

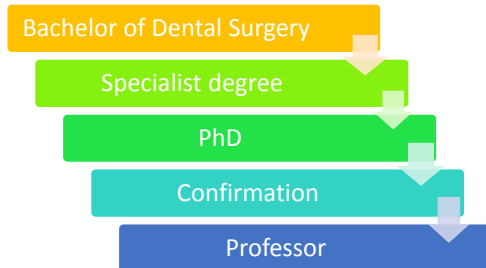
Two-part presentation

1. Discussion of research careers
2. Evidence on career experiences from a survey of dental researchers



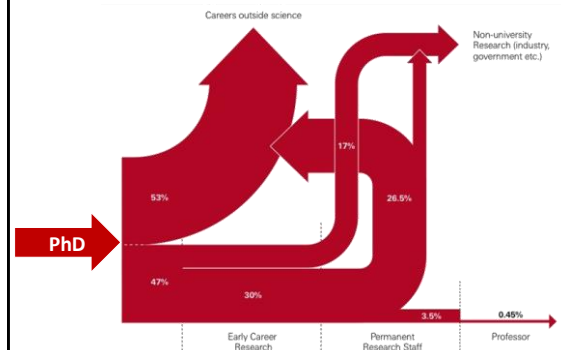
The dental research career path

(an example)



Where might a PhD take a career?

From "The Scientific Century", Royal Society (2010)

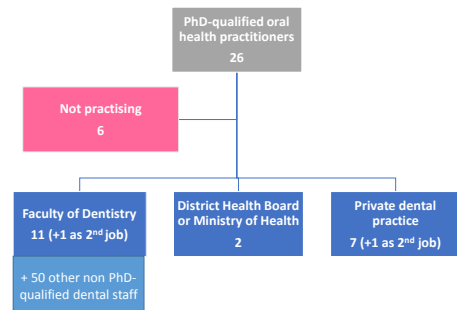


Evidence from NZ (2012-2013)

19 practising PhD-qualified dentists
6 non-practising PhD-qualified dentists
0 PhD-qualified therapists or hygienists
1 PhD-qualified dental technician

Numerous PhD-qualified academics who are not oral health practitioners

Workplace of NZ dental PhDs (2012/2013)



Dental academia as a career

Not all dental researchers are PhD-qualified
 Not all PhD-qualified dental researchers are oral health practitioners
 Faculty positions are few and competitive
 Lower average income
 Requires broad skill set

- Teaching
- Networking/speaking
- Grant acquisition
- Writing
- Science
- Administration
- Clinical excellence

What is the employee after?
 What can the employer give?

intangible

Autonomy
 Harness curiosity
 Challenging work
 Altruistic mission
 Collaborative culture

tangible

Flexibility
 Good income
 Conference leave allowance
 Travel
 The job you love

What might the employer be after?

A researcher who fits the institution's strengths and balances the institution's weaknesses
 A researcher whose expertise will add value to the Faculty's portfolio
 A researcher who is able to work well with colleagues
 A researcher who will give access to new opportunities, international research networks
 A researcher who brings in research funding
 Publications that raise the profile of the Faculty

Employee Value Proposition (EVP)

What meets the needs of both the researcher and the Faculty?

How do researchers
 view their careers?

Survey on dental research as a career

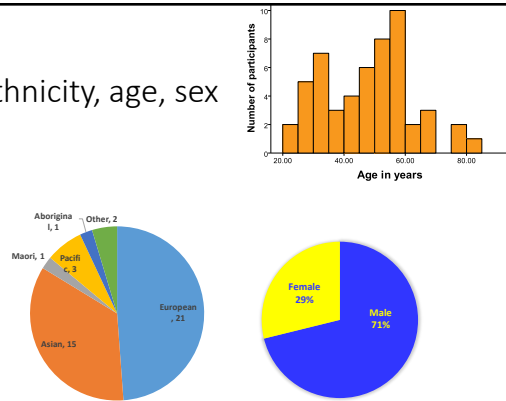
Mixture of quantitative and open questions

To investigate what researchers see as career issues

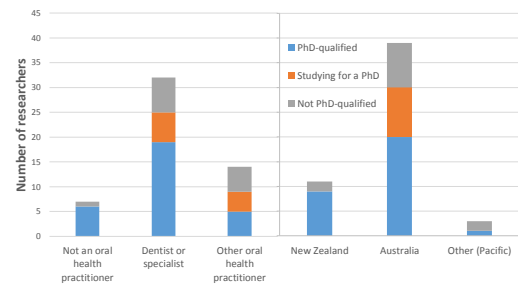
Work balance
 Career satisfaction
 Research productivity
 Ideas for improvements

n=54 participants, members of ANZ IADR
 Ethical approval from University of Otago Ethics committee, ref D15/260

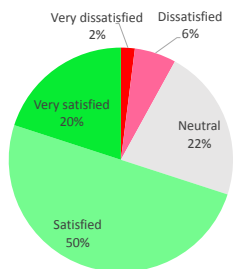
Ethnicity, age, sex



Qualifications & region



Career satisfaction



Research productivity

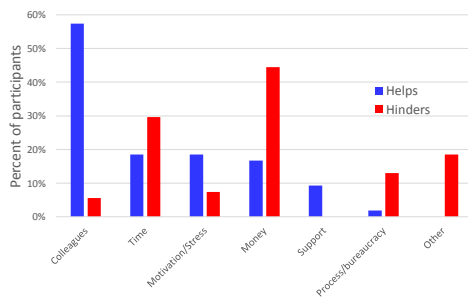
What helps?



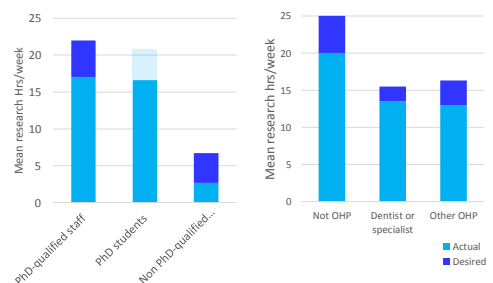
What hinders?



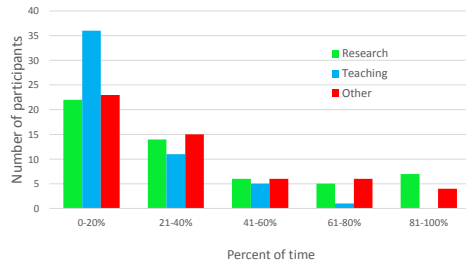
Research: help & hindrance



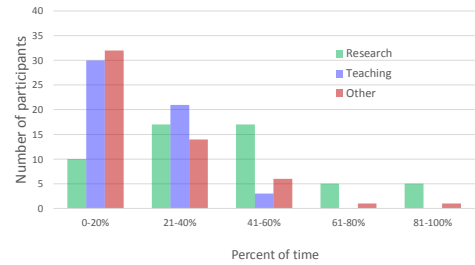
Research time by qualifications



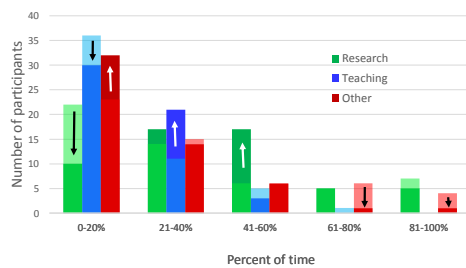
Work split - actual



Work split - desired



Work split - comparison



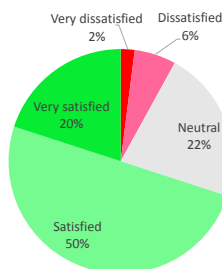
Time

Administration biggest time-consuming issue that researchers wanted reduced

Those engaging in clinical work were happy to be doing so

Desired teaching time depended on the individual

What would make your research career more satisfying?



'More funding for my research'

- 25 mentioned grant money
- "More grants"
 - "Access to research grants."
 - "More money to undertake research,"
 - "Easier access to research funds"
 - "Excellent financial support"
 - "Access to more funding"
 - "More funding!"
 - "Guidance in the early stages support during funding time"
 - "Enough funds for further research"
 - "More funding opportunities for small projects."
 - "More funding"
 - "More predictability in funding and less capriciousness in funding decisions."
 - "More funding"
 - "More research money"
 - "More funding including university, government and industry,"
 - "Better success in competitive research applications,"
 - "Better access for potential PhD students to gain funding and/or scholarships"
 - "More funding would enable a full scope of materials and support to necessary to undertake ideal research conditions."
 - "More funding available"
 - "Improved research funding to support research and research teams"
 - "Financial support for research."
 - "More opportunities for funding grants and fellowships specifically for dental hygienists, dental and oral health therapists"
 - "Receiving advice on information about possible funding sources instead of me having to search widely"
 - "Support for early career researchers from grants"
 - "Readily available small grants to do postgraduate research (up to \$4,000)"

'More income' & 'job opportunities'

"Fewer hours, more \$"
 "Faster promotion"
 "More income"
 "Reasonable income"
 "Better remuneration"
 "More competitive salary scales"

"Availability of job opportunities"
 "Job opportunities"
 "Stable career"
 "A job! Completed my PhD in 2014 but have not yet found a position in which I can use the research skills."
 "A part time or fulltime post in an academic environment"
 "To have an articulated pathway"

'Less admin/more time'

"Less administrative duties."
 "More time to do research....teaching and administration takes up most of my time..."
 "More time to do research."
 "More time for research"
 "More time allocated to research in dental schools."
 "Having more time left in my life"
 "Research is only one aspect of a dental academic's role and there is often insufficient time to devote to research due to other commitments."
 "Less time spent on administration, teaching commitment, grant writing and reviewing."
 "More time to write grants and papers,"

'Less bureaucracy'

"Less bureaucracy and work limitations"
 "Less meddling by universities."
 "Ethics approval process cumbersome"
 "Ethics committee's in my country to be more organized"
 "Less time on ethical approval"
 "The dental faculty is not supportive of public health research, so it is an uphill battle to undertake research"
 "To have a university that supports young researchers instead of threatening us all of the time with job security"
 "I was prevented from doing a phd as my original qualification was a diploma [I want to do a phd]"
 "Right now it seems like the unis are more interested in what we can teach on a day to day level than supporting our research efforts"

'Support & staffing'

"Excellent technical support and facilities"
 "More resources available for research."
 "Friendly and supportive working environment"
 "More staffing support"
 "Decent laboratory"
 "Some technical help"
 "More staff for teaching"
 "Support from senior supervisors/colleagues"
 "To work in a supportive team"
 "Opportunity to travel and meet other people"
 "To interact with a diverse group of people"
 "More locations to work from"
 "Work life balance"

'The joy of research'

"I really enjoy the data collection and data analysis phase of research, much more than writing papers. Unfortunately, publishing is a necessary part of our work."
 "Further support from different journals to make publishing process easier"
 "More clinically relevant studies."
 "Steady research discoveries"
 "To try to make a difference in dental education"
 "A closer link with policy makers and the real implementation of the findings in the population."
 "Ability to contribute to advancement of dental practice/education."
 "Recognition"
 "The opportunity to teach and mentor young academics"

Career advice?

Academic self-development

- Know your own career and make a plan.
- Talk to senior academics – select a mentor (or let them select you)
- Strive for collaborative, multi-investigator projects
- Build your profile: attend conferences, network, use academic social media
- Investigate issues that matter and interest you
- Contribute to scientific association(s)
- Apply for funding
- Unfinished/unpublished projects don't count

Research funding

- Select an appropriate topic
- Know what funding is on offer
- Collaborate with senior colleagues
- 'Pitch' your research
- Apply!

Dunedin Study funding

The age 26 dental data collection was supported by the New Zealand Dental Association Research Foundation (Auckland, NZ) and the University of Otago (Dunedin, NZ). The age 32 dental data collection was supported by Grant R01 DE-015260-01A1 from the National Institute of Dental and Craniofacial Research, National Institutes of Health, Bethesda, Maryland, and a program grant from the New Zealand Health Research Council (NZ HRC, Dunedin, NZ). The age-38 data collection was supported by a program grant from the NZ HRC. The Dunedin Multidisciplinary Health and Development Research Unit is supported by the New Zealand's HRC and Ministry of Business, Innovation and Employment (MBIE).

Final comments from survey respondents

"If it wasn't for the research side of my job, I wouldn't be doing it."

"I think the answers to the problems may be difficult to find."





Suggestions for further reading:

Royal Society report *The Scientific Century* (2010)
 Johnson AM *Charting a Course for a Successful Research Career*, 2nd edition Elsevier-Amsterdam (2011)

Acknowledgements

Professors Paul Brunton & Murray Thomson for comments on the draft survey
 Thank you to those who participated

