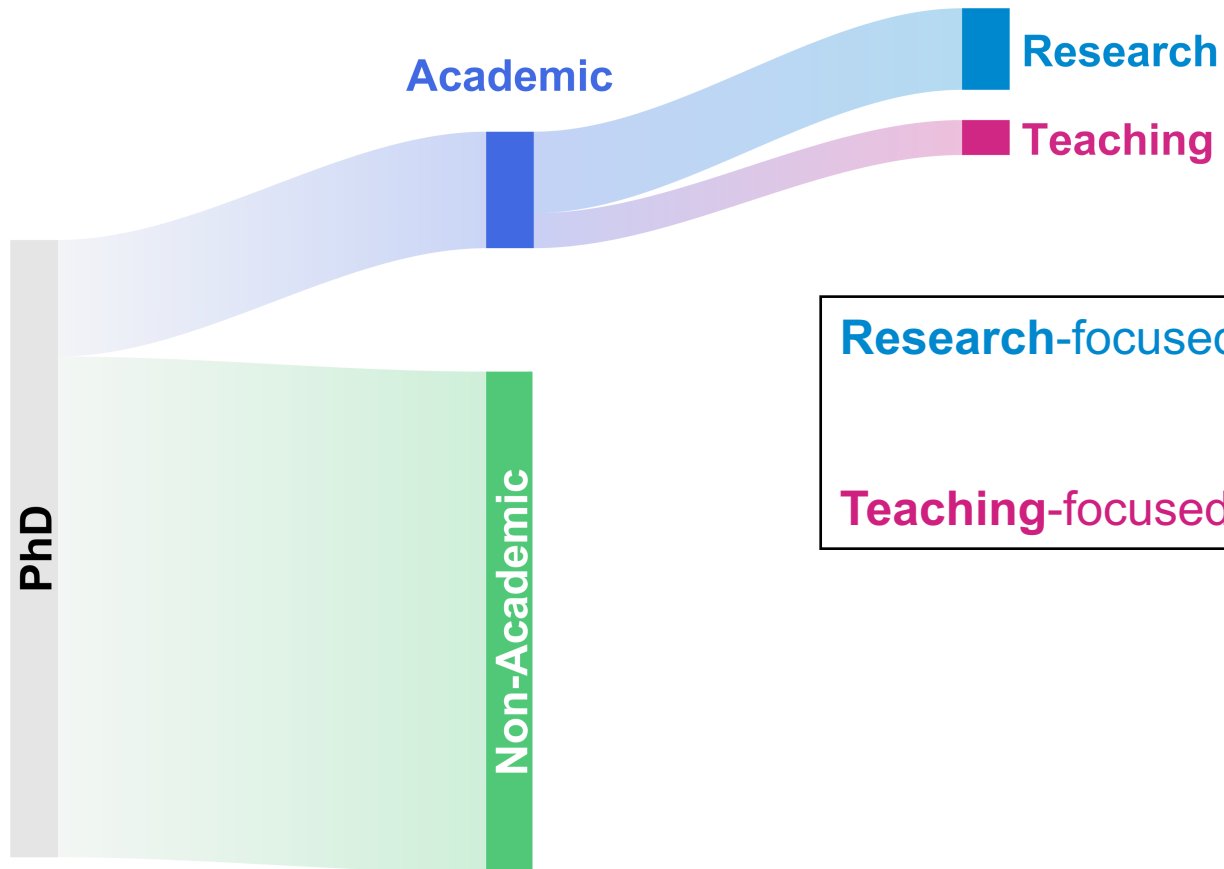


Madan, C. R. (in press). "What will you do after?": Lessons from *Academia and the World Beyond*. *Quarterly Journal of Experimental Psychology*. doi:10.1177/17470218241236144



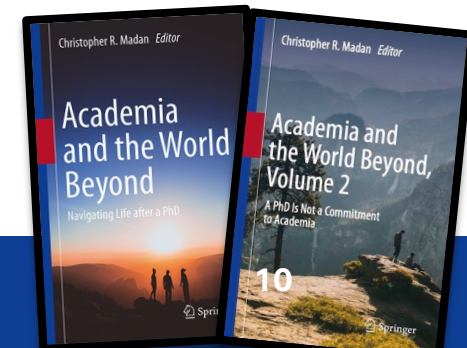
MADAN



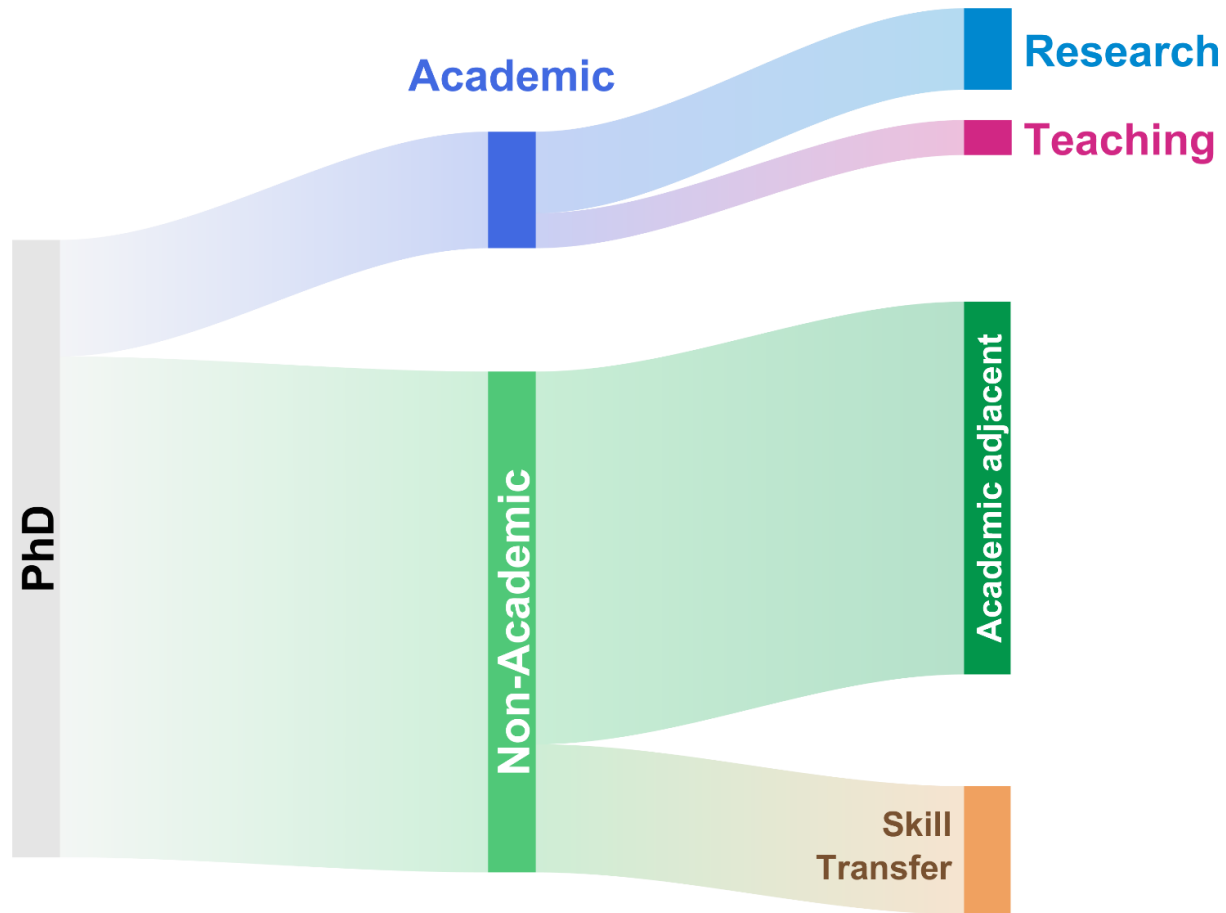


Research-focused tended to highlight the intellectual freedom and ability to pursue novel research questions

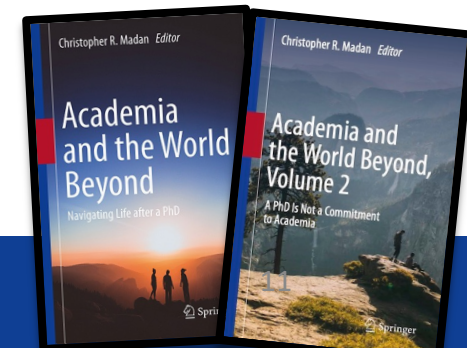
Teaching-focused fulfilment in teaching students rather than research

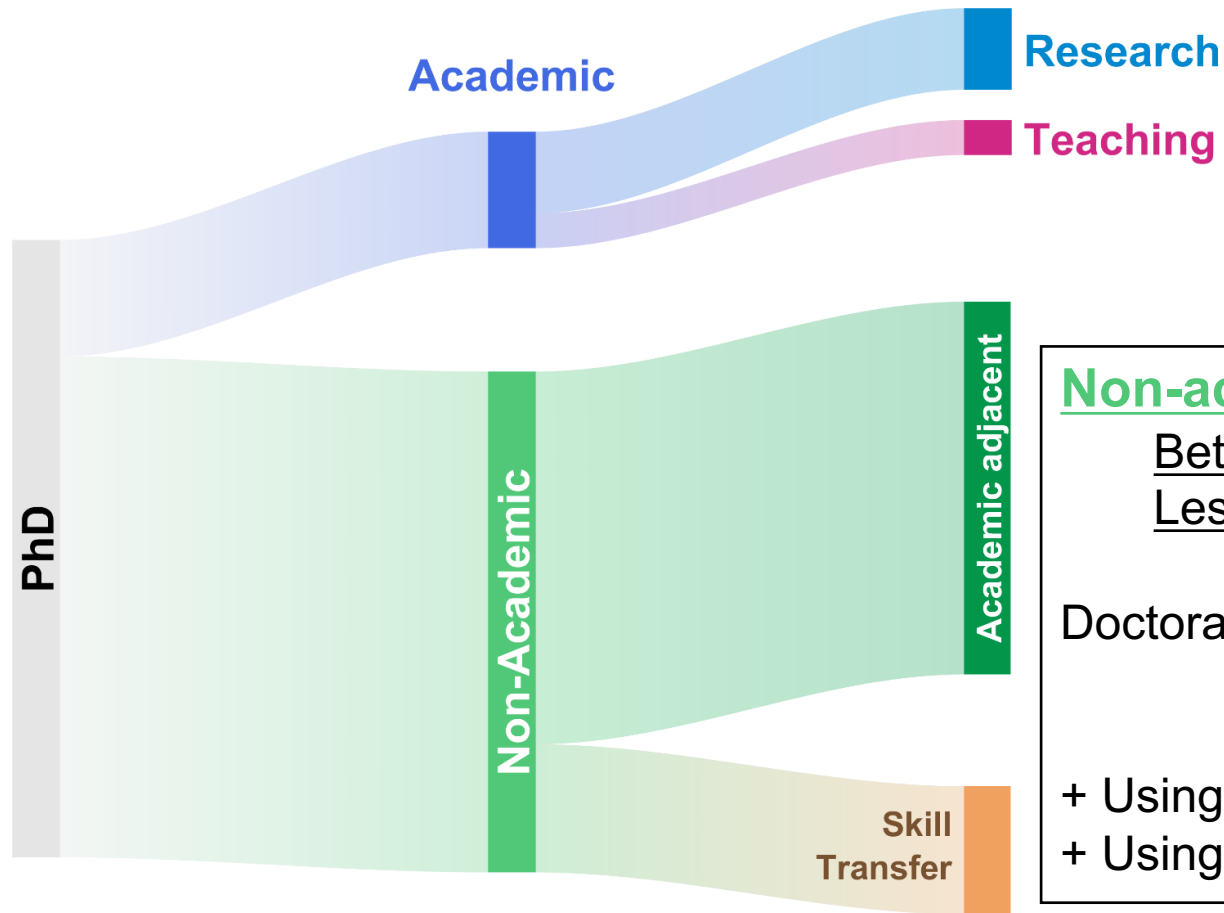


Madan, C. R. (in press). "What will you do after?": Lessons from *Academia and the World Beyond*. *Quarterly Journal of Experimental Psychology*. doi:10.1177/17470218241236144



MADAN



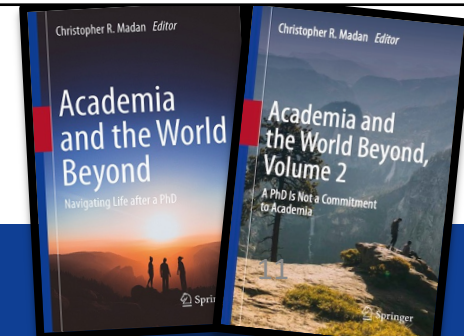


Non-academic Careers

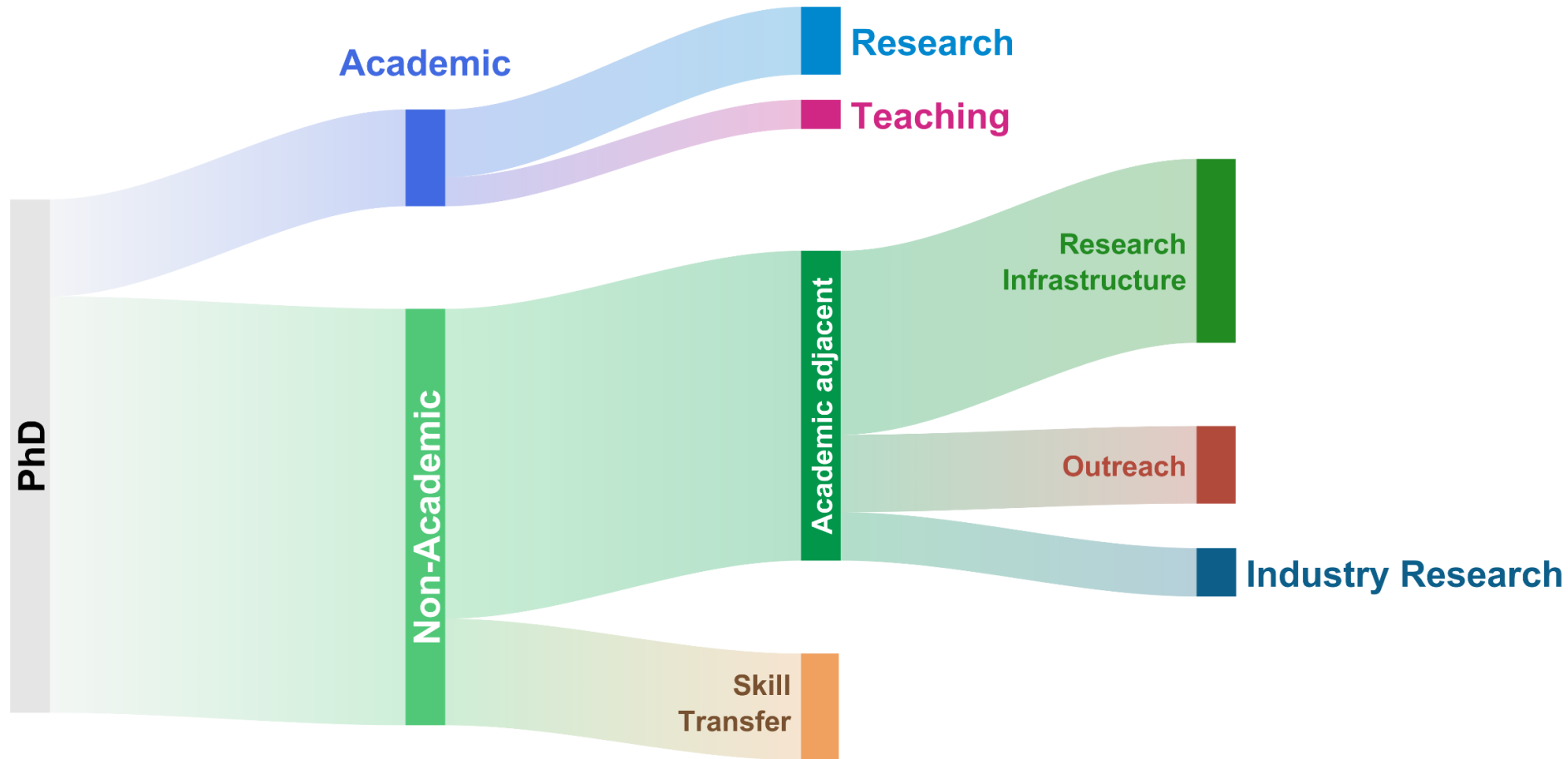
Better work-life balance, pay, and benefits
Less ability to choose projects or topics of interest

Doctoral training can be described as involving three sets of skills:
topic, methods, and general

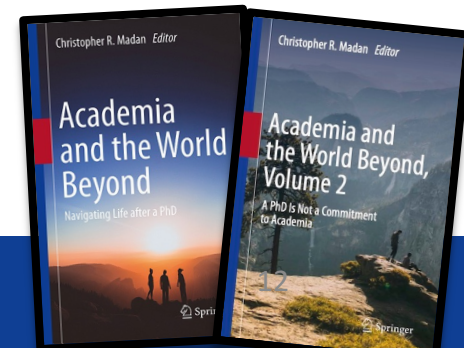
- + Using topic and/or method specific skills: “academic-adjacent”
- + Using general skills: “skill-transfer careers”



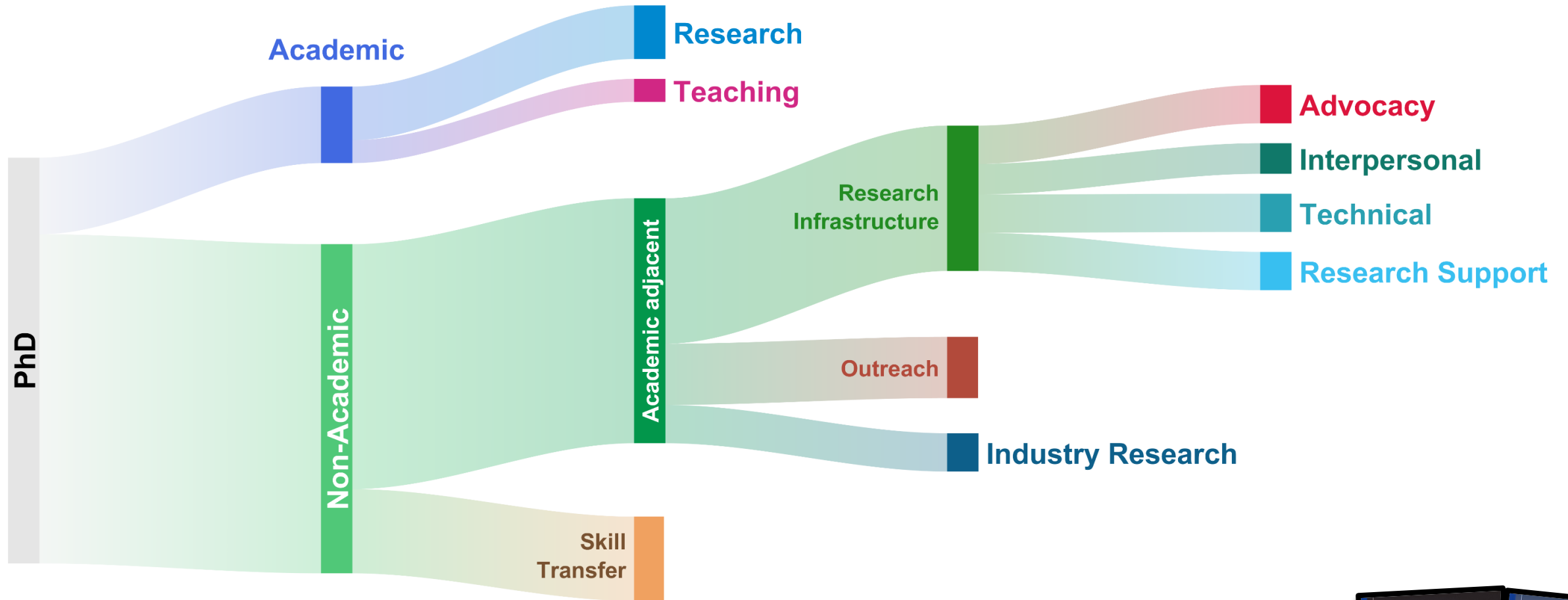
Madan, C. R. (in press). "What will you do after?": Lessons from *Academia and the World Beyond*. *Quarterly Journal of Experimental Psychology*. doi:10.1177/17470218241236144



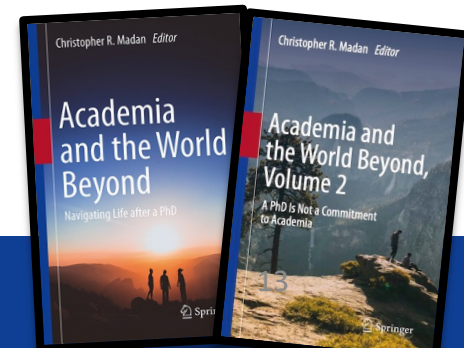
MADAN

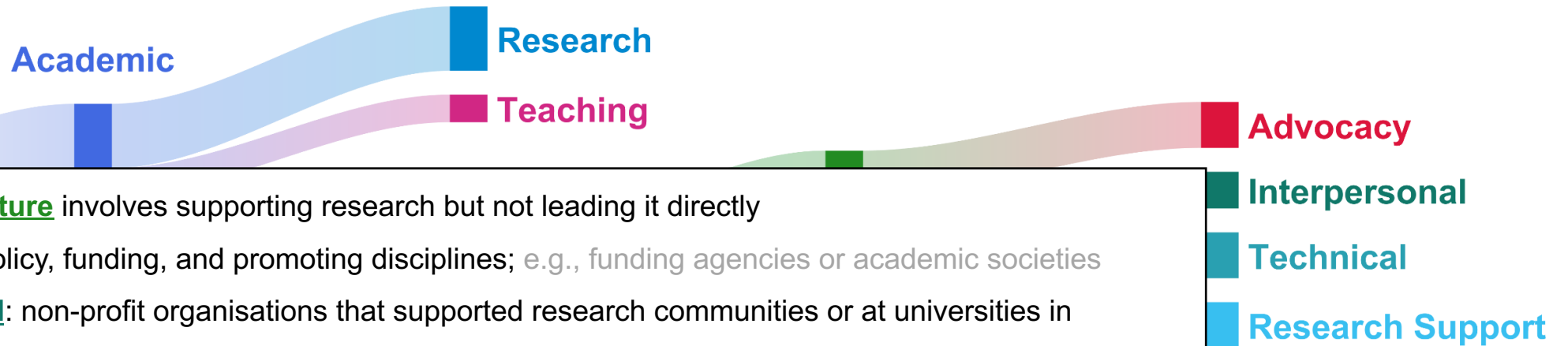


Madan, C. R. (in press). "What will you do after?": Lessons from *Academia and the World Beyond*. *Quarterly Journal of Experimental Psychology*. doi:10.1177/17470218241236144



MADAN





Research Infrastructure involves supporting research but not leading it directly

Advocacy: policy, funding, and promoting disciplines; e.g., funding agencies or academic societies

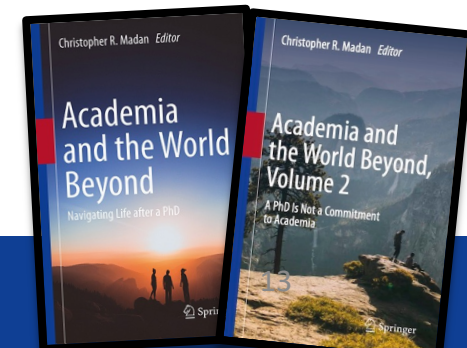
Interpersonal: non-profit organisations that supported research communities or at universities in supporting PhD student development (e.g., “Graduate School” or “Researcher Academy” departments)

Technical : specialised expertise to develop research tools;

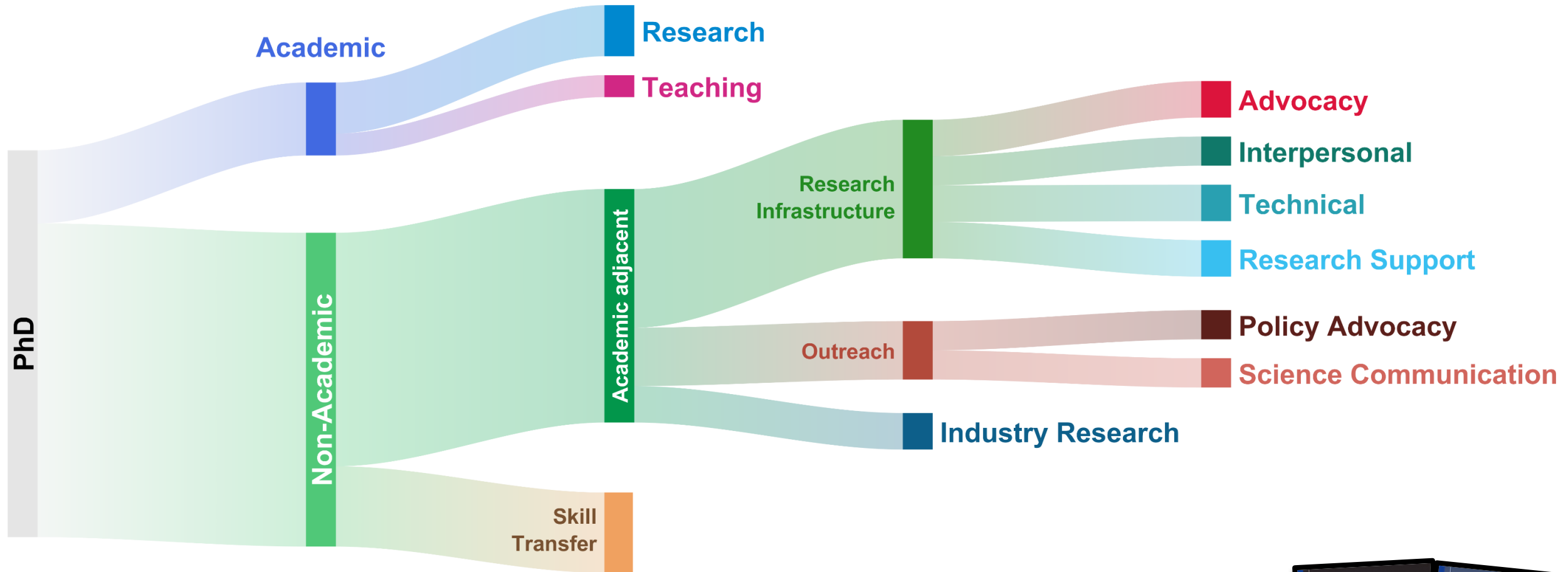
e.g., companies that developed research tools—such as those that develop research-related equipment (EEG, eyetracking, psychophysiology), implementing experiment programs or data analysis (PsychoPy, Gorllia), online platforms for recruiting participants (Prolific, CloudResearch), companies that facilitate data sharing (Figshare)

Research support roles assist research through equipment, workshops, or editing services;

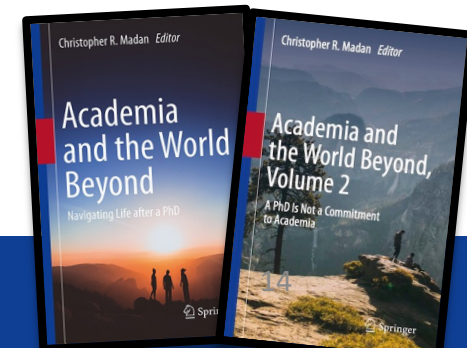
e.g., companies that develop scientific equipment and work in sales or user training



Madan, C. R. (in press). "What will you do after?": Lessons from *Academia and the World Beyond*. *Quarterly Journal of Experimental Psychology*. doi:10.1177/17470218241236144



MADAN



Outreach careers use research findings to create tangible real-world change

Policy advocacy roles focus on directly **informing government decision-making and policy**

Some overlap with the **advocacy** in **research infrastructure**, goals are different:

- + **Policy advocates** interact heavily with government, politics, and legislation;
- + **research infrastructure advocacy** (funders, societies)
more focused on grant management and community networking

Science communication roles aim to increase public understanding and engagement, using social media (YouTube) or traditional media (press releases); **target audience is the general public**

Advocacy

Interpersonal

Technical

Research Support

Policy Advocacy

Science Communication

Industry Research

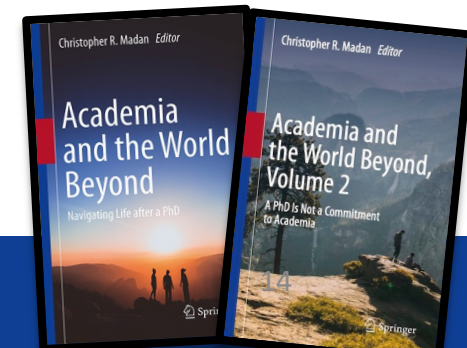
**Skill
Transfer**

Non-Acad

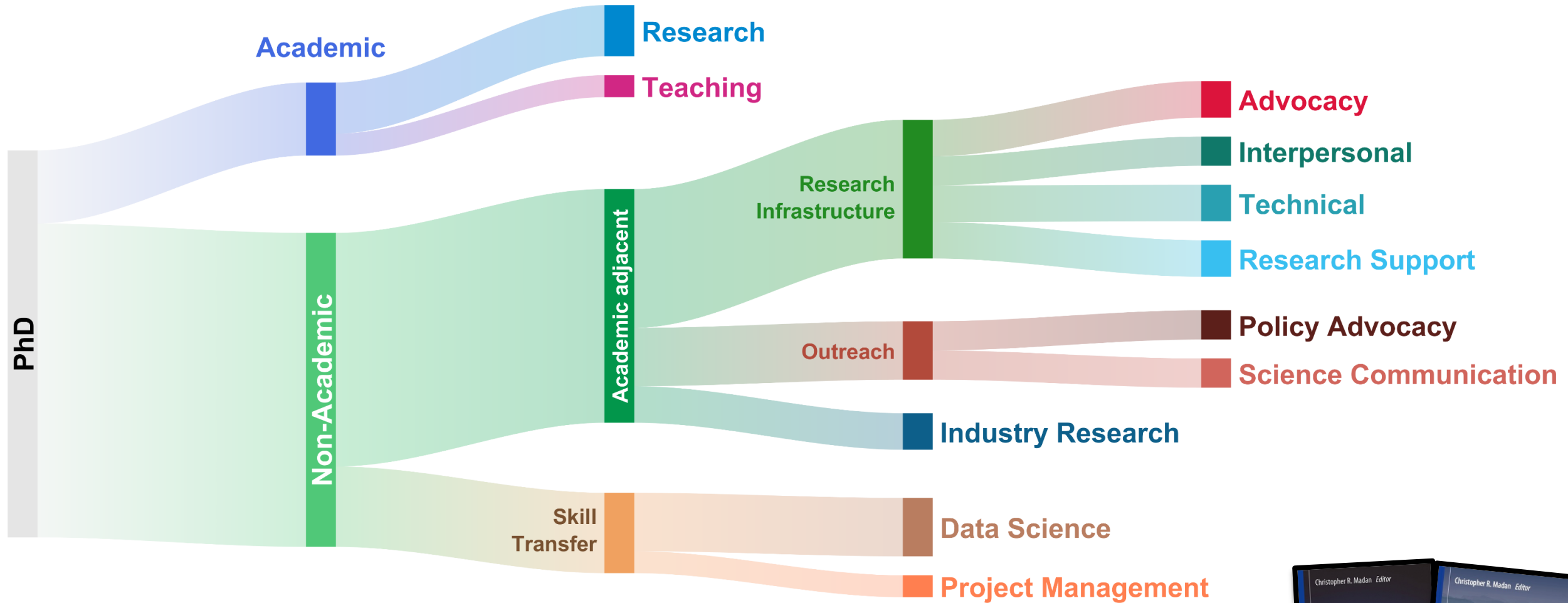
Acad



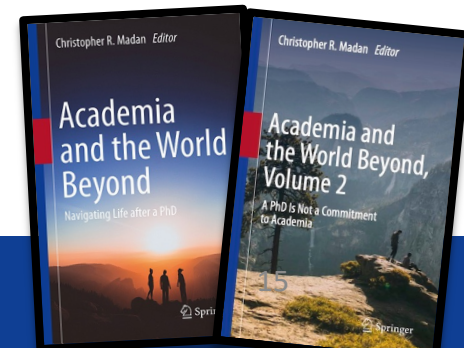
MADAN



Madan, C. R. (in press). "What will you do after?": Lessons from *Academia and the World Beyond*. *Quarterly Journal of Experimental Psychology*. doi:10.1177/17470218241236144



MADAN



Skill-transfer careers use broader PhD competencies in work settings farther from academia

Use general skills gained during doctoral training include data science, project management, and critical thinking, rather than direct research topic or method knowledge

Particularly feel loss of identity/grieving leaving academia; individuals ultimately find satisfaction applying their skills in new contexts

Particularly varied and require proactively developing industry-relevant abilities

Data science roles focus more on **technical skills** like programming, computational modelling, and data analysis

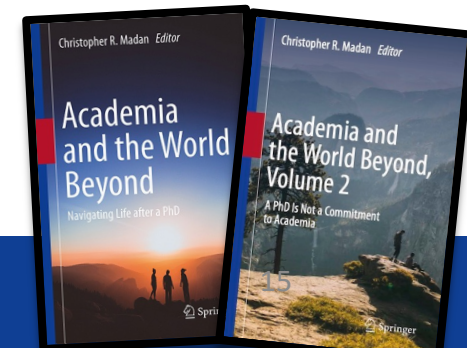
Project management roles involve more **interpersonal skills** and coordinating teams, managing budgets, and overseeing project timelines and outcomes

PhD

Skill
Transfer

Data Science

Project Management



Lessons

- Focus on the **journey!**
 - Academic-industry fluidity
(several interviewees went to industry and then returned to academia)
 - First non-academic position doesn't need to be a perfect fit
- Consider your **personal values** and priorities
 - Some interviewees discussed two-body problem/
other family considerations



Website Resources <https://worldbeyond.ac/cats/>

› Academic

›› **Research:** Irish [Vol. 1: Ch. 15], Buckingham [1:17], Ludvig [1:19], Fried [1:20], Vazire [1:21], Uddin [1:22], Hanson [1:23]

›› **Teaching:** Karanian [1:16], Arbeau [1:18], Johnstone [2:16]

› Non-academic

›› Academic-adjacent

››› Research Infrastructure

›››› **Advocacy:** Kousta [1:12], DeSoto [1:14], Askew [2:17], Lantz [2:18], Esch [2:31]

›››› **Interpersonal:** Rowe [2:19], Palmer [2:20], Ette [2:29], Ledmyr [2:32]

›››› **Technical:** Van Gulick [1:2], Moss [1:7], Hirst [2:8], Pickering [2:11], Iyer [2:30]

›››› **Research Support:** Quintanilha [1:4], Helena [1:11], Warbrick [2:9], Toovey [2:10], Treit [2:12]



Website Resources

<https://worldbeyond.ac/cats/>

Other noteworthy sets

Academia-industry fluidity: Irish [1:15], Ludvig [1:19], Smayda [2:5], Hirst [2:8], Johnstone [2:16]

Grief/stigma related to loss of academic identity: Caldwell [1:9], Helena [1:11], Chabrol [2:3], Hayes [2:4], Toovey [2:10], Balsters [2:15], Vilgis [2:22]

Two-body problem (coordinating careers of married partners): Moss [1:7], Ludvig [1:19], Hanson [1:23], Hayes [2:4], Toovey [2:10]

Family-related considerations: Quintanilha [1:4], Smith [1:10], Irish [1:15], Ludvig [1:19], Uddin [1:22], Hanson [1:23], Veldsman [2:2], Hayes [2:4], Riddoch [2:14], Neadle [2:23], Batty [2:24]



Website Resources

<https://worldbeyond.ac/resources/>

Resources from Chris

<p>Received: 20 February 2023 Revised: 7 July 2023 Accepted: 20 November 2023 DOI: 10.1111/qjep.12596</p> <p>EDITORIAL</p> <p>A brief primer on the PI position</p> <p>Abstract Becoming a successful academic and securing a research-intensity position at a research university requires many distinct skills. Beyond technical skills and domain-specific knowledge, some of these skills include time management, scientific writing, public speaking, and project management. Training prior to the PI position, some of these latter skills, and perhaps even degree of trainee supervision, but PhD-level supervision and the associated responsibilities do not arrive until one becomes a PI. Many academic skills are learned 'on the job', but few more so than PI supervision. While I myself have limited PhD supervision experience, I have reviewed the literature on student-supervisor relationship and here provide a brief primer.</p> <p>KEYWORDS academia, career, mentorship, supervision</p> <p>1 INTRODUCTION</p> <p>Becoming a successful academic and securing a research-intensity position at a research university requires many distinct skills (e.g., Marwede, 2021; Wright & Vanderford, 2017). Beyond technical skills and domain-specific knowledge, some of these skills include time management, scientific writing, public speaking and project management prior to the PI position involved some of these skills, and perhaps even some degree of training, but PhD-level supervision and associated responsibilities do not arrive until one becomes an academic skills are learned 'on the job,' but few more so than PhD supervision (also see Kuo-Raben, 2020). While I myself have only a few PhD supervision experience, I have reviewed</p>	<p>A PhD Is a Journey Lead?</p> <p>Christopher R. Madan</p>  <p>Christopher R. Madan</p> <p>C. R. Madan (✉) School of Psychology, University of Nottingham e-mail: christopher.madan@nottingham.ac.uk</p> <p>© The Author(s), under exclusive license to John Wiley & Sons, Ltd. C. R. Madan (ed.), <i>Academia</i> https://doi.org/10.1002/9781119797813</p>	<p>Opinion Piece</p> <p>Approaching the Clarifying expectations preparations</p> <p>Christopher R. Madan</p> <p>Keywords PhD thesis; PhD vision; thesis writing</p> <p>RESEARCH involves iterating to use certain academic skills and increased proficiency, such as in the literature, conducting statistical analysis and clearly communicating ideas in writing. However, the ultimate extent of these skills is only carried out in PhD thesis and viva. While this is designed to be the perfect mixture of underlying skills, it nonetheless is a final obstacle. Current PhD students should look at these of previous examples, but it can sometimes be to perceive the underlying general draw from these. Universities provide manuals or similar guidance of the viva process and expectations, but often too abstract. Recent PhD graduates those that have just completed this are ushered out shortly after completion and there may be only a few post-fellows in a department (who may newly arrived to a department and established social connections with PhD students), providing minimal support for those that have recently completed the hurdle to share insights with approaching it. However, this is all that there is no general guidance for current PhD students to use in their preparation and confidence outline four particularly beneficial that current PhD students can read</p> <p>46</p>	<p>Post-PhD Possibilities Academic-Adjacent Career Paths</p> <p>Christopher R. Madan</p>  <p>Christopher R. Madan</p> <p>Contents</p> <p>What is a PhD for?..... Three Career Paths: Traditional..... The Book Series..... Insights into Academic-Adjacent..... Conclusion..... References.....</p> <p>C. R. Madan (✉) School of Psychology, University of Nottingham e-mail: christopher.madan@nottingham.ac.uk</p> <p>© The Author(s), under exclusive license to John Wiley & Sons, Ltd. C. R. Madan (ed.), <i>Academia</i> https://doi.org/10.1002/9781119797813</p>	<p>QJEP</p> <p>Quarterly Journal of Experimental Psychology 1.4 © Experimental Psychology Society 2024 Article reuse guidelines: onlinelibrary.wiley.com/terms-and-conditions DOI: 10.1111/qjep.12596 http://onlinelibrary.wiley.com Sage</p> <p>Commentary</p> <p>"What will you do after?": Lessons from Academia and the World Beyond</p> <p>Christopher R. Madan</p> <p>Abstract Determining post-PhD career options is a challenge for many Psychology PhD graduates. Here I provide a comprehensive overview of the diverse career trajectories available to graduates, drawing from interviews with 53 PhD graduates conducted as part of the two-volume <i>Academia and the World Beyond</i> book series. From these, I conducted a hierarchical qualitative classification to categorise and characterise potential career paths. The findings reveal a spectrum of opportunities, from traditional academic roles to "academic adjacent" and "skill-transfer" careers. This work underscores the versatility of Psychology doctoral training, providing skills that can support a wide array of career possibilities. The results serve as a guide for current and prospective PhD students—and their mentors—emphasising the variety of professional contexts where doctoral training is beneficial.</p> <p>Keywords Career paths; doctoral training; academic-adjacent roles; skill-transfer careers; career transition; psychology graduate careers</p> <p>Received: 20 November 2023; revised: 9 January 2024; accepted: 22 January 2024</p> <p>Introduction</p> <p>In the contemporary academic landscape, the journey from doctoral studies to a fulfilling career is often fraught with uncertainty. "What will you do after?" is not just a casual question posed by friends and family to Psychology PhD students; it's a reflection of the broader challenge that these graduates face in navigating the complex terrain of career opportunities. Although academia has traditionally been the sought-after path, the limited availability of academic positions, coupled with the evolving dynamics of the job market (Afonso et al., 2021; Edge & Munro, 2015; Feibelman, 2011; Kriksy, 2015; Linder et al., 2020; Schillebeeckx et al., 2013), has necessitated a broader view of potential post-PhD career trajectories.</p> <p>The significance of this challenge cannot be understated. For many PhD graduates, the transition from academia to the professional world is not just about securing a job—it's about finding a role that aligns with their skills, passions, and the years of specialised training they've undergone. Moreover, with the diversification of industries and the increasing value placed on interdisciplinary skills, there's a pressing need to understand how the competencies acquired during doctoral studies can be applied in various professional contexts (Bennett et al., 2022; Robinson & Nolia, 2020; Sinche et al., 2017). PhD graduates know that a wide range of nonacademic career paths exist, but the specifics are nebulous.</p> <p>Here, I aim to shed light on this issue. Having interviewed 53 PhD graduates in a two-volume book series, <i>Academia and the World Beyond</i> (Madan, 2022a, 2024a), here I seek to provide an overview of the diverse career paths available to Psychology PhD graduates. Although individual narratives offer rich insights, there's a need for a higher-level summary—a structured framework that categorises and characterises the broader career trajectories, be it in academia, roles that are "academic adjacent," or those that predominantly rely on "skill transfer" of general doctoral skills, such as data science or project management (Madan, 2024b).</p> <p>I conducted a hierarchical qualitative classification of the interviews to determine a more granular characterisation of post-PhD career paths relevant to Psychology PhD</p> <p>School of Psychology, University of Nottingham, Nottingham, UK Corresponding author: Christopher R. Madan, School of Psychology, University of Nottingham, Nottingham NG7 2RD, UK. Email: christopher.madan@nottingham.ac.uk</p>
--	---	--	---	---



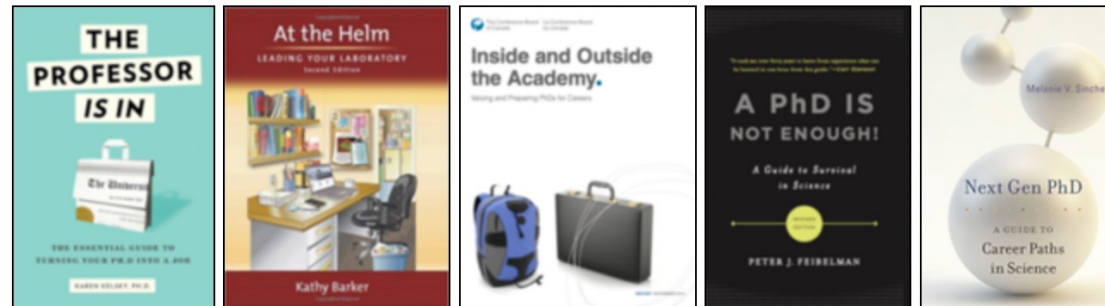
Website Resources

<https://worldbeyond.ac/resources/>

Advice for Non-Academic Careers



Advice for Academic Careers



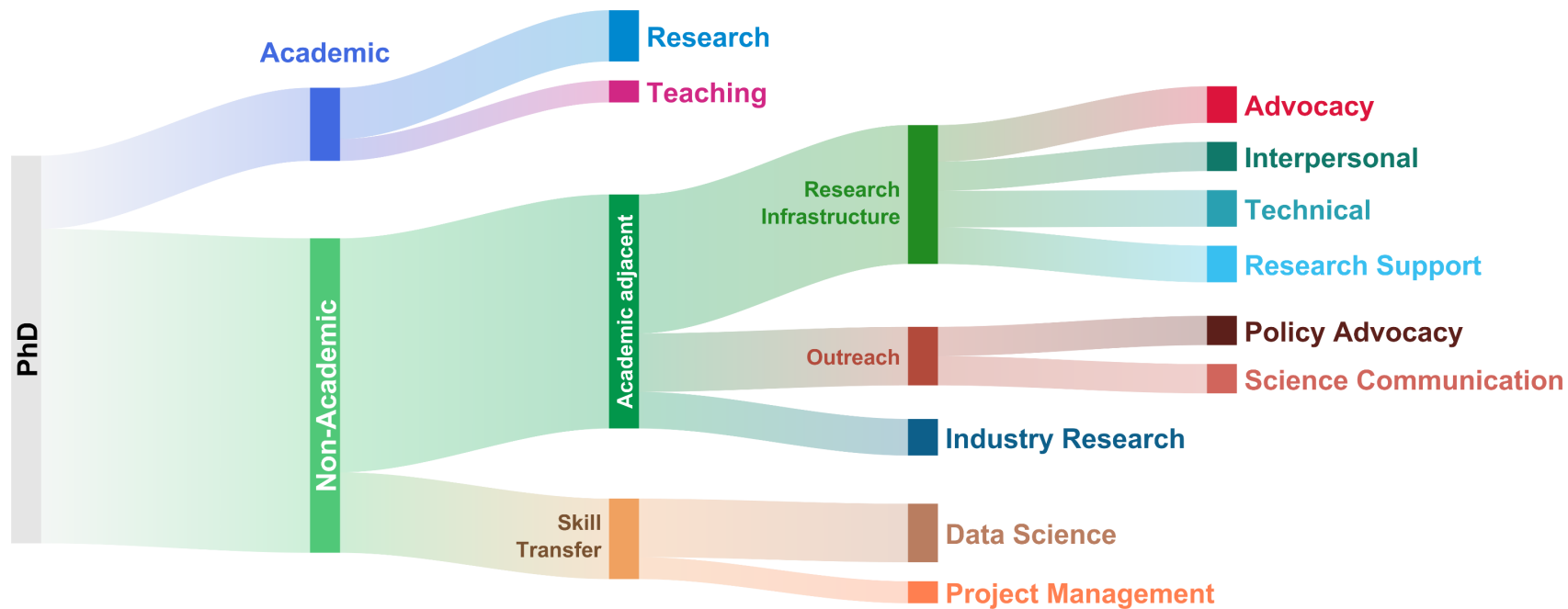
10 paper recommendations

- Afonja, S., Salmon, D. G., Quailey, S. I., & Lambert, W. M. (2021). Postdocs' advice on pursuing a research career in academia: A qualitative analysis of free-text survey responses. PLOS ONE, 16, e0250662.
<https://doi.org/10.1371/journal.pone.0250662>
- Campbell, S. P., Fuller, A. K., & Patrick, D. A. (2005). Looking beyond research in doctoral education. *Frontiers in Ecology and the Environment*, 3(3), 153–160.
[https://doi.org/10.1890/1540-9295\(2005\)003\[0153:LBRIDE\]2.0.CO;2](https://doi.org/10.1890/1540-9295(2005)003[0153:LBRIDE]2.0.CO;2)
- Edwards, K. A., Acheson-Field, H., Rennane, S., & Zaber, M. A. (2023). Mapping



Careers Questionnaire

15-items based on skills, interests, and values



Academic Research

Academic Teaching

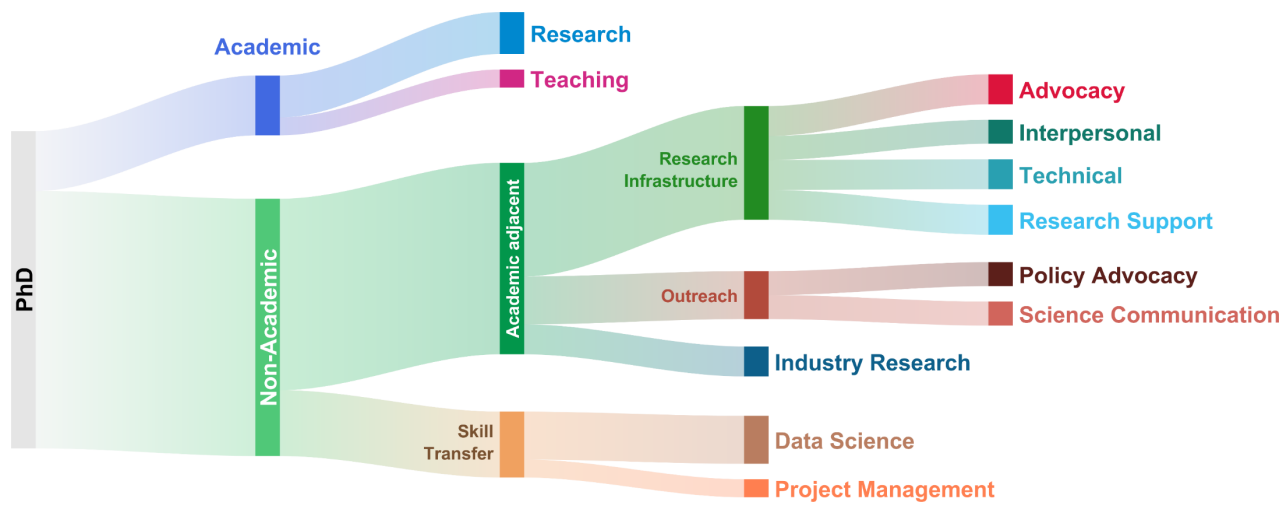
Industry Technical

Policy & Outreach

Industry Research

Skill Transfer





Academic Research
Academic Teaching

Industry Technical
Policy & Outreach
Industry Research

Skill Transfer



worldbeyond.ac/q/#WARW5931





Academia and the World Beyond

Christopher R Madan

Details about the career paths:

<https://worldbeyond.ac/cats/>

Happy to take questions!

worldbeyond.ac/q/#WARW5931

