

# Chapter 3

## Who Are New Zealand's Early Career Academics?

### Introduction

In order to consider the interaction of various academic structures with the agency of the academics themselves, and how these interactions affect academic socialisation, we first have to know who the individuals are. Are New Zealand early career academics a homogenous group? Have they had similar prior experiences? Do they have the same qualifications? While there are various places to view current student and staffing numbers in New Zealand universities (the Universities New Zealand website, for example, and the Ministry of Education's annual Profile and Trends reports), no comprehensive investigation of the demographics and perceptions of academics in New Zealand universities has been undertaken in at least the last 8 years. The most recent projects have relied on census data – which includes academics outside the university sector, from polytechnics, wānanga, research institutes, and so on – or on a specialised subset of academics, for example, scientists. Therefore, this chapter offers insights into who New Zealand university academics are (early career academics in particular), where they come from, and what they do.

### Previous Studies on New Zealand Academics

Studies on the academic profession in New Zealand over the past few decades have used a wide variety of methodological approaches, from ethnographic studies to sociological critiques to case studies and interview/participant observer research (see Table 3.1). The topics are also broad, including workload and stress, gender issues, and the impact of the PBRF. Table 3.1 provides a sample list, definitely not exhaustive, of previous studies.

**Table 3.1** Previous studies on New Zealand academics

<b>National studies</b>	<b>Examples</b>
Surveys on workload commissioned by staff unions	Bentley et al. (2014), Boyd and Wylie (1994) and Chalmers (1998)
Workforce planning commissioned by Universities New Zealand	Nana et al. (2010)
Research capabilities among social scientists, commissioned by the Tertiary Education Commission	Wall et al. (2009) and Witten et al. (2006)
Science policy and working experience, commissioned by the New Zealand Association of Scientists	Sommer and Sommer (1997) and Sommer (2010)
<b>Smaller-scale studies</b>	<b>Examples</b>
The impact of the PBRF	Ashcroft (2007), Billot (2010), Middleton (2005), Waitere et al. (2011) (see Chap. 4 for more)
Academic experiences	Gilbert and Cameron (2002) and Sutherland and Petersen (2010)
Comparative data on salaries and status	Robinson (2006)
Gender and family issues in academia	Airini et al. (2011), Baker (2010, 2012), Doyle et al. (2004), Harris et al. (2013), Nasrudin and O'Donnell (2011) and Smith (2011)
Workload, stress, psychological contracts	Allan et al. (2007), Houston et al. (2006), Paewai et al. (2007), Sullivan (1997) and Tipples and Krivokapic-Skoko (1997)
Ethnographic studies and sociological critiques on tertiary education reform	Curtis (2008, 2016), Olssen and Peters (2005), Roberts (2007, 2012, 2013) and Shore (2010)

Several excellent books have also traced the changes in New Zealand's higher education system, and contributed to a sense of who academics in New Zealand universities are and what matters to them, including *A shakeup anyway: Government and the universities in New Zealand in a decade of reform*, by Ruth Butterworth & Nicholas Tarling (Butterworth and Tarling 1994); Michael Peters's edited collection on *Cultural politics and the university in Aotearoa/New Zealand* (1997); Donald Savage's (2000) report on academic freedom for the Association of University Staff (AUS), and accompanying collection of essays edited by Rob Crozier (2000); former Waikato Vice Chancellor Wilf Malcolm and History Professor Nicholas Tarling's *Crisis of Identity* (Malcolm and Tarling 2007); as well as books on the experiences of people within those systems, *Ara mai he tetekura* (Whitinui et al. 2013), and recent book chapters charting New Zealand's higher education history (Stefani 2015). The Ministry of Education and the Tertiary Education Commission also periodically provide reports on tertiary education facts and figures, sourced from the data sets that tertiary education institutions provide to the Ministry each year. One such report, 'The Changing Structure of Public Tertiary Education Workforce,' summarised changes in staffing in universities, polytechnics, and wānanga from 2001 to 2011 (Wensvoort 2012).

As far as I have been able to ascertain, however, there have been few large-scale projects on the academic workforce in New Zealand in recent years that have included surveys of a significant sample of the New Zealand university academic staff population. The New Zealand Association of Scientists conducted three surveys of New Zealand scientists in 1996, 2000, and 2008 and the most recent and comparative results were published in the *New Zealand Science Review* (Sommer 2010). That survey attracted a 38.6% response rate ( $n = 361$ ) and comprised 74 questions, the majority using a five-point response scale ranging from emphatic agreement to emphatic disagreement. More than half of the respondents were scientists based in universities, and the survey sought their views on science policy and their working experiences.

Another project was initiated by the Universities New Zealand (UNZ) Human Resources Committee Steering Group, who commissioned a report from Business and Economic Research Limited (BERL) that “quantified the supply and demand for academic staff within New Zealand’s universities between 2008 and 2020, and identified strategies to address the issues that may arise during this period” (Nana et al. 2010, p. 5). Nana et al. (2010, p. 9) found that the “New Zealand university sector is facing a future with caps to funded domestic student numbers, a significantly older than average academic workforce and increasingly intense global competition for academics.” They argued that these conditions mean that the sector faces a challenge to make an academic career an attractive opportunity.

Both the Sommer (2010) and Nana et al. (2010) reports include demographic data on academics in New Zealand universities, but the overall population and the general focus of each of their reports are different from the focus of this book. The NZAS project (Sommer 2010) focussed on *scientists* across New Zealand, employed in universities, polytechnics, Crown Research Institutes, Research Associations, and museums. University staff made up just over two-thirds of the research population and just under half of the respondents. By contrast, the UNZ Human Resources project (Nana et al. 2010) was aimed at identifying strategies for dealing with the economic and workforce planning realities of New Zealand’s changing academic workforce and included data collected from all eight New Zealand universities’ HR departments. A snapshot was taken of the academic workforce at each New Zealand university in 2008 and included such information as position and employment category, discipline or business unit, age and sex, length of service, and turnover. The project compared some of this information with 2006 New Zealand Census data, particularly on ethnicity, nationality, age, and sex. The views and opinions of the academic staff themselves were not sought in the UNZ project, in contrast with my survey which sought to canvas the experiences and opinions of early career academics, as well as the demographics of that population in New Zealand universities. These two surveys provide useful points of comparison, however, as do surveys conducted internationally by countries involved in the Changing Academic Profession (CAP) project. At different points in this chapter, I draw on data from both the New Zealand surveys, and from the CAP international surveys.

**Table 3.2** Staff and student numbers at New Zealand universities in 2015

University	Students (EFTS)	Total Staff (FTE)	Academic Staff (FTE)	Staff:Student Ratio
Auckland	33,489	5075	2183	1:15
AUT	19,798	2349	1135	1:17
Waikato	10,018	1510	647	1:15
Massey	18,688	3115	1109	1:17
Victoria	16,978	3041	968	1:18
Canterbury	11,931	1866	708	1:17
Lincoln	2934	682	236	1:12
Otago	18,421	3803	1619	1:11
<b>Total</b>	<b>132,257</b>	<b>21,441</b>	<b>8605</b>	<b>1:15</b>

Sources: The Universities New Zealand website at <http://www.universitiesnz.ac.nz/nz-university-system> and the eight universities' 2015 annual reports

## Academic Staff and Students in New Zealand Universities

At the time of writing, the most recent data available on academic staff employed at universities in New Zealand on the Universities New Zealand website were for the academic year 2015, and show that in 2015 there were more than 21,000 full-time equivalent staff – just over 8600 of whom were academics – and approximately 133,000 equivalent full-time students (EFTS) in New Zealand's eight universities (see Table 3.2).

As reported in Chap. 2, New Zealand, like many other countries around the world (Cummings 2015), moved from an elite to a mass system of tertiary education in the 1990s, with the number of people participating in tertiary education in New Zealand doubling between 1985 and 2001 (Crawford 2016) and increasing a further 25% since then to grow to one of the highest participation rates in the developed world. It is not easy to work out participation rates in university education in New Zealand because statistics are reported for the whole tertiary sector, and some polytechnics and wānanga have degree-granting status, but the most recent data suggests that 24.9% of 18–24 year olds in New Zealand are participating in degree-level education (Bachelor's degrees and beyond) (Ministry of Education 2015, p. 10). The proportion of 18–20 year olds participating in tertiary education in New Zealand is above the OECD average, and there is comparatively very high participation of students over the age of 30 years (Crossan 2015).

New Zealand also has a very high percentage of part-time students, which leads to longer completion rates (Scott 2009). While New Zealand, since the 1990s, had one of the most open systems in terms of allowing all school leavers who met university entrance standards, and anyone else 20 years of age or over, the opportunity to study at university, we also had one of the worst qualification completion rates in the OECD. In 2005, less than 60% of New Zealand students left university having completed a first degree; the OECD average was 69% (Healey and Gunby 2012). We were fourth last, only just ahead of Hungary, the US, and Italy. That appears to

have improved recently, with Universities New Zealand (2016) claiming that New Zealand now has some of the “best degree completion rates in the world – 17% who start at a university in NZ do not have a qualification within 8 years compared with 18% in the UK, 27% in Australia, 42% in the US, ~50–55% in South America and Asia”. The Tertiary Education Strategy 2010–2015 had seen a shift from guaranteeing open access to ensuring fewer failures and incomplete qualifications, by imposing financial penalties on universities for low completion and progression rates, and by making access to student loans and allowances conditional on passing at least half the credits undertaken in two successive years (Healey and Gunby 2012, p. 40). Simultaneously, the government prioritised attention on the low participation and completion rates of Māori<sup>1</sup> students. In 2015, just 10% of New Zealand university students identified as Māori, which is lower than the percentage of international students at New Zealand universities (16%), and significantly lower than the percentage of Māori (15%) in the general New Zealand population. Nevertheless, Māori participation in university education is slowly increasing.

Academic staff numbers have also increased, although not in line with the increase in student numbers. From the universities’ 2015 annual reports, I identified the numbers of academic staff at each university and then calculated the staff:student ratio by dividing the total EFTS by number of academic staff (see Table 3.2). More than two decades ago, when Boyd and Wylie (1994) surveyed New Zealand academics, they identified a steady deterioration in “the total staff:student ratio from 1:10.5 in 1980 to 1:12.5 in 1987; then a faster deterioration to 1:17.5 in 1991” (p. 10). By 1995, the staff:student ratio was 1:18.5 (Roberts 1999, p. 70). Wensvoort in a 2012 report for the Ministry of Education on the changing structure of the New Zealand tertiary education workforce found that the staff:student ratio in universities fluctuated between 2001 and 2011 but seems to have settled at 1:16, which is close to the 1:15 indicated by my data in Table 3.1 from 2015. This contradicts data in the Ministry of Education’s annual profile and trends report which shows that the staff:student ratio at universities in New Zealand was up to 18.7 in 2004 and had settled at 18.4 in 2014 (Ministry of Education 2016). Regardless of the actual figures, Crossan (2015), in an analysis of how New Zealand compares to other OECD countries, notes that “at degree level, New Zealand has more students per teacher on average” (p. 3).

The CAP project tends to differentiate between two levels of academic staff in most countries: junior academics, those who have not yet achieved tenure in the North American context or are on the lecturer or senior lecturer scale in UK universities, for example; and senior academics, who have tenure or are at professorial level. Data available in the year before my survey was conducted show that there has been a significant decrease in the percentage of “junior” academics in New Zealand universities (classified in Table 3.3 as lecturers and senior lecturers) compared with more senior academics at professorial level (including associate professors). Junior academics represented 56% of New Zealand’s university academic workforce in 2001 but just 38% in 2011.

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<sup>1</sup>Māori are the Indigenous people of New Zealand.

**Table 3.3** Proportions of academic staff by role in New Zealand, 2001 and 2011

Role	2001	2011
Lecturers (including Senior Lecturers)	56%	38%
Professors (including Associate Professors)	14%	17%
Other academic staff (teaching only or teaching/ research)	22%	32%
Research-only staff	8%	13%
Total	100%	100%

Source: Percentages calculated from data in Wensvoort (2012, p. 52)

This decrease is covered in part by a small increase in the percentage of professorial staff, but also by significant increases in the percentages of research-only staff and “other academic staff,” a category which includes assistant lecturers, senior tutors, tutors, visiting academics, and teaching fellows, many of whom are often on casual contracts.

## Appointment Type and Status

In this book, I concentrate on the findings from a survey of *early career academics* in New Zealand universities ( $n = 538$ ). The survey did not capture the views of *all* academics, and undoubtedly missed the views of some early career academics, particularly those on short-term contracts because, as explained in Chap. 1, it took the research population from those early career academics included in the Performance Based Research Fund census in the last round in 2012. The PBRF guidelines stipulate that all teaching and/or research staff who worked more than the equivalent of 1 day a week (0.2 Full Time Equivalent or FTE) and on contract/s of at least 1 year had to submit a portfolio, regardless of how many contracts it took for them to be considered more than 0.2 FTE. For example, if a person was on two contracts of 0.15 FTE each, and both contracts were for at least a year, then those two contracts were considered together as 0.3 FTE and the person was expected to be included in the PBRF. Therefore, my survey should have captured a good many contractual, as well as permanent, employees (at least those on contracts extending beyond 1 year). What is clear from the survey is that many early career academics *start* their academic careers as part-time and/or contract staff, rather than in full-time, continuing appointments, as demonstrated in Tables 3.4 and 3.5.

Sixty-three per cent of respondents were first appointed on contract, and into full-time roles (73%), but the vast majority are now both permanent (72%) and full-time (86%), as Table 3.5 shows. The percentage of academics in contract positions compares favourably with data from similar countries in the CAP project (Australia in particular, whose percentage of contract academics is higher at 38%) (Bennion and Locke 2010, p. S23).

**Table 3.4** Appointment type (first and current)

Appointment type	First appointment			Current appointment		
	% All	% Men	%Women	% All	% Men	% Women
Permanent/continuing	37	41	34	72	75	70
Contract	63	59	66	28	25	30
Total	100%	100%	100%	100%	100%	100%

**Table 3.5** Appointment status (first and current)

Appointment status	First appointment			Current appointment		
	% All	% Men	%Women	% All	% Men	% Women
Full-time	73	84	66	86	95	80
Part-time	27	16	34	14	5	20
Total	100%	100%	100%	100%	100%	100%

Gappa et al. (2007) identify a trend towards fewer tenure-track and fewer full-time academic appointments between 1987 and 2003 in the US and similar patterns are detected in Europe (Enders and de Weert 2009), while Coates et al. (2009) comment on the increasing “casualisation” of Australian academia. Wensvoort (2012) has noticed a similar, though less pronounced trend in New Zealand, with 41% of all academic staff in New Zealand universities in 2011 apparently employed part-time, compared with 34% in 2001. Significantly, as Tables 3.4 and 3.5 show, women are more likely to be in part-time roles ( $\chi^2(1) = 21.62, p < 0.001$ ), and more likely to have been originally appointed as part-time ( $\chi^2(1) = 18.84, p < 0.001$ ). I pick up on this particular finding again in Chaps. 4 and 6.

## Academic Discipline Area

The discipline areas in Table 3.6 have been taken from the 2012 Performance Based Research Fund Quality Evaluation Guidelines panels and subject areas.

The biggest groups of respondents to the early career survey came from Health and Medicine, the Biological Sciences, and Social Sciences, which also corresponds with the staff groupings in the PBRF, where we find the biggest numbers of staff in those three areas, and in Business and Economics, who were slightly under-represented in this survey.

## Nationality and Ethnicity

New Zealand has recently been recognised as having one of the most international university systems in the world, with seven of its eight universities named in the top 112 “most international universities” according to the Times Higher Education

**Table 3.6** Academic discipline area (percentage of respondents)

Discipline	% of early career academics responding to this survey	% of academics in each subject area in 2012 PBRF
Biological sciences	13	11
Business & Economics	6	11
Creative & Performing Arts	3	6
Education	7	8
Engineering, Technology & Architecture	8	9
Health & Medicine	23	18
Humanities & Law	8	10
Māori Knowledge & Development	3	2
Mathematical & Information Sciences & Technology	4	7
Physical Sciences	7	7
Social Sciences & Other Cultural/ Social Sciences	16	11
Multidisciplinary	1	0
Other (please specify)	1	0
Total	100%	100%

university rankings.<sup>2</sup> This international outlook is reflected in the reality that many of our academic staff are foreign-born. More than half of the respondents (56%) to my survey were not born in New Zealand. This contrasts with other systems, such as Europe, where “international hiring is still rather rare in many countries” (Musselin 2013, p. 33), and represents a much higher percentage of foreign-born staff than any of the countries in the CAP survey. Only Australia comes close with 46% of senior academics foreign-born, but only 37% of junior academic staff (Teichler et al. 2013, p. 85).

Hiring international academics is a long-time trend in New Zealand universities. Back in 1995, Joanna Kidman (1999) reported that slightly over half of all new appointments in New Zealand universities were from applicants based overseas, which at first glance would seem to mirror my recent data. However, many of the 1995 “international” appointees were New Zealanders returning home. More were appointed from North America than from Britain in 1995. Kidman argued that this demonstrated a shift away from our British colonial origins, and that argument could be made even more strongly now. The bulk of all appointments in 1995 comprised candidates who applied from New Zealand, North America, Australia, and the United Kingdom or Europe (with a very tiny percentage coming from outside these areas). By contrast, in the recent survey, only 44% of early career academics are New Zealand-born, and the rest were born in countries all around the world,

<sup>2</sup>These rankings measure the percentage of international staff and students, and the proportion of research papers published with at least one co-author from another country.



**Table 3.7** Region and country of birth for respondents

Region	Percentage	Countries (in descending order)
New Zealand	44%	
United Kingdom	12%	England, Scotland, Northern Ireland, Wales
Europe	10%	Germany, The Netherlands, France, Italy, Spain, Russia, Ukraine, Poland, Ireland, Croatia, Czech Republic, Belgium, Slovakia, Malta
North America	9%	United States, Canada
Asia	8%	India, China, Japan, Taiwan, Korea, Malaysia, Bangladesh, Turkey, Sri Lanka, Hong Kong, Vietnam
Australia	4%	Australia
Africa	3%	South Africa, Zimbabwe, Kenya
Latin America	1%	Brazil, Mexico, Venezuela, Puerto Rico
Pacific Islands	1%	Fiji, Samoa, Tonga
Unspecified	8%	

representing all regularly inhabited continents. The United Kingdom comprises the highest percentage of respondents from outside New Zealand (12%), followed closely by Europe (10%), North America (9%), Asia (8%), Australia (4%), Africa (3%), and Latin America and the Pacific Islands both at 1%. Table 3.7 identifies their countries and regions of birth, showing that more than half our early career academics are from very diverse national backgrounds.

The high number of international academic staff is also reflected in New Zealand's high percentage of international students, particularly at doctoral level. At 16%, New Zealand has one of the largest proportions of tertiary students who are international (Crossan 2015) compared with the OECD average of 9%. At doctoral level, however, the percentage is even higher, with 43% being international students (PhD students from overseas pay domestic fees in New Zealand, which goes some way to explaining this high proportion).

That more than half (56%) of New Zealand's early career academics were born overseas indicates an acceleration of the trend identified in Nana et al.'s 2010 report of an increase in overseas-born academics from 32% of the tertiary academic population in New Zealand in 1991 to 39% in 2006 and now 56% (of early career academics) in 2012. Furthermore, in the 2006 sample, under half (42%) of those overseas-born academics had been in New Zealand for 9 years or less. By contrast, my responses indicate that the majority (71%) of overseas-born academics in early career positions in New Zealand universities in 2012 have been in New Zealand for fewer than 10 years (see Table 3.8).

These data remind us that hiring internationally brings benefits and challenges. As Enders and de Weert (2009) note, academics have to "increasingly navigate between global concepts and local agendas" (p. 260). Their socialisation is not just to a new profession, but also to a new country. Those responsible for inducting, managing and supporting early career academics need to be mindful of how much newcomers to the country might or might not know about New Zealand's cultures

**Table 3.8** Length of time in New Zealand for respondents born overseas

Time in New Zealand	%
Most of my life	9
15 years or more	12
10–14 years	8
5–9 years	30
Fewer than 5 years	41
Total	100%

**Table 3.9** Ethnicity (percentage of respondents)

Ethnicity	%
Caucasian	79
Māori	6
Pacific Islander	2
Asian	10
Other <sup>a</sup>	3
Total	100%

<sup>a</sup>Other was self-reported and included Hispanic, Latin American and African

and education systems (both school and tertiary level). Allowing some time to transition smoothly from one country to another (especially if moving with a family and needing to find a home, schools, and/or daycare for the children, and so on) is important. Furthermore, some support for raising awareness and knowledge of Māori culture and language may be appropriate for new academics from overseas. Of course, such support would likely be welcomed by many other early career academics as well, especially given that so few have Māori heritage themselves. The ethnicity of respondents is outlined in Table 3.9.

Nana et al. (2010) found that “between 1991 and 2006, the proportions of the tertiary teaching workforce identifying themselves as Māori or Pasifika has remained unchanged, while the proportion reporting themselves as Asian has increased noticeably” (p. 80). By contrast, the New Zealand Association of Scientists Survey reported an increase for Māori scientists from 0.7% in 1996 to 1.7% in 2008 (Sommer 2010). The percentage reported by Sommer is still considerably lower than the percentage of Māori in the overall New Zealand population, however. While my findings in terms of ethnicity show a higher proportion of Māori (6%) and Pasifika academics (2%) than in the survey of scientists (Sommer 2010), the percentages of early career academics of Māori and Pasifika descent are significantly lower than in the national population (with 15% Māori and 7% Pasifika reported in the 2013 New Zealand census). My findings indicate that there may be a higher percentage of Māori and Pasifika academics starting to enter the academic workforce in recent years, which is encouraging, but more Māori and Pasifika academic staff will need to be recruited to come close to matching the numbers of students from these priority groups. More data and insights on the experiences of Māori academics in New Zealand universities are provided in Chap. 7.

**Table 3.10** Age of respondents

Age group	%
Under 30 years	5
30–34 years	29
35–39 years	30
40–44 years	16
45–49 years	10
50 years or more	10
Total	100%

## Age

The majority (64%) of respondents are under 40, which is to be expected given that my criteria sought respondents within the first 7 years of their academic career. Clearly, however, many early career academics in New Zealand have come into academia from another career, with more than a third (36%) of respondents 40 years of age or over, as Table 3.10 shows. This corresponds with Australian research on early career academics, which found that 38% of the 522 respondents to a survey of ECAs at three Australian universities were 36 years old or over (Matthews et al. 2014).

It is important to keep this in mind when designing support programmes and deciding how best to induct, orient and provide information for new academics: not all early career academics will need the same level of input in terms of career planning, for example, but may need more opportunity to refine their research or teaching skills, depending on prior experience, or to find networks of like-minded colleagues. One survey respondent commented that, “as an older early career academic there are a lot of extra barriers to overcome and it can be quite lonely at times” [Postdoc, Education, Female, 50+]. By contrast, other older early career academics may find the transition less daunting and take quite a different attitude towards the career change, as the following comment indicates:

My situation is quite different than many other early career academics because I was 55 when I was hired here (my first academic job), I am part-time (0.4 FTE), and I had an abundance of teaching experience in a variety of settings before I began academic teaching. I have been astonished at the amount of support available for staff...It appears to me that there is a large quantity of it, which I think is wonderful. [Lecturer, Humanities and Law, Female, 50+]

Early career academics with experience in other industries or professions may also have a lot to offer in terms of mentoring other staff and providing insights from outside the university, as well as possessing leadership or management skills that younger early career academics may not have had the time to develop yet.

## Women and Men in Academia in New Zealand

More women (60%) than men (40%) responded to the survey. This contrasts with the UNZHR stocktake data, which showed that 54% of the total academic workforce is made up of men and 46% women (Nana et al. 2010, p. 64). However, given that there are fewer women than men in senior academic positions in New Zealand universities (McGregor 2012, p. 138) and that my target population was *early career* academics, it is not surprising that more women responded. These percentages also correspond with figures in other similar countries, such as Australia, where 63% of junior staff are women, and the UK (52%) (Teichler et al. 2013, p. 78).

Women are slightly over-represented among the older participants in the sample (especially over 50 years) (see Fig. 3.1). This was a non-significant trend ( $\chi^2(5) = 9.59, p = 0.09$ ), and contrasts with Nana et al.'s (2010) finding from the 2006 Census data, which shows that the proportion of female academics in tertiary institutions nationwide declines markedly after the age of 55. It also contrasts with Sommer's (2010) finding that the majority of young scientists are women (women outnumbered men four to one in the under-35 age group in his survey). These differences could be attributed to the fact that my survey sought data from early career academics at universities only, whereas the Nana et al. (2010) finding from the Census data was from across the tertiary workforce (including institutions other than universities), and the New Zealand Association of Scientists survey (Sommer 2010) incorporated all scientific research institutions in New Zealand, including universities, polytechnics, museums, and Crown Research Institutes. Regardless of the difference, the data from all three surveys emphasise the need to work on evening out the representation of women and men in academia.

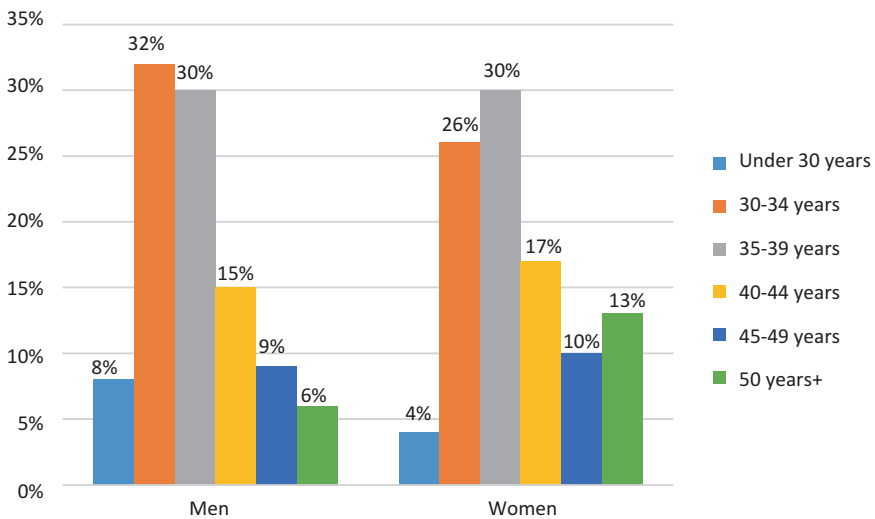


Fig. 3.1 Age group of respondents (by gender)

**Table 3.11** Current academic level (percentage of respondents)

Current Academic Level	% All	% Men	% Women
Senior Lecturer <sup>a</sup>	21	29	17
Lecturer	52	50	53
Post Doc/ Research Fellow	23	18	25
Other <sup>b</sup>	4	3	5
Total	100%	100%	100%

<sup>a</sup>Includes two Associate Professors (Two respondents were already Associate Professors, but were still considered early career academics because they earned their doctorates in 2004 and 2005, and were appointed to their first academic jobs in 2009 and 2005, respectively. One started in 2009 as a Senior Lecturer and was promoted to Associate Professor in 2011; the other started in 2005 as a Post-Doc and was promoted to Associate Professor in 2009. I included them in with Senior Lecturers for reporting purposes.)

<sup>b</sup>If respondents chose “Other”, they were asked to name their role. Their responses included the following kinds of roles: tutor, field work coordinator, director, professional practice fellow, and programme leader

Table 3.11 shows the spread of men and women across academic levels. The percentage of women in the higher ranks of academia continues to be disturbingly low.

The New Zealand Human Rights Commission *Census of Women’s Participation* (McGregor 2012) reports that only 24.38% of Associate Professors and Professors in New Zealand universities are women – a small, but important, 8.56% increase since 2003. However, these data contrast negatively with the situation in Australia and the UK, where women reportedly make up a much higher 39% and 33%, respectively, of senior academics (Teichler et al. 2013, p. 78). My data show that despite a higher percentage of men than women under 30 years of age in academia, men and women are not equally represented in the lower levels of academia ( $\chi^2(5) = 13.87, p < 0.05$ ). There is a significantly higher percentage of women than men at the lower ranks (Lecturer and below), and in jobs where contracts are often not permanent (such as Post-Doctoral positions and Tutoring roles). Because of these differences, I consider the gender of respondents as a factor in my investigation of early career academics’ experiences at several points in this book.

## Academic Qualifications and Training

The experiences that academics have during their graduate training have been referred to as “anticipatory socialization” (van Maanen 1976; Austin 2002) and, if well-structured and supported, can help to prepare doctoral students for an academic life. Even if the doctoral experience is not a positive one, it is still a socialising experience and, good or bad, has significant bearing on future academic success (Austin 2002; Bazeley 2003; Billett et al. 2005; Fairweather 2002; Laudel and Gläser 2008; Lindholm 2004; Williamson and Cable 2003). Life experience in other

**Table 3.12** Doctoral qualifications

Qualification	New Zealand Born	Overseas Born	All
New Zealand Doctorate	49%	29%	38%
International doctorate	14%	54%	37%
Working towards NZ doctorate	16%	6%	10%
Working towards Int'l doctorate	2%	2%	2%
None of the above	19%	9%	13%
Total	100%	100%	100%

**Table 3.13** Origin of doctoral degree

Qualification	New Zealand Born	Overseas Born	All
New Zealand Doctorate	78%	35%	51%
International doctorate	22%	65%	49%
Total	100%	100%	100%

industries and professions before entering academia can also have a socialising effect, so I investigated various aspects of the prior experiences that New Zealand early career academics might have had before taking on their current academic roles. Table 3.12 shows that 75% of all respondents have a doctoral degree and 12% are working towards a doctorate. This compares favourably with Australia and the United Kingdom, where the percentage of early career academics holding doctoral degrees is 72% and 80% respectively (Bennion and Locke 2010, p. S10).

Emphasising the international nature of New Zealand's universities, of those with doctoral degrees, more than half (51%) earned them in New Zealand, and just under half (49%) from universities overseas (see Table 3.13). Despite a common understanding that many New Zealand academics are "expected to spend time overseas and ideally get one of their postgraduate degrees at a non-New Zealand university before returning home" (Bönisch-Brednich 2014, p. 19), my data show that a significant majority (78%) of the New Zealand-born or New Zealand-raised (those who indicated that they were born overseas but have spent most of their lives in New Zealand) early career academics earned their doctoral degree in New Zealand (see Table 3.13). Among the international academics, just under one third have a New Zealand doctorate. These data compare with data from the CAP project which show that in most countries, a high percentage of academics have earned their doctorates from the country in which they are currently employed (Bennion and Locke 2010, p. S11).

## The Nature of Doctoral Degrees in New Zealand

New Zealand offers a few professional doctorates, such as the EdD (Doctor of Education) and the DMA (Doctor of Musical Arts), which tend to be coursework based, with a shorter thesis or exegesis requirement. However, the majority of

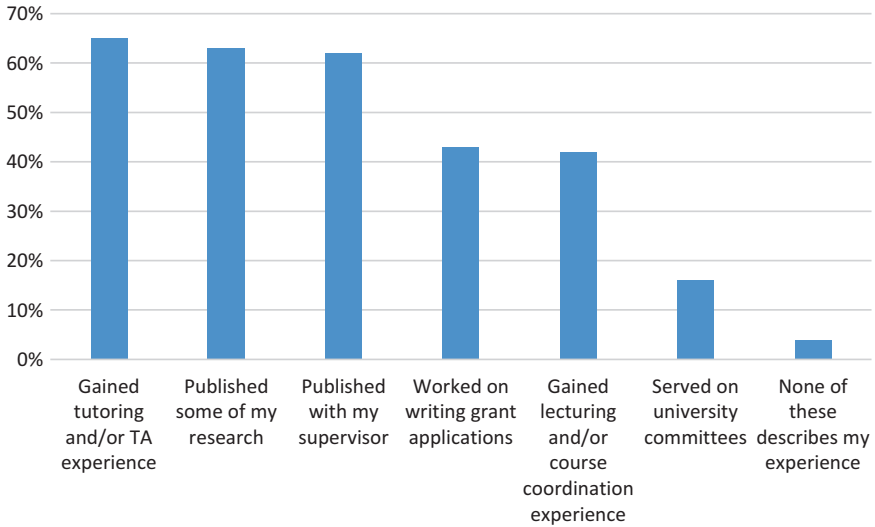
doctoral degrees in New Zealand are Doctors of Philosophy (PhD), and the New Zealand PhD experience is, in the main, a thesis-only one. That is, students enrolled for a PhD in New Zealand are usually not expected to attend any classes or courses, or engage in teacher training (although both courses and training may be available to them), nor are they required to sit written examinations. Some students with scholarship funding may have extra expectations placed on them as a condition of their scholarship.<sup>3</sup> However, the main responsibility of PhD students in New Zealand is the completion of a thesis (usually up to 100,000 words long) under the supervision of at least two supervisors. Often there will be a period of provisional registration during which some courses *may* be undertaken to address any deficiencies in research methods or expertise, or language ability, for example, and during which the candidate's thesis proposal is usually considered by a committee before full registration in the degree is confirmed and the thesis itself undertaken. Once complete (and PhD completion times in New Zealand are in the range of three to 5 years), the thesis is then examined by a committee comprised, usually, of an examiner from the university at which they have completed the thesis, another New Zealand examiner, and an examiner from outside New Zealand. Increasingly, there is now also an oral examination process after the examiners' reports have been received.

## Training During Doctoral Degrees

Even though New Zealand doctoral degrees tend to be thesis-only, as we have seen, not all early career academics in New Zealand have doctoral degrees from New Zealand (49% earned their doctorate outside New Zealand). Furthermore, not all early career academics now teaching in New Zealand limited their doctoral experience to the thesis alone. Figure 3.2 shows some of the non-thesis-related experiences in relation to teaching, research, and service, that early career academics gained during their time as doctoral students. Bennion and Locke (2010) have noted that doctoral training is often skewed towards research and research-related activities “with virtually no training in pedagogy and ... limited opportunities to teach” (p. S14). Similarly, Austin (2002) in her extensive work on graduate students in the United States has noted “the lack of systematic professional development opportunities, minimal feedback and mentoring from faculty, and few opportunities for guided reflection” (p. 104) and indicates that assistantship opportunities differ by discipline, with a research assistantship more common in the sciences and teaching assistantships more common in humanities and social sciences.

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<sup>3</sup>For example, at my university, until 2015, PhD students with a university scholarship were expected to provide, each year, 150 h of service (in the form of tutoring, lab work, or research assistance, for example) to the department in which they were enrolled for their thesis. This requirement has recently ended, however, as it was inconsistently applied and too difficult to monitor.



**Fig. 3.2** Other experience and training during doctoral degree

Figure 3.2 shows that the majority of respondents were offered both research *and* teaching experiences during their doctoral training, with fewer being given (or taking up) service opportunities. Those who answered that none of these statements described their experience during their doctorate, tended to fall into one of three camps: either they were working full-time as academics during their PhD and did not see the PhD as the training ground implied by these questions, or they were working off campus and/or taking care of children so only had time for their thesis, or they were distance students who were not necessarily able to take advantage of these opportunities even if they were offered.

Nearly two-thirds of respondents indicated that they published some of their research during their doctorate, either with or without their supervisor/s, which appears to be a slightly higher percentage than doctoral students in Europe, 52% of whom indicated that they undertook research projects with faculty (Ates and Brechelmacher 2013, pp. 19–20). Those in my study who did not publish during their doctoral training, either independently or with their supervisor, recorded a lower overall research output across their career to date than those who published during their doctorate (see Chap. 4 for more data on research output and activity).

The experience of serving on university committees is also similar in New Zealand and Europe with 14% of European doctoral students reporting service on a departmental or institutional committee as part of their doctoral training (Ates and Brechelmacher 2013, pp. 19–20) and 16% of respondents in New Zealand reporting university committee service during their doctorates.



**Table 3.14** Teaching qualifications of early career academics in New Zealand universities

Type of teaching qualification	Percentage
Higher education teaching qualification	15%
Other teaching qualification	13%
No teaching qualification	70%
Currently studying towards a teaching qualification	2%
Total	100%

## Teaching Qualifications

While the majority of early career academics in New Zealand universities appear to have gained teaching *experience* (see Fig. 3.2), they do not, in the main, have actual teaching *qualifications*. Table 3.14 shows that 15% have a higher education teaching qualification and 13% have another teaching qualification, while only 2% report that they are studying towards a higher education teaching qualification at present. This contrasts with 18% of the European doctoral students having received any instructional skills training or learning about teaching methods (Ates and Brechelmacher 2013, pp. 19–20), 14% in Australia and the UK, 20% in Canada, and 34% in the US (Bennion and Locke 2010, p. S14).

The pattern of teaching qualification is not consistent across the eight universities, however, as Table 3.15 shows. AUT (Auckland University of Technology), the newest of New Zealand’s eight universities, which converted from an institute of technology to a university in 1999, has a much higher percentage (60%) of early career academics with a teaching qualification, and with a higher education teaching qualification specifically (33%), than any other university. About one third of early career academics at Waikato and Canterbury have a teaching qualification of some description (with a significant percentage of these being overseas qualifications), while the other universities have less than a quarter either holding or studying towards a teaching qualification of any description.

It is clear from these data on respondents’ qualifications and postgraduate experiences that early career academics in New Zealand universities have come into academia from a variety of backgrounds and with a diverse array of prior training and experience. Most (75%) have a doctoral degree and of those who do not, more than half are working towards attaining one. During their doctoral (or other higher degree) training, the majority gained both research and teaching experience, in terms of publishing and tutoring, although less than half gained lecturing and/or course coordination experience, and few have actual teaching qualifications.

**Table 3.15** Percentage of respondents with teaching qualifications at each university

University	NZ Hi Ed <sup>a</sup>	Overseas Hi Ed <sup>b</sup>	Other NZ <sup>c</sup>	Other overseas <sup>d</sup>	Studying towards <sup>e</sup>	None <sup>f</sup>	Total %
Auckland	5	9	4	6	1	75	100
AUT	33	0	18	9	11	36	107
Waikato	10	10	15	0	5	66	106
Massey	9	7	4	2	2	77	101
Victoria	4	4	9	12	2	74	105
Canterbury	7	11	13	7	0	69	107
Lincoln	8	0	0	0	0	92	100
Otago	3	6	4	4	1	82	100
Men	7	8	3	4	3	75	100
Women	9	6	10	7	1	67	100
All	8%	7%	7%	6%	2%	72%	102

NB: Some respondents have more than one qualification, which is why the totals do not add up to 100%.

<sup>a</sup>New Zealand certificate or diploma in Higher Education Teaching & Learning (or equivalent)

<sup>b</sup>Overseas certificate or diploma in Higher Education Teaching & Learning (or equivalent)

<sup>c</sup>Other New Zealand teaching diploma or degree

<sup>d</sup>Other overseas teaching diploma or degree

<sup>e</sup>Currently studying towards a Higher Education Teaching & Learning certificate or diploma

<sup>f</sup>None of these describes my teaching qualifications

## Summary

In this chapter, I have outlined the demographics of my early career academic respondents. Not surprisingly, given what we know from earlier work (Nana et al. 2010; Sommer 2010) early career academics are predominantly female, Caucasian, and under 40 (although 36% of all respondents are over 40). Early career academics in New Zealand universities are also from a diverse range of national, ethnic, and doctoral backgrounds, with more early career academics born overseas than in New Zealand – a much higher percentage than any of the countries in the CAP survey. Of those born outside New Zealand, the majority (71%) have been in New Zealand for fewer than 10 years, so considerable attention needs to be paid to appropriate socialisation into not just the individual academic's new university, but also New Zealand's cultures and education system.

My data also confirm earlier New Zealand findings (Doyle et al. 2004) that women are over-represented in the lower ranks of academia. It is worrying that, despite the increasing percentage of women joining the academic workforce, they continue to be under-represented in permanent, full-time roles, and at the more senior levels of leadership in New Zealand universities (more so, it appears, than in many other countries). Even in my survey of *early* career academics, this discrepancy was noticeable, with men over-represented at the level of senior lecturer. New Zealand universities will need to continue to support programmes like Women in

Leadership (see Chap. 2), and undertake ongoing research across all disciplines (such as that recently conducted in Political Science (Timperley 2013) and in Science (Gaston 2015)) in order to identify and rectify the issues that allow these discrepancies to remain. Chapter 6 looks more into gender issues for early career academics in New Zealand universities.

Also noticeable in my survey of early career academics in New Zealand universities was that not all are young, despite being fairly new to academia. A significant percentage (36%) are over 40 years of age and inevitably bring considerable experience with them from their previous careers and jobs. We could probably harness this expertise more effectively than we currently do, and we need continually to be aware that not all early career academics will have the same prior experience, training expectations, resource needs, or desires for support. Their socialisation into the academic profession will differ, depending on where they did their doctoral degree and whether they have gained other career experiences outside academia, and we should be creating programmes of support for early career academics that identify and celebrate their differences and enable them to use their strengths.

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