

Chapter 5

Satisfaction Among Early Career Academics in New Zealand Universities: A Conceptual Model Tested

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Introduction: Who Cares If Academics Are Happy, Anyway?

Satisfaction matters in academia. As Chap. 4 has shown, early career academics in New Zealand work hard in a wide variety of roles, with varying responsibilities, expectations, aspirations, and influences. However, the general public appears still to carry a perception of academic life that is out of step with what academics actually experience. While research has shown that academics experience higher levels of stress than professionals in similar occupations (Bentley et al. 2014; Winefield et al. 2008), various media reports continue to perpetuate the myth that academics have it easy, reminding the public that academics teach only a few hours per week, take long and regular “holidays”, and get to travel internationally to talk about their research without having to meet excessive deadlines or answer to many bosses. Such myth-making was evident in a 2013 article in *Forbes* magazine, that reported on the, apparently, “least stressful jobs of 2013” and at the top of the list was “university professors” (Adams 2013). An outcry ensued and the report now includes an addendum admitting that the methodology for deciding upon the “least stressful” jobs weighs heavily in favour of stressors relating to life-and-death risks, physical demands and environmental conditions (making the jobs of “logger” and “oil-rigger” top of the *most* stressful list, for example). We note that while the 2016 version of the list still includes “university professor” in its top 10 (at number three after “information security analyst” and “diagnostic medical sonographer”), the job title now includes the word “tenured” after it – an acknowledgment perhaps that not all university work is the same. In fact, contrary to the long list of cushy perks that

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allegedly make an academic's life less stressful than many other jobs, academics are often saddled with job insecurity (if they are on contract or un-tenured) and with such an array of roles and expectations that they are at very high risk of stress and dissatisfaction arising from the pressure to perform.

Twenty-first century academics must demonstrate that they are: *committed teachers* who care about their students' learning, well-being, and progress; *productive researchers* whose ideas are changing their fields and whose outputs are influencing, and being cited by, other researchers; *diligent academic citizens* who serve their disciplines, departments, faculties, universities, and communities in a variety of ways throughout their careers; *inspiring leaders* and *effective managers* who oversee the work of other staff and help to manage the resources (financial and human) of the institutions by whom they're employed; *attentive supervisors* who help bring student research to fruition; *progressive entrepreneurs* who find commercial outlets and uses for their research; *active fundraisers* who seek money for their own research and know how to write good grant applications; as well as many other roles such as industrial and professional consultants and/or practitioners, peer reviewers and editorial board members, event planners, recruitment specialists, public speakers, and conference organisers. In New Zealand in particular, academics must also understand and be committed to the principles of the Treaty of Waitangi; as well as take on the role of *public intellectuals* who serve as the critic and conscience of society (Education Act 1989 Section 162 4(a)(v)); and they must be *internationally mobile* (New Zealand shares borders with no other country and any face-to-face contact and collaboration with academics off-shore comes only after a minimum-three-hour international flight).

Balancing these competing roles and expectations may lead academics to feel that they lack time to do all aspects of their job well. Their focus and energies are pulled in so many directions that oftentimes not all elements of the job receive the devotion or even minimal attention they deserve. Such stressors can ultimately lead to job dissatisfaction (Mark and Smith 2012) and a desire to pursue a different kind of career, one with fewer expectations from fewer quarters. At the same time, higher rewards, particularly in terms of salary, can be found outside academia (Bozeman and Gaughan 2011) and definitely outside New Zealand academia, with academics in New Zealand being paid comparatively less than many of their international counterparts (Crawford 2016; Robinson 2006). In a working environment such as a university, which values autonomy but is dependent on collegiality, job dissatisfaction can also arise from a sense of not being rewarded, recognised or acknowledged for the work one does. Whether related to time, effort, or output, lack of recognition may lead to the desire to forgo an academic career.

Losing academic staff at a time when more are predicted to be needed (Nana et al. 2010) could be very costly for New Zealand universities. Student numbers in university-level degree programmes in New Zealand have been increasing, albeit slowly (Ministry of Education 2015, p. 3), accompanied by a desire to see the growing diversity of the student population matched by increasing numbers of academic staff from diverse backgrounds, particularly Māori and Pasifika (Ministry of Education and MBIE 2014). Couple this with an ageing academic population that

will see significant numbers of academics likely to retire in the coming decade (Nana et al. 2010), and keeping academic staff satisfaction at reasonable levels becomes even more important. Recruitment and/or replacement of an academic staff member consumes considerable time and resources (advertising, interviewing, appointment, induction, training, start-up grants, laboratory equipment, research assistance, etc.) (Gappa et al. 2007). Thus, New Zealand universities would do well to pay close attention to the conditions that attract academics to a university career, and keep them there, as well as the conditions that discourage them from staying or, worse still, from choosing even to *begin* an academic career. International literature has shown that identifying satisfaction levels and working to improve academic staff satisfaction are key to both recruitment (Bozeman and Gaughan 2011; Gappa et al. 2007; McInnis and Anderson 2005; Sabharwal and Corley 2009; Stupnisky et al. 2015) and retention of academic staff (Adams 2000; Eagan et al. 2015; Seifert and Umbach 2008). Furthermore, attention to academic staff satisfaction can help universities to identify issues with well-being (of the individual and the institution) and improve productivity (Eagan et al. 2015; Mark and Smith 2012; Sabharwal and Corley 2009; Stupnisky et al. 2015).

What's Happening Elsewhere?

Looking at countries with similar higher education systems or with whom New Zealand often aligns itself for comparison, levels of academic job satisfaction vary among academics worldwide. Satisfaction appears to be relatively high in Canada (Jones et al. 2012; Bentley et al. 2013a) but has reportedly declined over the past few decades in the US (Schuster and Finkelstein 2006), the UK (Locke and Bennion 2013) and Australia (McInnis and Anderson 2005).

However, various studies report conflicting findings, based on disparate datasets, using a range of variables and combining different results to present a sense of “overall satisfaction”. For example, Gappa et al. (2007, p.104) cite U.S. Department of Education statistics for surveys in 1987, 1998, and 2003 that show high levels of satisfaction for US faculty across all types of institutions, for both male and female, full-time and part-time. Furthermore, the percentage of satisfied faculty had increased from 85.3% in 1987 to 87.5% in 2003. By contrast, Schuster and Finkelstein (2006) make the claim that US “faculty job satisfaction has eroded significantly over the past generation” (p. 148) with only one-third of faculty respondents reporting they were very satisfied in recent years compared with half in the 1960s and 1970s. They also note that *dissatisfaction* has doubled. However, Schuster and Finkelstein combined the “very dissatisfied” and “somewhat dissatisfied” responses to create their “dissatisfied” percentage, but only include the “very satisfied” responses in their percentage of satisfied faculty. If ““very satisfied” and “satisfied” were combined, it would show that satisfaction was, on the whole, very high in the US, and consistently so from the 1960s through to the 1990s, although there is a decline from 91.1% in 1969 to 84.7% in 1998. More recent data from a com-

parison of the 1992 Carnegie survey and the 2007 Changing Academic Profession (CAP) survey shows that faculty satisfaction in the United States appears to have increased (Bentley et al. 2013a, p. 248).

Closer to home, Australian academics' satisfaction is reported as having increased from 49% in the 1992 Carnegie survey to 55% in the 2007 CAP survey (Bentley et al. 2013b, p. 248), after "plummeting" in a 1999 survey (McInnis and Anderson 2005) and apparently stabilising in further surveys in the early and mid-2000s (Bentley et al. 2013c, p. 30). Despite these roller-coaster findings, it is clear that Australian academics appear to be less satisfied than many other academics around the world. Bentley et al. (2013c) attribute this dissatisfaction to dramatic reforms in Australian higher education that have led to "declining resources, increased accountability requirements and work intensification" (p. 31) for academic staff.

Previous Studies on Satisfaction in New Zealand Universities

New Zealand has not gathered such data so systematically and was not part of any of the international CAP surveys. As noted in Chap. 3, few comprehensive studies of the university academic profession in New Zealand have been completed. The New Zealand Council for Educational Research with the Association of University Staff (AUS) – the university academic staff union at the time – conducted surveys of university staff in the 1990s (see, for example, Boyd and Wylie 1994; Chalmers 1998), but more recently, since the AUS has converged with other tertiary sector unions to form the Tertiary Education Union (TEU), those surveys have been of *all* staff in the tertiary sector, not just universities (see for example, Bentley et al. 2014). There have been studies of academic staff satisfaction at individual universities (Houston et al. 2006; Tipples and Krivokapic-Skoko 1997) and of academics from different disciplinary areas, such as humanities and social sciences (Curtis and Matthewman 2005), social sciences (Wall et al. 2009; Witten et al. 2006), and sciences (Sommer and Sommer 1997; Sommer 2010).

These earlier studies report varying degrees of satisfaction. Boyd and Wylie (1994) noted that "[d]espite increasing workloads and stress, the majority of respondents (65%) indicated that they were satisfied with their jobs" (p. 50). Conversely, Tipples and Krivokapic-Skoko's respondents at one New Zealand university in a survey conducted in 1995 report that "their level of job satisfaction appeared to be deficient although it was the most important obligation that the academic staff believed the University owed them" (Tipples and Krivokapic-Skoko 1997, p. 114). And Houston and colleagues, reported that the academic respondents at their university were "neutral and moderately satisfied" (Houston et al. 2006, p. 24). Most recently, Bentley et al. (2014) found that just over half (54.7%) of *all* tertiary staff (including professional staff and across the whole tertiary sector, not just universities) in New Zealand indicated that they were satisfied to some degree with their job as a whole. They note that this compares "less favourably" than that found "for two national population surveys of New Zealand employees" (Bentley et al. 2014, p. 28).

The Hagedorn Model for Explaining Satisfaction

This chapter aims to provide a baseline for comparison with New Zealand academics against international trends, and for longitudinal research in coming years as part of the CAP project. The scope of the 2007–2008 CAP project is described in detail in Teichler et al. (Teichler et al. 2013) and a chapter in that book describes the design and methods of the comparative project. Further, each case-study chapter in Bentley et al. (2013a) outlines the approach that the 11 countries represented in that book took to analysing their own country's job satisfaction data. Bentley et al.'s book also includes a final chapter comparing the satisfaction data of 12 countries (the 11 in the book, plus the USA).

As Bentley et al. (2013a, p. 244) have warned, however, “[d]rawing comparisons from separate studies is particularly problematic given the various methods for operationalising job satisfaction and the choice of independent variables”. For this reason, we have decided to follow the conceptual model used by many previous researchers involved with the CAP project, and described in detail in Hagedorn (2000) and Bentley et al. (2013b). As noted by Bentley et al. (2013a, p. 240), it is “unclear to what extent the theoretical models of job satisfaction developed in the USA apply to other national contexts,” so this chapter offers a contribution to fill that gap from a New Zealand perspective.

A common theoretical framework informing the design of many investigations into academic job satisfaction is Herzberg, Mausner, and Snyderman's (Herzberg et al. 1959) two-factor theory of job satisfaction. This theory posits that the intrinsic aspects of any job interact to bring the worker satisfaction – for example, being recognised for doing a job well, gaining more responsibility, feeling a sense of achievement or accomplishment, or feeling as if the work that you do is making a difference. These are *motivational* factors. Alongside these motivational factors are aspects that can cause *dissatisfaction* if they are insufficient, absent, or excessive, such as salary and working conditions (large class sizes, inflexible working hours, lack of childcare, etc.). These are called *hygiene* factors. As Lacy and Sheehan (1997) describe, “motivational factors can cause satisfaction or no satisfaction, while hygiene factors cause dissatisfaction when absent, and no dissatisfaction when present” (p. 307). Linda Hagedorn (2000) combines these motivational and hygiene factors into one category that she calls *mediators* and to this category she adds environmental conditions (collegial relationships, institutional climate, etc.) and demographics (gender, ethnicity, and discipline, for example). Also included in her model is a category she labels *triggers* – major life changes such as getting married, moving cities, or being promoted. Hagedorn's model has been applied many times since 2000 to various satisfaction studies in the US (August and Waltman 2004; Hesli and Lee 2013) and to a comparative study of 12 countries who participated in the international CAP study (Bentley et al. 2013b). We follow closely Bentley et al.'s (2013b) operationalisation of Hagedorn's model for our investigation of satisfaction amongst early career academics in New Zealand universities.

Data

The data for this chapter were taken from a survey of early career academics in all eight New Zealand universities in 2012 ($n = 538$, response rate of 47%). More detail on the method for the overall survey can be found in Chap. 1. The responses included in this chapter are from those who responded to the satisfaction questions.

Method

Table 5.1 describes the variables relevant to satisfaction, following the operationalisation of variables, with some changes, as reported previously by Hagedorn (2000) and Bentley et al. (2013b).

Table 5.1 Conceptual framework for academic job satisfaction

Mediators			Triggers
<i>Demographics</i>	<i>Motivators and hygienes</i>	<i>Environmental conditions</i>	<i>Change or transfer</i>
Gender	Achievement	Collegial relationships	Change in life stage
Ethnicity	Recognition	Student quality or relationships	Change in family-related personal circumstances
Institutional types	Work itself	Administration	Change in rank or tenure
Academic discipline	Responsibility	Institutional climate or culture ^c	Transfer to new institution
Marital status ^a	Advancement		Change in perceived justice
Age ^a	Salary ^c		Change in mood or emotional state ^c
Part-time status ^b	Institutional resources ^d		
Number of children ^b			

Adapted from Hagedorn (2000) and Bentley et al. (2013b)

^aVariable included in Demographics instead of Triggers

^bAdditional variable, not included in Bentley et al. (2013b) or Hagedorn (2000)

^cMeasures not available in our data set

^dAdditional variable, added by Bentley et al. (2013b), not included in Hagedorn's (2000) framework

Dependent Variable

Many studies of academic job satisfaction use a single-item measure for their dependent variable, usually a response to a question such as “I am satisfied with my current job” or “My overall job satisfaction is high”. The dependent variable in other studies includes responses to paired questions about satisfaction with “instructional issues” and “employment issues” (Antony and Hayden 2011; Myers 2011); or questions about “life” and “job” (Filiz 2014), “departmental” and “institutional” (Ethington et al. 1989), or “intrinsic” and “extrinsic” satisfaction (Seifert and Umbach 2008). Still another group of studies uses multi-item measures for satisfaction that comprise combinations such as: satisfaction with autonomy, professional relationships, competency of colleagues, department leadership, and course assignments (Eagan et al. 2015) or satisfaction with workload, salary, benefits, and overall (Mamiseishvili and Rosser 2011).

Following Bentley et al. (2013b), we have used a multi-item measure for job satisfaction that comprises a factor-based score that is an unweighted sum of responses to the following four statements: “Overall, how satisfied are you as an academic?”, “If I could do it all over again, I would still embark on an academic career”, “I get intellectual pleasure from my job” and “I enjoy the challenges of my job”. Respondents answered on a scale of 1–5 for the overall satisfaction question where 1 was very satisfied and 5 was very unsatisfied, and on a five-point scale from strongly agree (1) to strongly disagree (5) for the other three statements. The satisfaction scale was internally consistent (Cronbach’s Alpha = 0.71).

Independent Variables

Using Hagedorn’s conceptual model as a starting point, we followed Bentley and colleagues’ interpretation of this model and describe below how we operationalised each factor. Hagedorn’s framework has four categories:

- *Motivators and Hygienes*, includes achievement (publication), recognition (awards and office bearer/funding), work itself (interest and percentage time teaching and research), responsibility (mentor), advancement (rank), and salary (not included), and Bentley and colleagues added institutional resources
- *Demographics*, includes gender, ethnicity, and academic discipline (to which we added age, marital status, part-time status, and number of children)
- *Environmental conditions*, includes collegial relationships, student quality or relationships, administration (admin processes and involvement in decisions), and institutional climate or culture (not included), and we moved institutional type from demographics to here
- *Triggers*, includes changes in the following: life stage, family-related/personal circumstances, rank/tenure, perceived justice, mood or emotional state; or a

transfer to a new institution. We only included change in rank or perceived fairness, and new appointment.

As indicated in Table 5.2, predictors of satisfaction have been grouped into four categories: Demographics, Motivators and Hygienes, Environmental Conditions, and Triggers. It may be argued that, presented in this order, each category represents increasingly proximal factors that might be associated with satisfaction. That is to say, demographics such as age and sex are relatively constant and outside of the control of the respondent, and therefore most causally distal to satisfaction (changes in satisfaction cannot cause changes in sex or age, while the reverse may be true). At the most proximal level, Triggers reflect local and changeable perceptions of the environment. For this reason, the hierarchical regressions reported introduce each of these categories of variables separately and sequentially in order to evaluate the impact of increasingly proximal factors on satisfaction. Analysis 1, therefore, presents the relationships between Demographics and satisfaction only; Analysis 2 presents the relationship between Demographics *and* Motivators and Hygienes in predicting satisfaction in order to assess whether Motivators and Hygienes improves prediction of variation in satisfaction beyond that already associated with Demographics, and so on. In a sense, Analysis 4 presents the strictest assessment of the predictive utility of the most proximal category of Triggers, as it indicates how much variance in satisfaction is uniquely associated with Triggers on top of that *already* accounted for by Demographics, Motivators and Hygienes, and Environmental Factors.

Results

Mean Satisfaction

By contrast with academics elsewhere, academics in New Zealand appear to be generally more satisfied, as Table 5.3 shows.

Our survey was of early career academics, but several (21%) of those respondents had already made the rank of senior lecturer (or were appointed into this rank), despite having been academics for 7 years or less. These data show a high level satisfaction at both junior and senior ranks among early career academics in New Zealand, with satisfaction increasing as rank increases. Obviously, there are many more “junior” academics in our sample than “senior” and it will be interesting to see if this disparity in satisfaction level applies across ranks with a bigger national sample that includes more senior academics.

The job satisfaction index used as the dependent variable is comprised of four items for which means and percentage responses are provided in Table 5.4. It includes two items which are the same or very similar as in Bentley et al.’s (2013c) study of Australian academics: “Overall job satisfaction” and “If I had to do it all over again, I would not become an academic”. The wording for the second of these

Table 5.2 Operationalisation of Hagedorn's satisfaction model with descriptions for each variable

Demographics	Variable description
<i>Gender</i>	Dichotomous variable indicating male or female, where 1 = male
<i>Ethnicity</i>	Three dichotomous variables indicating if Pākehā (New Zealand European), Māori, international.
<i>Academic discipline</i>	Ten dichotomous variables categorised by PBRF discipline groupings in my study (Humanities and Law, Natural and Physical Sciences, Technology, Health and Medicine, Biological Sciences, Business and Economics, Creative and Performing Arts, Education, Māori Knowledge, and Mathematics and Information Science)
<i>Marital status</i>	Sample split by single/never married; married, civil union or de facto; separated, widowed or divorced
<i>Age</i>	An ordinal variable reflecting age group <30, 30–34, 35–39, 40–44, 45–49, and >50 years
<i>Part-time</i>	Dichotomous variable indicating part- or full-time status, where 1 = part-time
<i>Number of children</i>	Six-point ordinal variable: None, 1, 2, 3, 4, 5 or more
Motivators and Hygienes	
<i>Publications</i>	A square root transformation of the weighted sum of an individual's journal articles (1 point), book chapters (1 point), edited books (2 points), and authored books (5 points)
<i>Recognition: Awards</i>	Has received a teaching, research, and/or service award
<i>Recognition: Office bearer/funding</i>	Is a journal editor or advisory board member, office bearer or committee member for a national or international professional/academic organisation; and/or has received more than \$200,000 in external research funding
<i>Interests</i>	Indicates a higher interest in teaching than in research
<i>Percentage time</i>	A dichotomous variable indicating higher percentage time on research and higher percentage time on teaching
<i>Rank</i>	'Senior' is senior lecturer or above and 'junior' is lecturer or below
<i>Institutional resources</i>	An ordinal variable based on the mean perceived effectiveness of 12 institutional resources: orientation programme, mentoring programme, assistance with teaching development, assistance in obtaining externally funded grants, travel funds, information about promotion, research leave, resources for research, resources for teaching, opportunity to gain a teaching qualification, rewards for teaching, and rewards for research
<i>Responsibility</i>	Has been a mentor (either formally or informally) for 6 months or more
Environmental conditions	
<i>Student quality or relationships</i>	The mean response to degree of concern with "changing student population" and mean response to perceived effectiveness of "opportunities to engage with student representatives [outside formal classroom environments]"
<i>Involvement in decisions</i>	The mean response to two correlated items on the perceived effectiveness of opportunities to participate in decision-making processes, and opportunities to make decisions about the direction of their own teaching and research

(continued)

Table 5.2 (continued)

Demographics	Variable description
<i>Administration processes</i>	The mean response to seven highly correlated items addressing the perceived effectiveness of communication between university management and academics, feedback from manager, support to apply for promotion, head of department/manager who is committed to early career academics' success, support from administrative/general staff, infrastructure, and support for career progress
<i>Collegial relationships</i>	The mean perceived effectiveness of "Senior colleagues who are interested in my progress and wellbeing", "Regular contact with senior colleagues in my department", and "Support from other departmental colleagues"
<i>Institutional type</i>	We moved this from demographics to environmental conditions as it is not a characteristic of the individual, but of the environment in which they are located. It is operationalised as two dichotomous variables: 'Old university' (Auckland, Canterbury, Otago, and Victoria) and 'New university' (AUT, Lincoln, Massey, and Waikato)
Triggers	
<i>Change in rank</i>	Calculated as the ratio of promotion successes to promotion applications. Where a person had not applied, they received a score of zero
<i>New appointment</i>	As in Bentley et al.'s (2013b) study, a "dichotomous variable for the length of tenure within one's current institution, with those having fewer than 4 years at current institution considered a 'new appointment'" (p. 38)
<i>Change in perceived fairness</i>	An ordinal variable based on mean agreement with the statement, "I am treated fairly by my employer" (where 1 = strongly agree, and 5 = Strongly disagree)

Table 5.3 Proportion of academics reporting job satisfaction (%) and sample size (*n*) by rank and country

	Senior rank ^a		Junior rank ^b		All respondents	
	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>
NZ	83	99	73	358	75	457
Australia ^c	72	255	50	842	55	1101 ^d
All CAP ^c	67	6285	57	6719	62	13,403 ^d

^aIncludes all Senior Lecturers and the two Associate Professors who responded

^bIncludes all lecturers and below

^cAustralian and CAP data taken from Bentley et al. (2013b, p. 251)

^dIncludes cases where academic rank is unknown

items in my study was more positively framed as 'If I could do it all over again, I would still embark on an academic career' so for comparison to be made we have reverse coded the responses on the strongly agree (1) to strongly disagree (5) scale. We have also reverse coded the response to the overall job satisfaction item from very satisfied (1) and very dissatisfied (5) to match Bentley et al.'s scale of very dissatisfied (1) and very satisfied (5). The mean for the final two questions is also reverse coded for consistency of presentation.

Table 5.4 Satisfaction with academic work

Item	Mean	Std. Dev	% ^a	<i>n</i>	Australia
Job satisfaction index	4.10	0.73	87	484	3.11
Overall job satisfaction ^b	3.85	0.90	75	457	3.42
If I had to do it all again, I would not become an academic ^c	3.93	1.15	28	454	3.60
I get intellectual pleasure from my job ^c	4.39	0.70	92	455	–
I enjoy the challenges of my job ^c	4.34	0.91	93	483	–

^aPercentage responding very satisfied/satisfied, or strongly agree/agree

^b1 = Very Dissatisfied and 5 = Very Satisfied

^c1 = Strongly Disagree and 5 = Strongly Agree

Satisfaction was regressed onto the variables under each category. Table 5.5 shows the results of our regression analysis at all four stages, with the progressive introduction of each of the four categories of satisfaction predictors. Table 5.5 shows the Means and Standard Deviations for each of the satisfaction predictors, the regression coefficients for each in predicting satisfaction, and the amount of variation (adjusted R-squared) in satisfaction associated with each successive block of variables. All four regressions predicted a significant amount of variance and, importantly, each subsequent block of variables improved the prediction of satisfaction significantly, indicating that at least some of the variables under each heading account for significant variance in participant satisfaction.

Results for Demographics

We found only two Demographic variables had any effect on satisfaction. The first was part-time status, which predicted greater satisfaction, but only in our first analysis. By the time other variables were factored in, the association between part-time status and satisfaction was weaker (and no longer statistically significant). The second was if the respondent was from Humanities/Law: these academics were considerably less satisfied in all analyses than academics from other disciplines. This differs from findings elsewhere that show no statistical differences in job satisfaction across disciplines (Bentley et al. 2013b; Myers 2011). Some of the explanation for lower satisfaction among Humanities/Law academics may stem from the pressure expressed among these disciplines to justify their existence in a political environment that privileges economic outcomes and STEM disciplines (see Chap. 2), but we have not investigated this further yet. It may also relate to the fact that they spend more time on teaching than those in other disciplines (see Chap. 4).

Other findings from our demographic analysis resonate with what others using Hagedorn's model have found, particularly in relation to gender, which was not a significant predictor for academic satisfaction in our model, nor in several other studies (Bentley et al. 2013b; Hesli and Lee 2013; Olsen et al. 1995). Some studies

Table 5.5 OLS regression unstandardised betas for factors associated with higher levels of job satisfaction (scale)

	Mean (SD)	Analysis 1	Analysis 2	Analysis 3	Analysis 4
(Constant)		2.03**	1.99**	2.03**	2.35**
<i>Demographics</i>					
Male ^a	.39	.09	.07	.08	.10
Age	3.27 (1.38)	-.04	-.02	-.02	-.05
International (1 = Not NZ born) ^b	.51	-.05	-.01	-.06	-.05
Pākehā (1 = Pākehā) ^a	.54	.01	.04	.04	.03
Māori (1 = Māori) ^b	.05	-.21	-.18	-.15	-.18
Marital status	1.84 (.47)	-.01	-.02	-.04	-.03
Part-time status (1 = part time) ^a	.14	.25*	.18+	.12	.09
How many children? ^b	1.97 (1.21)	-.02	-.02	-.01	-.01
Social/Cultural sciences	.14	-.33	-.36	-.32	-.32
Humanities/Law	.07	-.61*	-.46+	-.52*	-.54*
Natural/Physical sciences	.06	-.17	-.24	-.18	-.21
Technology	.07	-.15	-.21	-.23	-.23
Health/Medicine	.20	-.30	-.40+	-.39+	-.37+
Biological Sciences	.11	.05	-.13	-.21	-.20
Business/Economics	.05	-.22	-.29	-.22	-.25
Creative/performing arts	.03	.10	.13	.11	.10
Education	.06	-.06	-.06	-.22	-.18
Māori Knowledge	.02	-.37	-.35	-.45	-.46
Mathematics/Information Science	.04	-.53+	-.34	-.38	-.43
<i>Motivators and Hygienes</i>					
Publications ^c	3.76 (.63)		-.06	-.09	-.12+
Recognition: Awards ^b	.03 (.06)		-.43	-.49	-.71
Recognition: Office bearer/ funding ^a	.15 (.22)		-.35*	-.35*	-.37*
Interests (higher = teaching)	2.22 (1.04)		-.08+	-.02	-.04
Percentage time research	.43 (.26)		.00	.00	.00
Percentage time teaching	.34 (.23)		-.01+	-.01*	-.01*
Senior rank ^a	.00 (.07)		.72	.60	.72
Institutional resources ^d	2.44 (.57)		.37**	.03	.04
Responsibility ^a	.22 (.51)		-.04	.00	.00
<i>Environmental conditions</i>					
Poor student relationships ^c	3.45 (.71)			-.15**	-.14*
Involvement in decisions ^c	1.76 (.53)			-.04	-.03
Admin. Process ^d	2.17 (.54)			.44**	.37**
Collegial relationships ^d	2.19 (.83)			.15**	.14*
Institution type (1 = Old) ^b	.70			.20*	.19*

(continued)

Table 5.5 (continued)

	Mean (SD)	Analysis 1	Analysis 2	Analysis 3	Analysis 4
<i>Triggers</i>					
Change in rank ^a	.42 (.75)				.02
New appointment ^a	.53				-.21
Perceived fairness ^a	2.51 (1.14)				.03
<i>R</i> -square		.10	.24	.38	.40
Adjusted <i>R</i> -square		.05	.18	.33	.34
Adjusted <i>R</i> -square (change)		.05**	.14**	.14**	.02**
<i>n</i>		401			

Significance level: $p < 0.10$; * $p < 0.05$; ** $p < 0.01$

^aDichotomous

^bSix-point ordinal

^cScale

^dFive-point ordinal

^eFour-point ordinal

have found that women are more satisfied in teaching-oriented departments and men in research-oriented departments (Kessler et al. 2014), or that men are slightly more satisfied than women (although this was not a statistically significant finding, Machado-Taylor et al. 2016). Where women academics report lower satisfaction than men (Bozeman and Gaughan 2011; Sabharwal and Corley 2009), these relationships become weaker when other variables (such as institutional support) are factored in.

Just as gender does not predict satisfaction in our model, nor does ethnicity. Although Māori academics and those born outside New Zealand express lower levels of academic satisfaction than Pākehā/New Zealand European academics, the differences are not statistically significant (see Chap. 7 for more on the experiences of Māori academics). This differs from studies in the US (Hesli and Lee 2013; Sabharwal and Corley 2009), which show that minority faculty are less satisfied.

Results for Motivators and Hygienes

When we added Motivators and Hygienes into the analysis, part-time status was no longer a significant predictor of satisfaction, suggesting that the variation in satisfaction previously “explained” by part-time status is perhaps better explained by the combination of Motivators and Hygienes, and Environmental Conditions. In statistical terms, the relationship between employment status and satisfaction may be mediated by factors such as recognition (part time employees may be less likely to receive recognition and institutional resources *because of* their part-time status).

The importance of the ‘recognition’ variable is, at first glance, not surprising given the theories underpinning Hagedorn’s model (i.e., that intrinsic motivators

such as feeling well-recognised and well-accomplished – for example, by having published a lot – will generate feelings of satisfaction). However, our analysis showed a surprising *negative* association with recognition and achievement in publication, in that those who were office bearers in their professional/academic society or had received more than \$200,000 in external funding were significantly less satisfied than those who had not received such recognition. Also, those who had published more were slightly less satisfied than those with fewer publications. This differs from Bentley et al.'s (2013c) findings with Australian academics, where there was no difference in satisfaction between elected leaders of professional associations or members of international scientific communities and those without such roles, or between prolific publishers and other academics. Bentley and colleagues were surprised by this, as they had expected to find that such academics would be *more* satisfied (having been elected into such roles by their peers and thus finding satisfaction in such recognition), so our findings are even more perplexing. However, another section of the survey (expanded upon in Chap. 6) shows that early career academics in New Zealand are not driven by status, so perhaps this is not such a surprising finding, after all. It is possible that recognition from peers is not sufficient and academics in such roles also want their contribution to be recognised and rewarded through formal promotions processes. Alternatively, it could be that along with the recognition comes more responsibility and a potentially higher workload, thus lowering satisfaction. Finally, it may be that they do not necessarily feel well-rewarded or properly recognised for the extra work that they have taken on as office bearers in what are often *voluntary* roles, especially as they are still early career academics themselves and may feel they are carrying a heavy burden of responsibility along with the recognition. In relation to lower satisfaction amongst more prolific researchers, as Bentley et al. (2013c) point out, “publishing research may be less intrinsically satisfying for academics than the research process itself” and “the pressure to publish may mean that the motivation to publish additional research is not autonomous” (p. 44).

Such reasoning also resonates with the finding that those academics who spend a higher percentage of their time on teaching, and have a higher interest in teaching than in research, also express less satisfaction with their work. It is quite possible that these academics are not finding enough time either for what they *love* to do (teaching) or for what they are *expected* to do (research) in a performance-based funding environment. It is probable that these negative findings around satisfaction for teaching-oriented academics reflect the time the survey was conducted – in early and mid-2012 – when preparation for the six-yearly national Performance Based Research Fund (PBRF) exercise was in full swing and most New Zealand university academics had recently been pulling together their evidence portfolios of research outputs, contributions to the research environment and evidence of peer esteem within their academic fields. Those academics for whom teaching is more important and/or who were spending a lot of time on teaching may have resented the imposition of the PBRF on their teaching time, and this may be reflected in their lower satisfaction levels.

The other motivator or hygiene variable significantly associated with satisfaction was, as in Bentley et al.'s (2013b) study, "institutional resources". This variable comprised 12 highly correlated resources that had all clearly indicated significant ($p < .001$) positive relationships with satisfaction, including: formal mentoring, $\rho(298) = 0.29$; an orientation programme, $\rho(356) = 0.25$; the opportunity to gain a tertiary teaching qualification, $\rho(205) = 0.17$; rewards for teaching, $\rho(305) = 0.21$; rewards for research, $\rho(342) = 0.23$; and the availability of both resources for research, $\rho(426) = 0.27$, and for teaching, $\rho(368) = 0.25$, for example. Where all these institutional resources were considered effective, academics in our sample expressed greater satisfaction. However, by the time we ran the next two layers of analysis (where we brought in environmental conditions and then triggers), this variable no longer showed a direct relationship with satisfaction, suggesting that while institutional resources are definitely important for keeping academics happy, other factors such as relationships, support, and administrative processes are much more significant.

Results for Environmental Conditions

Bentley et al.'s (2013c) analysis of Hagedorn's model had shown that Environmental Conditions demonstrated the strongest factors associated with job satisfaction for Australian academics, so for this reason we ran our analysis of environmental conditions later, after having tested for the influence of Demographics, Motivators, and Hygienes. To Bentley et al.'s (2013b) version of Hagedorn's model, we added the variable "Collegial relationships" for which we had three correlated items about relationships with colleagues (neither Bentley nor Hagedorn operationalised this variable in their own studies), and "Institution type" (either an "old university" – Auckland, Canterbury, Otago, or Victoria – or a "new university" – AUT, Lincoln, Massey, and Waikato), which we identified as an environmental condition rather than a demographic variable. Interestingly, employment at older universities (Auckland, Canterbury, Otago, and Victoria) rather than the four newer universities (AUT, Lincoln, Massey, and Waikato) was associated with greater satisfaction. However, it is not clear from the data presented in Table 5.5 why this might be the case. We also renamed the variable of "Department Influence" to "Involvement in Decisions" as we felt that "Department Influence" could be easily misinterpreted by readers as the influence of the department on the individual academic, rather than the other way around.

This "Involvement in Decisions" variable was the only Environmental Condition that showed no significant relationship with satisfaction. We were somewhat surprised by this result, given how strongly respondents rate the importance of autonomy and making their own decisions (see Chaps. 7 and 8). We had thought that those academics who felt more autonomous might also feel more satisfied, but having the opportunity to participate in decision-making processes or make decisions about their own research and teaching does not appear to predict higher satisfaction.

There was, however, a non-significant trend towards lower satisfaction if early career academics do *not* feel as if they have the opportunity to be involved in making such decisions, so the *absence* of autonomy is important to consider.

Of much more importance, and in line with Bentley et al.'s (2013c) findings with Australian academics, was the effectiveness of various administrative processes – most of which involved relationships with, support and feedback from the Head of Department and university management. If a respondent indicated that such processes were effective at their institution, they were also much more likely to be satisfied in their work. Similarly, if academics felt that relationships with their colleagues were effective, and that their senior colleagues were supportive and interested in their progress and well-being, then they were more likely to be satisfied. These were very strong findings in our analyses and are picked up again in Chap. 8, where I talk about the interaction of structure (including administrative processes, environmental conditions, and relationships) and individual and collective agency.

In terms of other important relationships, if early career academics agreed that interactions with students were poor (in the form of not having enough opportunity to engage with students outside of class, or in carrying a high level of concern about the changing student population), then this was likely to affect satisfaction negatively. We did not ask a specific question about “student quality” in our study, as Bentley and colleagues did in theirs (Bentley et al. 2013c). They measured “poor student quality” through an item that asked academics if they felt they “spent too much time than they would have liked teaching basic skills to students with deficiencies” (p. 42), and found a negative relationship between academic satisfaction and student quality. They noted that “the quality of academic-student relationships has arguably declined as massification of Australian higher education has brought an increase in student numbers, student diversity and declines in student funding (on a per capita basis)” (Bentley et al. 2013c, p. 42). As noted in Chap. 1, similar circumstances are prevalent in the New Zealand higher education environment; however, we did not ask quite the same question as Bentley as we were not so keen on taking a deficit approach to the relationship between academic staff and students. Instead, we asked whether academics felt that the changing student population was of high concern to them, and whether they felt they had enough opportunity to meet with students outside formal classroom environments. These items were highly correlated and if academics were concerned about either, then they were also more likely to express overall lower satisfaction. It is important to note, however, that only a small percentage (26%) academics expressed any concern with the changing student population (see Table 5.6). Of much more concern was funding of the tertiary sector, the focus on quantity over quality, workloads, and the casualisation of the workforce.

Table 5.6 Issues of concern to early career academics in New Zealand universities

Item	% Concerned or very concerned	Mean	SD	n
Funding for research	85%	1.85	1.20	457
Funding of the higher education sector in general	84%	1.91	1.23	452
Too much focus on quantity rather than quality	72%	2.39	1.46	459
Too much administration	67%	2.57	1.53	455
Too high a workload	65%	2.62	1.52	455
Casualisation (use of fixed term & similar contracts)	58%	2.66	1.54	455
Threats of job losses	50%	2.86	1.48	459
Staff:Student ratio	48%	3.00	1.50	457
Undemocratic governance	39%	3.20	1.50	454
Student fees	41%	3.22	1.42	457
Too much focus on research rather than teaching	30%	3.44	1.40	454
Too much focus on teaching rather than research	28%	3.52	1.39	455
Lack of employment rights	26%	3.54	1.36	456
Changing modes of delivery	27%	3.54	1.35	455
Changing student population	26%	3.59	1.37	454
Too much focus on quality assurance	25%	3.69	1.38	449
Intellectual property	21%	3.78	1.28	453
Not enough focus on quality assurance	20%	3.90	1.32	450

Results for Triggers

Our Trigger variables – change of rank, new appointment, and perceived fairness – were individually not significant predictors of academics’ satisfaction levels. In combination, however, they do account for a significant but small amount of variation in satisfaction (approximately 2%).

Summary of Findings

As already mentioned, each successive category of predictors accounted for significant variation in satisfaction. However, Motivators and Hygienes (accounting for 14%) and Environmental Conditions (accounting also for 14%) were most important in predicting satisfaction. Overall, membership of the Humanities/Law was associated with a decrease of more than half a point on the satisfaction scale, or equivalent to almost one standard deviation. Increasing recognition and time spent teaching were the Motivators and Hygienes that predicted significant decrease in

satisfaction. More positive perceptions of relationships with both students and colleagues, administrative processes, and employment at an “old” university were all significantly predictive of greater satisfaction.

Conclusion

These findings suggest that New Zealand academics early in their careers are generally quite satisfied, and appear to be considerably happier than academics in other countries, particularly Australia, our nearest neighbour. As argued in the opening chapter, the interrelationship of structure and agency in determining an academic’s satisfaction appears to ring true. Our findings show that supportive relationships with colleagues and managers, and the provision of sufficient resources and services, are related to higher satisfaction, and the absence of autonomy and feeling under-recognised can affect satisfaction negatively. Academics in Humanities/Law disciplines are significantly *less* satisfied than colleagues in other disciplines and we speculate that this may relate to their heavy teaching loads, in an environment that values and rewards research outputs (as discussed in Chap. 4). While gender did not show any significant relationship with academic satisfaction, the more children an academic has hints at a negative relationship with satisfaction and some of these issues are picked up on in the next chapter on work-life balance. Then, later in the book (Chap. 8), the importance of adequate resourcing and support from colleagues is addressed. For now, the words of the participants themselves in the poem below provide some insight into satisfaction (and dissatisfaction) and remind us that academics are not homogeneous in their feelings.

Satisfaction: A Poem

She said:

I very much enjoy being an academic
and would choose it
all over again.

He said:

I have recently
submitted my resignation
and am leaving
my university
soon.

This career opportunity has been
exciting
got me
working beyond my comfort zone,
the Business lecturer said.

I am overworked,
 the Humanities lecturer said.

I'm actually quite happy
 because I've had a lot of support,
 said the New Zealander.

You sink or swim,
 said the international academic.

The support I have received from
 the amazing team
 of people
 I work with
 has made my work
 a pleasure,
 exclaimed the post-doc.

I love this job
 but it is
 killing me
 sighed the senior lecturer.

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