Chapter 13
Academic Job Satisfaction from an International Comparative Perspective: Factors Associated with Satisfaction Across 12 Countries

Peter James Bentley, Hamish Coates, Ian R. Dobson, Leo Goedegebuure, and V. Lynn Meek

In many ways, the academic profession is one of the "key professions" in the knowledge society. Academics hold central positions in the knowledge society through their traditional roles as producers of knowledge and educators of knowledge workers. Universities are also emerging as a key source of innovation and economic and social development, taking on responsibilities previously in the realm of business and government (Etzkowitz et al. 2007). However, the positive and opportunistic outlook of university-driven innovation is contingent upon individual academics successfully adapting to these new roles and balancing competing demands. Across a wide range of studies, job satisfaction has been shown to correlate significantly with job performance, with the strongest correlation found in jobs requiring complexity and autonomy (Judge et al. 2001). Change has always been a key feature of the university and the academic profession, but academics have rarely played a positive role in initiating or supporting institutional reform. Almost without exception, academics defend traditions and the status quo, regardless of whether such traditions serve the long-term interest of the university (Altbach 1980). The university's durability can be partly credited to the conservatism of the

P.J. Bentley • L. Goedegebuure • V.L. Meek
L.H. Martin Institute for Higher Education Leadership and Management, University of Melbourne, Melbourne, Australia

H. Coates
L.H. Martin Institute for Higher Education Leadership and Management, University of Melbourne, Melbourne, Australia

Australian Council for Educational Research (ACER), Melbourne, Australia

I.R. Dobson (✉)
Higher Education Governance and Management Unit, University of Helsinki, Helsinki, Finland

School of Education and Arts, University of Ballarat, Australia
e-mail: ian.dobson@helsinki.fi

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professoriate. Conservatism protects the university from ill-advised change or change for the sake of change. On the other hand, conservatism can also obstruct desirable change. Undoubtedly, the rise of the knowledge society envisages changes to traditional academic roles, and a motivated academic workforce, satisfied with their reconstructed academic jobs, is most likely to produce the greatest benefit to research, innovation and society. Therefore, it is of paramount importance that stakeholders seeking to influence the university's role in the knowledge society understand what motivates academics in their everyday work. This, of course, is equally true for those in charge of our universities, be they vice chancellors, deans, heads of school or research directors.

While job satisfaction within universities has received increased attention, most detailed former studies are single-country, often from the USA (August and Waltman 2004; Bozeman and Gaughan 2011; Grunwald and Peterson 2003; Iiacqua et al. 1995; Mamiseishvili and Rosser 2010). International studies have been limited to comparisons of descriptive results and mean levels of satisfaction, rather than exploring job satisfaction through a multivariate approach (Enders and Teichler 1997; Lacy and Sheehan 1997). With job satisfaction and its correlates defined inconsistently across studies, international comparisons are problematic, and so too are generalisations beyond the single countries examined. It is also unclear to what extent the theoretical models of job satisfaction developed in the USA apply to other national contexts. The purpose of this chapter is to examine job satisfaction from an international and comparative perspective through an established theoretical framework, Hagedorn's (2000) Conceptual Framework for Academic Job Satisfaction (for a summary of Hagedorn's conceptual framework, see Bentley and colleagues in Chap. 3 of this book). Hagedorn's framework has been utilised in previous analyses of job satisfaction in the USA, but as yet has not been used in an international comparative study or in developing countries. This chapter will examine the factors associated with job satisfaction in the 11 countries covered in earlier chapters of this book (Argentina, Australia, Brazil, Canada, Finland, Germany, Japan, Malaysia, Portugal, South Africa, United Kingdom), plus the USA.

13.1 The Rise or Fall of the Academic Profession?

An international and comparative study of job satisfaction appears particularly pertinent at a time when universities across the world face an increased range of demands, expectations and opportunities. Even though the rise of the knowledge society places universities in the front line of wealth generation, other knowledge-based institutions will battle with them for global competitive advantage (Scott 2009). For the university to be successful, it is reliant upon its core academic workforce. However, many have claimed the academic workforce has been in a state of crisis and decline since at least the 1970s, following the onset of mass higher education in many countries (Altbach 1980). The "decline and fall" narrative is linked to the tangible loss of stable career paths and salary relativities with comparable professions, and the less tangible downgrading in autonomy, and privileged status of the

profession (Enders and Teichler 1997). Welch (1998, 1997, 2005) characterised context of the academic profession as "Commodified, Virtualised, Globalised and Postmodernised". Academics face heightened demands for accountability and social relevance of their research and teaching, a greater contestation over scientific knowledge, an upheaval of research and teaching practices through technological change and, according to some, a more general weakening of professorial power under neo-liberal globalisation (Currie 1998; Welch 1998). Neave (2009) sees academics "becoming simply one more specialised sub-sector in a public world that reduces talent, ingenuity and diversity to the single, all-encompassing descriptor of a 'human resource'" (p. 20). Many of these changes to academic work have the potential for this "key profession" to face difficulties in attracting, retaining and regenerating its workforce (Coates et al. 2009).

The bleak outlook for the academic profession is primarily drawn from the accounts of scholars in the developed countries. Far less is known about job satisfaction and the situation of academics in developing countries (Ssesanga and Garrett 2005). Broadly speaking, academics across the world engage in similar activities (teaching, research and service) and often share similar concerns and experiences. Indeed, Meyer et al. (2007) believe that the academic profession can be characterised in global terms, with universal status and reciprocal recognition across the world, analogous to rabbis or priests. Scott (2006, p. 19) characterises the position of academics in the knowledge society in similar terms as "a form of secular priesthood". However, the factors influencing academic performance are highly contextual. In developing countries, knowledge is often held in higher esteem and academics enjoy relatively more status, but this is frequently counteracted by very low salaries, poor institutional facilities and a lack of intellectual freedom (Altbach 2003). While academics in all countries may bemoan the proverbial decline of collegiality and the intrusion of administrators and bureaucratic accountability into everyday work, academics in developing countries, such as China and Malaysia, work in highly politicised universities, with direct political involvement in university decision-making (Chen 2003; Lee 2003). Although universities in both countries are developing corporate cultures, government ministries retain considerable power and talented academics are often drawn towards more lucrative administrative careers. Therefore, the opportunities provided to academics in the developing countries with the onset of the knowledge society, and the factors which motivate such academics, may well not be generalisable from the bulk of studies of the academic profession in developed countries.

Not all accounts of the changing nature of academic work, however, project the changes in negative terms. Scott (2009) offers a more nuanced account and considers the decline and fall of the academic profession as primarily restricted to a narrowly defined group of teachers and researchers in traditional universities. He believes universities have engaged in "mission stretch", which has brought formerly peripheral activities, such as knowledge dissemination and entrepreneurialism, into the core. He sees this as a strategy to maximise income and argues that such changes probably benefited the situations of academics in newer universities and nonuniversity institutions. Enders and de Weert (2009) also consider these newer roles and expectations as opportunities in the knowledge economy. They characterise contemporary academic careers as T-shaped, with entrepreneurial knowledge dissemination roles

extending out of traditional disciplinary and institutional bases, in ways which may have previously have been considered contradictory. Similarly, Slaughter and Leslie (1997) use "academic capitalism" to describe a range of entrepreneurial activities which academics have engaged in, though more in response to reduced institutional base funding than through active embracement. While many will benefit from exciting entrepreneurial activities, Slaughter and Leslie also offer a more nuanced account by claiming academics "close to the market" (p. 243) will be afforded greater opportunities to research compared to heavier teaching loads of others further from the market. The changing nature of academic work risks fragmenting the profession between those who readily adapt and accommodate the new demands as an extension of their traditional work and those who either lack opportunities (or are unwilling) to engage in newer roles.

Clark (1998) saw no particular contradiction between entrepreneurism and traditional academic values but emphasised that the core function of universities remained in the traditional "academic heartland". Ylijoki's (2003, 2005, 2011) studies in Finland suggest that the two value sets coexist rather than integrate. Balancing the two value sets and finding time for research have become difficult, even for senior staff in technology-related fields, but particularly in the humanities where teaching and administrative commitments leave little time for research and scholarship. While Ylioki found that some academics on short-term contracts with heavy teaching loads limited their commitment to traditional academic values (e.g. disinterested basic research), most retained a particularly strong commitment to their research centres and nostalgia towards traditional research. Ylioki interpreted the nostalgia as evidence of the strength of traditional values and the ongoing commitment of academics to basic research, even when the demands for applied research and fundraising appear overwhelming. Likewise, Hakala (2009) also found that early career researchers in Finland retained a strong commitment to parts of the traditional conception of a professional "calling" and desire to remain in academia, but rejected other notions such as research for the sake of knowledge itself. This may also be considered a relatively positive adaptation to the new academic environment which emphasises the utility of research for national innovation.

One thing that the conflicting narratives of the academic profession share in common is that expectations of universities have changed and the importance of the profession is unquestionable. In 1980, Altbach (1980, pp. 13–14) claimed that the similar worldwide challenges faced by the profession – of expansion, fiscal constraints, public criticism, curricular malaise and a declining sense of professionalism – justified examining these changes to the academic profession in comparative terms. At the time, he lamented that the challenges were unrecognised by many, including government officials and even some university administrators, and was surprised at the lack of research concerning the academic profession, either comparatively or in specific countries. In 1992, under the leadership of Ernest Boyer, the Carnegie Foundation for the Advancement of Teaching (hereafter "Carnegie") conducted the first ever international survey of the academic profession across 14 countries (Altbach 1996).

13.1.1 Previous International Studies of Job Satisfaction and the Academic Profession

Crisis, change and morale were themes in many of the journal articles, book chapters and reports based on the Carnegie survey. In 1997, a special issue of the journal *Higher Education* was dedicated to the Carnegie survey results. Welch's (1997) introductory article claimed that change and uncertainty were coming from various fronts. The 1980s and 1990s saw governments – in both industrialised and developing countries – reducing per-student funding of universities while at the same time expecting universities to move towards a system of universal access (massification). Higher education was becoming increasingly measured according to economic benchmarks,

"commodifying" activities that previously did not have an explicit market value. Teaching students and the pursuit of truth through scientific research (formerly social goods without clear economic value) were ascribed economic value and measured by governments and administrators based on their contribution towards human resource and economic development. From China to the UK, universities appeared to be facing similar pressures to privatise through deregulation, with funding gaps to be covered by private contributions on a user-pays basis. New technologies were having an impact on long-standing research and pedagogical traditions while also facilitating deeper implementation of performance measurement. The implications for morale within the professoriate appeared self-evident.

International data on job satisfaction from the Carnegie international survey were duly analysed by two articles in the special issue, which have subsequently been cited many times. Lacy and Sheehan (1997) set out to examine job satisfaction in 8 of the 14 countries (Australia, Germany, Hong Kong, Israel, Mexico, Sweden, UK and USA). From the outset, the expectations were clear. According to the authors, changes to higher education in the 1980s and 1990s led to high levels of unease, and it was commonplace to hear that "morale has never been lower" or that "staff were at breaking point" (p. 306). Their descriptive results indicated 60% of academics in Sweden and the USA were satisfied with their job situation as a whole, compared to half or fewer in Hong Kong (50%), UK (49%), Australia (49%), Mexico (46%) and Germany (41%) (no data were available for Israel). Refraining from drawing international or national conclusions, the authors speculated that national differences reflected the individual circumstances of academics in each country. For example, the low level of satisfaction amongst German academics may have been due to their comparably low satisfaction with the classes they taught, prospects for promotion and the way the institution was managed. However, they did not pursue the international comparisons further. There was no examination of whether job satisfaction was correlated with aspects of academic work and if these patterns were similar across countries.

The second article within the special issue examining job satisfaction by Enders and Teichler (1997) used the Carnegie data to compare job satisfaction (and other work-related variables) across six countries (Germany, the Netherlands, England,

Japan, the USA and Sweden). They segmented the samples and explored the results based on rank (professor, middle rank, junior staff) and institutional type (universities and other higher education providers). While negativity could be interpreted from the title of their article ("A victim of their own success?"), victimisation was not a key theme in their interpretation. They reported that roughly two thirds of university professors were satisfied, with very minor differences across countries, and concluded "the degree of satisfaction expressed can be considered as surprisingly high … the survey does not portray the academic profession as clearly disappointed and resentful" (p. 370). This relatively positive view of the academic profession was reiterated by Enders (1999) in a later article titled "Crisis? What Crisis?" where he speculated that high satisfaction may be credited to three potential sources: the profession's enormous staying power and ability to survive under varying conditions, that the core of the profession had been unaffected by (or yet to experience) the changes referred to above, or job satisfaction was an example of academic self-compliance amidst a time of rapid change (p. 79). However, the conclusion of broad job satisfaction within the professoriate did not sit easily with Lacy and Sheehan's (1997) findings or the authors' own results for academics below the professor rank. In all countries examined by Enders and Teichler (1997), academics were less satisfied in middle ranks and lesser still in lower ranks. For example, in Germany, the proportion of satisfied academics dropped appreciably from 64% amongst professors to 34% in middle ranks and 32% in junior staff. Given that most academics did not hold professor positions (though the authors did not show the sample size for each rank), overall satisfaction could hardly be considered high. In fact, Enders and de Weert (2009, p. 252) later cited the article as an example of the "decline and fall" narrative of the profession in the wake of massification. It also highlights the fact that interpretations can change depending on how one splices the data and that sample sizes can become an issue – something we will return to later in this chapter.

It is difficult to conclude from the Carnegie data what the broad level of job satisfaction in the early 1990s was due to the considerable variability within each country based on staff categories. Basic cross-tabulations are also insufficient to demonstrate how job satisfaction varies within the professoriate because many categorisations are highly correlated (e.g. rank, gender, qualifications, institutional type, research and teaching duties). Drawing comparisons from separate studies is particularly problematic given the various methods for operationalising job satisfaction and the choice of independent variables. This illustrates the importance of approaching job satisfaction and its correlates through an established theoretical framework, particularly when one has the opportunity to analyse internationally comparable data.

13.2 Theoretical Framework

Hagedorn's Conceptual Framework for Academic Job Satisfaction (2000) builds upon the classic two-factor theory of job satisfaction developed by Herzberg et al. (1993). Herzberg considered job satisfaction to be derived from two sources: motivators (intrinsic factors) and hygienes (contextual and extrinsic factors). The two-factor

Table 13.1 Conceptual framework for academic job satisfaction (Hagedorn 2000)

Mediators			Triggers
Motivators and hygienes	Demographics	Environmental conditions	Change or transfer
Achievement	Gender	Collegial relationships[a]	Change in life stage
Recognition	Ethnicity[a]	Student quality or relationships	Change in family-related or personal circumstances[a]
Work itself	Institutional types[a]	Administration	Change in rank or tenure
Responsibility[a]	Academic discipline	Institutional climate or culture[a]	Transfer to new institution
Advancement			Change in perceived justice[a]
Salary[a]			Change in mood or emotional state[a]
Institutional resources[b]			

[a]Measures not operationalised
[b]Additional variable, not included in Hagedorn's (2000) original framework

theory considers factors promoting job satisfaction to be different to those which prevent dissatisfaction. Motivator/intrinsic factors, such as challenging and interesting work, help promote job satisfaction. However, they do not prevent dissatisfaction if certain hygiene factors are left unmet, such as satisfactory salary or workplace policies. By contrast, satisfactory salary and hygiene factors, while effective at preventing dissatisfaction, do not lead one to be satisfied, as job satisfaction is believed to be an outcome of motivator factors and the intrinsically rewarding elements of one's work. Many studies of academic job satisfaction have offered support to Herzberg and colleagues' two-factor theory, including Hill (1987, in Lacy and Sheehan 1997, p. 307) who concluded that job satisfaction is related to intrinsic factors (the work itself), while dissatisfaction arises from factors external to the job. Lacy and Sheehan (1997) believed their results offered no evidence to challenge to the two-factor theory as an explanatory model, but it is not clear how the two-factor theory was used to categorise the independent variables in their study.

Hagedorn (2000) offers a clear account for how the two-factor theory may be applied to academic work, including both motivators and hygienes, and other categories of factors, such as demographics, environmental conditions and triggers. Hagedorn's main departure from the two-factor theory was the inclusion of triggers, which are significant work or nonwork events affecting one's reference point for how work fits into one's life. Hagedorn's framework and the variables operationalised in this chapter are shown below (Table 13.1).

13.3 Data and Methodology

We examine comparable data on job satisfaction across 12 of the CAP countries: Argentina, Australia, Brazil, Canada, Finland, Germany, Japan, Malaysia, Portugal, South Africa, United Kingdom and the USA. Our total sample size is 13,403 academics.

13.3.1 Dependent Variable

Our dependent variable is the ordinal response to the question: "How would you rate your overall satisfaction with your current job?" (very low = 1; very high = 5). Our use of a single question to measure the complexity of job satisfaction raises some concerns. Single-item measures are less reliable than multi-item scales constructed from numerous questions directly and indirectly related to one's job satisfaction. For example, if one was genuinely satisfied with their academic work, one would expect consistently positive views across a range of questions addressing the state of the academic profession. Multi-item approaches also improve specificity, increasing the potential range of values. In their study of Australian academics, Bentley and colleagues (in Chap. 3 of this book) constructed a factor-based score based on four items by including an additional three questions ("This is a poor time for any young person to begin an academic career in my field", "If I had it to do over again, I would not become an academic" and "My job is a source of considerable personal strain"). They found this to be an internally consistent measure, with a Cronbach alpha of 0.74, exceeding the threshold for what Burns and Burns (2008) consider acceptable internal consistency in an attitude scale (a Cronbach alpha exceeding 0.70).

The problem with replicating this approach for an international sample is that the four items are not internally consistent in most countries. Only in the UK, Brazil, Australia and the USA did the Cronbach alpha exceed the recommended threshold of 0.70. Canada, the remaining English-speaking country, came close to reaching this benchmark with a Cronbach alpha of 0.69 (which increased to 0.73 when the question addressing prospects for young academics was removed). As noted by Höhle and Teichler (in Chap. 7 of this book), inconsistent correlation across questions addressing the state of the academic profession suggests that the meaning of job satisfaction probably differs across cultures. For example, the relationship between job satisfaction and work-related personal strain may take upon a different meaning in cultures that revere personal sacrifice. The greater internal consistency across English-speaking countries probably reflects a similar cultural understanding of job satisfaction. The statistics for internal consistency and the means for the four questions are shown in Table 13.2.

13.3.2 Independent Variables

Hagedorn's (2000) framework contains four types of independent variables: motivators and hygienes, demographics, environmental variables and triggers. We operationalised four out of the six motivators and hygienes variables: achievement (publications), work itself (available research time), recognition (elected leadership role or scientific board member) and advancement (senior academic rank). We also include an additional variable for satisfaction with institutional resources (not contained

Table 13.2 Mean response for job satisfaction, prospects for young academics, if one would choose an academic career again, work-related personal strain, Cronbach alpha and sample size (*n*), by country

Country	Job satisfaction	Prospects for young	Academic career again	Personal strain	Cronbach alpha	*n*
Argentina	3.72	3.75	4.46	3.40	0.54	826
Australia	3.42	2.77	3.60	2.64	0.74	1,101
Brazil	3.69	3.85	4.00	3.16	0.75	1,144
Canada	3.87	3.13	4.18	2.82	0.69	1,077
Finland	3.71	2.72	3.83	2.71	0.56	1,428
Germany	3.59	3.02	4.03	2.90	0.64	1,193
Japan	3.64	4.06	3.68	2.40	0.42	1,392
Malaysia	3.72	4.00	4.16	3.51	0.62	1,190
Portugal	3.39	2.90	3.72	2.73	0.64	1,041
S. Africa	3.37	3.55	3.64	3.07	0.66	733
UK	3.34	2.63	3.47	2.45	0.76	1,132
USA	3.69	3.53	4.18	3.06	0.72	1,146
Total	3.60	3.32	3.91	2.88	0.67	13,403

Notes: Sample size (*n*) may vary slightly across questions due to single-item nonresponse
Prospects for young: "This is a poor time for any young person to begin an academic career in my field" (strongly agree = 1; strongly disagree = 5)
Academic career again: "If I had it to do over again, I would not become an academic" (strongly agree = 1; strongly disagree = 5)
Personal strain: "My job is a source of considerable personal strain" (strongly agree = 1; strongly disagree = 5)

in Hagedorn's framework) because we consider satisfactory institutional resources as facilitators of academic work and their absence has detrimental effects on one's work satisfaction. Two motivators and hygienes – responsibility and salary – were not operationalised due to a lack of data (responsibility) and correlation with other independent variables (salary and rank).

We operationalised two out of the four demographic variables: academic discipline (academic field based on the guidelines of UNESCO (1978)) and gender. The CAP survey did not contain data on ethnicity, and we chose not to operationalise a variable for institutional type due to a lack of consistency across countries in university categories. Our model contained two environmental variables: student quality/relationships (poor student quality) and two separate variables for administration, satisfaction with administration processes and perceived departmental influence. Environmental variables directly measuring collegial relationships and institutional climate/culture were not available in the CAP data, though the effect of these factors is likely found in the other environmental variables measuring administration. We only had limited data for operationalising Hagedorn's trigger variables due to the lack of precise questions and the cross-sectional nature of the CAP survey. We operationalised three trigger variables for change in life stage (early career/under 40 years, mid-career/40–55 years and late career/over 55), change in rank/tenure (recently promoted or appointed in the past 5 years) and transfer to new institution (new appointment with less than 4 years at current institution).

The procedure and rationale for operationalising the selected variables have been discussed previously in Chap. 3 of this book. The only differences in procedure for examining the international sample in this chapter relate to advancement (academic rank) and the omission of a variable for institutional type. Given the large number of national categories for rank, we operationalised advancement as a single dichotomous variable, rather than as a series of dichotomous variables for all categories. National classification for senior academic rank was developed by the national CAP survey teams and typically included full professors and those holding the rank immediately below. A summary of how the independent variables were operationalised is shown in Table 13.3, and the means for each independent variable, by country, are shown in Table 13.4.

13.4 Results

Before presenting the multivariate results, it is worth presenting some descriptive results and drawing comparisons with the former studies. In Lacy and Sheehan's (1997) analysis of the 1992 Carnegie survey, they reported the proportion of academics satisfied with their jobs (reporting 4 or 5, on a scale of 1–5). They found satisfaction varied between countries: Australia (49%), Germany (41%), Hong Kong (50%), Mexico (46%), Sweden (60%), the UK (49%) and the USA (60%). Taking a similar dichotomy for satisfaction in the CAP survey, Table 13.5 indicates that the proportion of satisfied academics is slightly higher for Australia (55%) and the USA (63%) and considerably higher in Germany (62%). Only in the UK is the proportion of satisfied academics lower (47%). This would suggest that self-reported job satisfaction has improved since the early 1990s. Enders and Teichler (1997) also examined the 1992 data for Germany, England, Netherlands, Sweden, Japan and the USA. They found the proportion of academics reporting satisfaction declined with rank and was higher in universities compared to other institutions. According to Enders and Teichler, roughly two thirds of university professors in the six counties were satisfied, and this proportion varied only slightly across countries (from 63 to 67%). In all six countries, the proportion of satisfied academics was lowest in the bottom academic ranks, but satisfaction in lower ranks varied from 32% of university junior staff in Germany to 55% in the Netherlands. Satisfaction was also a minority response for staff not employed at universities. We are unable to precisely replicate Enders and Teichler's variables for academic rank and institutional categories because it is not clear how Enders and Teichler operationalised these variables. However, in Table 13.5, we also report the proportion of academics reporting job satisfaction based on academic rank.

Two thirds (67%) of the senior-ranking academics in the CAP sample reported satisfaction with their jobs. This is remarkably similar to Enders and Teichler's (1997) results for professors (roughly 65% satisfied). Further, the CAP results also support Enders and Teichler's findings that, in most countries, satisfaction is higher in senior-ranked positions compared to lower-ranked university positions. Only

Table 13.3 Independent variable operationalisation and description

Motivators and hygienes	
Publications[a]	A square root transformation of the weighted sum of an individual's journal articles (1 point), edited books (2 points) and authored books (5 points) in the previous 3 years
Recognition[b]	In the previous year was a member of a national/international scientific board, elected leader of a professional association or union or elected leader of a professional/academic organisation
Available research time[b]	Academics were categorised as having sufficient research time if (1) their primary interest was research and they spent at least 30% of their time on research; (2) they held both teaching and research interests and spent at least 20% of their time on research; or (3) they held a primary interest in teaching
Senior rank[b]	Holds a senior academic rank (details in the Appendix)
Institutional resources[c]	Mean satisfaction with 12 institutional resources: classrooms, technology for teaching, teaching support staff, laboratories, research equipment, research funding, research support staff, computer facilities, libraries, office space, telecommunications and secretarial support
Demographics	
Male[b]	Male
Social sciences[b]	Current academic unit in the social sciences
Humanities[b]	Current academic unit in the humanities
Natural sciences[b]	Current academic unit in the natural sciences
Technology[b]	Current academic unit in technology or engineering
Medicine[b]	Current academic unit in the medical/health sciences
Environment	
Poor student quality[c]	Degree of agreement that "You spend more time than you would like teaching basic skills due to student deficiencies"
Dept. influence[d]	"How influential are you, personally, in helping shape academic policies … at the level of the department"
Administration processes[c]	Mean response to five administration questions: At my institution there is "a cumbersome administrative process" (reverse coded), "collegiality in decision-making", "good communication between management and academics", "a supportive attitude of administrative staff towards teaching" and "a supportive attitude … towards research"
Triggers	
Early career[b]	Under 40 years of age
Mid-career[b]	40–55 years of age
Late career[b]	Over 55 years of age
Recently promoted[b]	Promoted/appointed to current rank within the last 5 years
New appointment[b]	Less than 4 years at current institution

[a]Scale variable
[b]Dichotomous variable
[c]Five-point ordinal variable
[d]Four-point ordinal variable

Table 13.4 Independent variable means by country

Country	ARG	AUS	BRA	CAN	FIN	GER	JAP	MAL	POR	SA	UK	USA
Motivators and hygienes												
Publications[a]	2.48	2.52	2.21	2.55	2.25	2.83	3.60	2.11	2.55	1.85	2.56	1.90
Recognition[b]	0.43	0.43	0.39	0.63	0.47	0.34	0.66	0.50	0.50	0.38	0.39	0.46
Available research time[b]	0.91	0.78	0.64	0.87	0.81	0.84	0.85	0.61	0.83	0.66	0.76	0.84
Senior rank[b]	0.31	0.23	0.59	0.71	0.27	0.40	0.87	0.24	0.23	0.70	0.56	0.64
Institutional resources[c]	2.65	3.22	3.16	3.25	3.57	3.26	2.93	3.12	3.03	3.22	3.06	3.33
Demographics												
Male[b]	0.41	0.50	0.53	0.59	0.50	0.71	0.91	0.52	0.55	0.53	0.51	0.58
Social sciences[b]	0.28	0.34	0.44	0.38	0.31	0.26	0.23	0.27	0.30	0.54	0.33	0.36
Humanities[b]	0.16	0.13	0.08	0.18	0.14	0.10	0.09	0.07	0.08	0.22	0.20	0.25
Natural sciences[b]	0.27	0.21	0.18	0.21	0.23	0.28	0.25	0.23	0.27	0.16	0.21	0.18
Technology[b]	0.19	0.06	0.08	0.08	0.16	0.18	0.22	0.31	0.24	0.03	0.08	0.07
Medicine[b]	0.10	0.25	0.22	0.15	0.16	0.18	0.20	0.13	0.10	0.05	0.17	0.13
Environmental												
Poor student quality[c]	3.82	3.61	3.51	3.54	3.25	3.46	3.70	3.48	3.80	3.90	3.76	3.53
Dept. influence[d]	2.28	2.38	2.76	2.78	2.44	2.88	2.48	2.42	2.52	2.72	2.40	2.99
Admin. process[c]	2.89	2.54	2.93	2.89	2.70	2.61	2.92	3.16	2.69	2.55	2.60	2.93
Triggers												
Early career[b]	0.24	0.26	0.31	0.26	0.42	0.34	0.12	0.56	0.38	0.31	0.27	0.16
Mid-career[b]	0.54	0.52	0.55	0.51	0.41	0.45	0.49	0.39	0.53	0.49	0.51	0.46
Late career[b]	0.22	0.22	0.14	0.23	0.18	0.21	0.39	0.05	0.09	0.19	0.22	0.39
Recently promoted[b]	0.45	0.73	0.58	0.60	0.68	0.48	0.53	0.80	0.62	0.60	0.68	0.58
New appointment[b]	0.11	0.43	0.31	0.29	0.36	N/A	0.23	0.45	0.14	0.33	0.38	0.27

[a]Scale variable
[b]Dichotomous variable
[c]Five-point ordinal variable
[d]Four-point ordinal variable

Table 13.5 Proportion of academics reporting job satisfaction (%) and sample size (*n*), by rank and country

	Senior rank		Junior rank		All staff	
	%	*n*	%	*n*	%	*n*
Argentina	79	258	56	568	63	826
Australia	72	255	50	842	55	1,101
Brazil	67	675	60	465	64	1,144
Canada	75	765	72	312	74	1,077
Finland	73	379	65	1,005	67	1,428
Germany	71	475	56	705	62	1,193
Japan	70	1,216	59	174	69	1,392
Malaysia	75	269	63	857	65	1,190
Portugal	65	209	50	711	53	1,041
South Africa	53	450	50	191	51	733
UK	49	606	44	471	47	1,132
USA	64	728	61	418	63	1,146
Total	67	6,285	57	6,719	62	13,403

All staff includes cases where academic rank is unknown

57% of academics in junior ranks reported satisfaction. However, the CAP results also indicate considerable variation across countries in the proportion of senior-ranking academics who are satisfied and the relationship between rank and satisfaction, compared to the relatively consistent international patterns in Enders and Teichler's study. In Argentina, 79% of senior-ranking academics reported satisfaction compared to 56% of junior-ranked academics, while in UK less than half of senior-ranked academics reported satisfaction (49%), and this was only marginally higher than juniors (44%). The greater variation across countries in this study is perhaps due to the wider range of countries included (compared to the six countries in Enders and Teichler's study), but there are other noticeable differences with Enders and Teichler's study. For example, 71% of senior-ranking German academics in the CAP survey reported satisfaction, compared to 56% in lower university ranks. These figures are comparably higher for both ranks than Enders and Teichler's results for German professors (64%) and lower-ranked staff (which ranged from 32 to 34%). Despite the narrowing of the gap, Höhle and Teichler (in Chap. 7 of this book) rightly point out that the German academic profession cannot be viewed as homogeneous in the level of satisfaction or factors associated with satisfaction.

Although the cross-tabulated results for the single question of overall job satisfaction suggest that job satisfaction is more common in senior academic ranks, rank also tends to reflect other characteristics, such as age, experience, research performance and gender. Further, a single question on job satisfaction, recoded into a categorical variable, provides a crude and limited picture of job satisfaction. While our use of a single-item ordinal scale for job satisfaction (from 1 to 5) has limitations, it does provide scope for multivariate OLS regression for the factors associated with higher levels of job satisfaction. Given that the independent variables are a mixture of dichotomous, ordinal and scale variables, we present the OLS regression results for unstandardised betas in Table 13.6 and standardised betas in Table 13.7.

Table 13.6 OLS regression unstandardised betas for factors associated with higher levels of job satisfaction

	ARG	AUS	BRA	CAN	FIN	GER	JAP	MAL	POR	SA	UK	USA
(Constant)	2.48**	1.16**	1.75**	1.24**	2.20**	1.17**	1.44**	1.97**	1.61**	1.23*	0.45	1.05**
Motivators and hygienes												
Publications[a]	0.06**			0.06*	0.04	0.03						
Recognition[b]												
Avail. res. time[b]		0.27**				0.34**					0.15	
Senior rank[b]	0.34**			−0.18								
Inst. resources[c]	0.14**	0.26**	0.28**	0.35**	0.24**	0.34**	0.38**	0.24**	0.27**	0.32**	0.39**	0.35**
Demographics												
Male[b]	0.18**		0.15*			0.18*	0.22*				−0.12	
Humanities[b]										−0.29		
Natural sciences[b]						−0.14						
Technology[b]		−0.30		0.21								
Medicine[b]						−0.22*						
Environmental												
Poor student quality[c]		−0.14**	−0.10**	−0.08**				−0.07*	−0.11*			−0.10**
Dept. influence[d]		0.15**	0.10**	0.20**		0.11**		0.17**	0.25**	0.22**	0.25**	0.17**
Admin. process[c]	0.21**	0.42**	0.31**	0.31**	0.18**	0.25**	0.19**	0.22**		0.19	0.37**	0.40**
Triggers												
Early career[b]												
Late career[b]		0.20*				0.28**	0.20**			0.40*	0.24**	0.12*
Recently promoted[b]		0.21*									0.19*	0.15*
New appointment[b]			0.21*			N/A				0.31	0.20*	
R-square	0.18	0.37	0.31	0.29	0.13	0.29	0.17	0.24	0.17	0.25	0.41	0.42
Adjusted *R*-square	0.16	0.35	0.29	0.28	0.10	0.28	0.16	0.20	0.13	0.19	0.40	0.41
n	636	513	566	710	474	687	897	366	321	212	656	974

Reference categories: social science, mid-career
Significance level: $p<0.10$; $*p<0.05$; $**p<0.01$
[a]Scale
[b]Dichotomous
[c]Five-point ordinal
[d]Four-point ordinal

Table 13.7 OLS regression standardised betas for factors associated with higher levels of job satisfaction

	ARG	AUS	BRA	CAN	FIN	GER	JAP	MAL	POR	SA	UK	USA
Motivators and hygienes												
Publications[a]	0.11**			0.08*	0.09	0.07						
Recognition[b]												
Avail. res. time[b]		0.10**				0.14**					0.06	
Senior rank[b]	0.19**			−0.08								
Inst. resources[c]	0.15**	0.16**	0.25**	0.24**	0.17**	0.24**	0.26**	0.21**	0.19**	0.23**	0.27**	0.26**
Demographics												
Male[b]	0.11**		0.08*			0.08*	0.07*				−0.06	
Humanities[b]										−0.13		
Natural sciences[b]						−0.07						
Technology[b]		−0.07		0.06								
Medicine[b]						−0.09*						
Environmental												
Poor student quality[c]		−0.15**	−0.13**	−0.10**				−0.10*	−0.13*			−0.11**
Dept. influence[d]		0.13**	0.09**	0.18**		0.11**		0.18**	0.23**	0.22**	0.23**	0.17**
Admin. process[c]	0.19**	0.32**	0.28**	0.25**	0.17**	0.21**	0.13**	0.21**		0.14	0.27**	0.35**
Triggers												
Early career[b]												
Late career[b]		0.08*				0.12**	0.11**			0.16*	0.10**	0.06*
Recently promoted[b]		0.09*									0.09*	0.08*
New appointment[b]			0.10*			N/A				0.14	0.09*	
R-square	0.18	0.37	0.31	0.29	0.13	0.29	0.17	0.24	0.17	0.25	0.41	0.42
Adjusted *R*-square	0.16	0.35	0.29	0.28	0.10	0.28	0.16	0.20	0.13	0.19	0.40	0.41
n	636	513	566	710	474	687	897	366	321	212	656	974

Reference categories: social science, mid-career
Significance level: $p<0.10$;*$p<0.05$;**$p<0.01$
[a]Scale
[b]Dichotomous
[c]Five-point ordinal
[d]Four-point ordinal

Both tables show results for all independent variables exhibiting statistically significant ($p < 0.10$) associations with higher job satisfaction.

Similar to the high variation across countries in the internal consistency of survey responses to various aspects of academic job satisfaction (see Table 13.2), the proportion of variance in the job satisfaction which could be explained by our model of independent variables ranged markedly across countries. Based on the adjusted *R*-squares, the model explained a reasonable share of the variance in self-reported job satisfaction the USA (42%), UK (41%), Australia (37%), Brazil (31%), Canada (29%) and Germany (29%). However, the model explained considerably less variance in Argentina (18%), Japan (17%), Portugal (17%) and Finland (13%). These results bring into question whether one may be able to utilise a single model of factors associated with academic job satisfaction around the world, even within the industrialised OECD countries.

13.4.1 Results for Motivators and Hygienes

Satisfaction with institutional resources, which contained 12 separate resource types, was the only variable which exhibited significant relationship with job satisfaction in all 12 countries examined. The pressure for universities to do more with fewer resources has been a worldwide phenomonenon, and it is unsurprising that satisfaction with institutional resources closely correlates with job satisfaction. In the wake of massification and declining government funding, universities around the world have become increasingly reliant upon private funding sources to supplement (Meek and Davies 2009). Although the experience of austerity may be common for all academics, the effects are uneven and those academics unable to access satisfactory resources for the completion of their duties report lower levels of satisfaction.

The availability of research time may also be considered an institutional resource, particularly in times of growing demands for accountability of academic time use. Traditionally, all academics could make claims to have adequate time available to engage in research, particularly under the Humboldtian traditions of research-based teaching. Equitable access to research time may still be seen in formal terms under union-based collective agreements governing academic work. We took a relatively conservative classification for whether or not one had available research time, based on the proportion of time spent on research and self-declared interest in this activity over teaching (30% of time in research for primary interest, 20% for both research and teaching interests and no threshold for those with primary teaching interests). The vast majority of academics in most countries met the threshold and were considered to have available research time. However, for the 22% of Australian academics, 16% of German academics and 24% of UK academics who did not have available research time, there was a modest but statistically significant negative relationship with job satisfaction.

Perhaps surprising, we found only weak relationships between publication productivity and job satisfaction, significant only in Argentina, Canada, Finland and

Germany. Based on expectancy and self-determination theories of motivation, one may expect that academics who perform well in research and publish will receive greater intrinsic and extrinsic rewards from such performance (Gagné and Deci 2005). Intuitively, one may have expected a particularly strong relationship between publishing and satisfaction in the UK, where the Research Assessment Exercise has increased the pressure to publish. However, it should be noted that the lack of significance for this variable is not unusual. An American study of academic productivity and job satisfaction by Mamiseishvili and Rosser (2010) found no significant relationship between job satisfaction and research productivity. Therefore, the lack of significance in most countries suggests that publishing has only a minor relationship with job satisfaction, once related factors, such as research time and academic rank, are controlled for.

13.4.2 Results for Demographic Variables

Hagedorn's (2000) framework contained four types of demographic variables associated with job satisfaction, of which we included two: gender and academic field (we did not operationalise institutional type or ethnicity). Most of the results for the demographic variables were weak and insignificant. While there were some significant effects for each of the variables in certain countries, there were no consistent international patterns. Male academics were marginally more satisfied than females in Argentina, Brazil, Germany and Japan, but the opposite is the case in the UK. None of the academic field variables were highly significant ($p<0.01$). The weakness of these variables suggests that demographics play only a minor role in predicting job satisfaction compared to the other clusters of variables in Hagedorn's framework.

13.4.3 Results for Environmental Variables

As a group, our results for the environmental variables showed the strongest and most consistent relationships with job satisfaction. We operationalised two variables under Hagedorn's (2000) administration category: administration processes (containing five correlated responses to perceived cumbersome administrative process, collegiality, communication, administration attitudes towards teaching and research) and departmental influence. In all countries other than Portugal, and to a lesser extent South Africa, the relationship between job satisfaction and satisfaction with administration processes is clear. Although it is not possible to pinpoint the precise element of administration which has the strongest relationship with job satisfaction, academics who perceive their administration positively hold more positive views on their own job satisfaction. Likewise, but generally to a lesser extent, academics who perceive that they have a stronger influence over their department's

decision-making processes are also more satisfied with their jobs. This relationship is particularly noticeable in the English-speaking countries, where a two-point increase in satisfaction with administration processes (on a five-point scale) and departmental influence (on a four-point scale) corresponds with roughly a one-point increase job satisfaction (on a five-point scale). The strong relationship between job satisfaction and both administration satisfaction and departmental influence is consistent with previous studies of academic staff in the USA. Iiacqua et al. (1995) implemented Herzberg's framework for job satisfaction at an American private business college and found that the strongest predictor variable was satisfaction with administration.

Our second environmental variable, perceived student quality, showed small but significant effects in the expected directions. The extent to which one agreed they spent too much time than they would like teaching basic skills due to students with deficiencies was negatively correlated with job satisfaction in Australia, Brazil, Canada and the USA and to a lesser extent in Portugal and Malaysia. It is worth reflecting also on the mean score for this variable (in Table 13.4). On a scale of 1 (strongly disagree) to 5 (strongly agree), the mean response for this variable was 3.6 across all 12 countries. In other words, dissatisfaction with student ability is common concern across all countries, even more than dissatisfaction with administration processes or institutional resources. The relationship between perceived student ability and job satisfaction has been identified in previous American studies (August and Waltman 2004; Iiacqua et al. 1995) and probably reflects the extra demands of teaching more students from increasingly diverse backgrounds. However, it is not clear from our international results why the very poor ratings of student ability in Argentina, UK and South Africa do not show significant relationships with job satisfaction.

13.4.4 Results for Trigger Variables

Hagedorn's (2000) Conceptual Framework for Academic Job Satisfaction considered how changes to one's life stage, family, rank, institution, emotional state and perceived justice can lead one to reassess the role work in one's life. Hagedorn described these events as "triggers". We included three of Hagedorn's triggers in our model: change in life stage (career stage based on age), change in rank (based on time since promotion) and transfer to new institution (based on time since appointment). Of these three trigger variables, only life stage showed consistent and significant relationship with job satisfaction. Controlling for other age-related factors, such as rank, being a late-career academic (over 55 years of age) was positively related to job satisfaction in Germany, the UK, Japan, South Africa and Australia and to a lesser extent in the USA. In Hagedorn's (1994) earlier research, she suggested that older academics may report greater job satisfaction because their experience has given them the time to align their work roles with individual competences

and interests. The limitations of cross-sectional data mean that we cannot draw conclusions on the effects of aging, only that academics of different ages report different mean levels of job satisfaction. If older academics do benefit from improved alignment with their interests, then cross-sectional data will distort the relationship between career stage and satisfaction. Given the group of older academics will not contain dissatisfied academics from the same generation who could not align their interests with their work and have sought alternative careers or retirement, the remaining group of older academics will be a selective group of academics. Therefore, one should be cautious to interpret these results as indicating changes to career stage have led to a positive reassessment of academic work amongst older academics.

The trigger variable for change in rank ("recently promoted" within the past 5 years) was significant only in Australia, USA and the UK. Although this may give some support to the positive relationship between job satisfaction and promotion (including additional salary and recognition of performance), the relationship is weak compared to the environmental variables. There is also very little evidence to suggest that a change of institution (being a "new appointment" in the past 5 years) is related to one's job satisfaction, though the weak significant results in Brazil, South Africa and the UK suggest a positive relationship with institutional change and job satisfaction.

13.5 Discussion

Academics are renowned for the intrinsic motivation they derive from their work. The broad results of the CAP survey suggest that the fulfilment that academic work provides remains central to the motivations behind academic careers. Across the 12 countries examined in this final chapter, on average, 62% of academics reported being satisfied (above the midpoint of the scale), with a further 26% neutral (at the midpoint). Even amongst the British academics, who invariably reported the lowest mean satisfaction on all job-related measures (see Table 13.2), only 17% reported a level of overall job satisfaction below the midpoint of the scale. Although a five-point scale for job satisfaction is a crude measure for such a complex phenomenon, there are further reasons to believe that, upon reflection, most academics are content with their current position and with the choices that have shaped their careers. When asked "if I had it to do over again, I would not become an academic", on average, only 15% of the academics agreed with this declaration. Clearly academics are not entirely miserable with the state of their careers.

However, despite positive accounts of their own careers, many hold negative views on the state of the profession for young entrants. Almost a third (30%) agreed that "this is a poor time for any young person to begin an academic career in my field". This was a particular concern of academics in the UK (51%) and Australia (46%). There is also ample reason to be concerned about the large minority of

academics (41%) who agree that their "job is a source of considerable personal strain". Again, this has been a particular concern for academics in the UK (58%) and Australia (51%). However, one should not assume that the relationship between personal strain and job satisfaction is simple and uniform across cultures, given the high levels of stress reported by Japanese academics and its lack of correlation with job satisfaction. Perhaps the consistently negative views of British and Australian academics reflect the particularly dramatic changes experienced by these academics over the course of their careers, such as the abolition of the binary divide between universities and teaching-focused institutions. Australia and the UK were also eager adopters of new public management (Hood 1995). The implications to universities have included work intensification and additional managerial and line management roles into formerly academic positions, such as deans and heads of department (Barry et al. 2001, 2003; Lafferty and Fleming 2000). Academics have also been pressured into new roles involving external fundraising and service in order to maintain university resources in times of growing public expectations and declining funding (Slaughter and Leslie 1997). On the other hand, academics in the USA have also experienced declining funding and greater demands for entrepreneurialism, yet do not share the same negativity of their Australian and British colleagues.

To the outside world, academics have been ridiculed as "heroic complainers" (*Economist* 2011) and a "bunch of whingers", pining for the "good old days" (Petersen 2011). It is easy to be dismissive of the bitterness and fears of academics were it not for the crucial role they are expected to play in contributing to economic growth through research and the training of the knowledge workforce. As noted by Ramsden (1998), academic leaders must work with academics to find ways to maintain commitment and forge new pathways towards effectiveness, in a culture that upholds open criticism and levels of insubordination which would be unacceptable in other organisations. This task would be easier with clearer knowledge on the factors associated with job satisfaction, which was the purpose of this final chapter.

From the OLS regression results for factors associated with job satisfaction, one may be tempted to conclude that one of the greatest areas of improvement in morale may come through restructuring administration processes. Many academics view administration processes as cumbersome, poorly communicated and lacking collegiality and support for teaching and research. These concerns are common across many countries, with only Malaysian academics, on average, evaluating their administration positively in these areas (above the midpoint of the scale, see Table 13.4). Likewise, of the variables included in our model, administration processes were the factor most strongly associated with job satisfaction in the majority of countries (see Table 13.7). However, it would be a mistake to draw the causal inference that by changing or improving administration processes, one might improve the morale of the academic workforce. Job satisfaction is complex and manifests itself in various ways. Attitudes towards university policies and administration may be symptoms of satisfaction, not the cause. Administration processes and associated managerialism are broad phenomena and easy scapegoats for academics to attach blame for a wide range of frustrations.

Academics across all countries lament the amount of time spent teaching basic skills due to student deficiencies (see Table 13.4). This negativity probably reflects a combination pressures to teach more students of varying scholarly abilities in post-massification systems. Within the OECD countries, academics also typically hold doctoral research qualifications and report a generally higher level of individual interest in research relative to teaching. However, the extent to which one considers they spend too much time teaching basic skills is a weak predictor of job satisfaction. It is difficult to explain why this is the case. One reason could be that the pressures associated with teaching are reflected in individual evaluations of other aspects of academic work, such as adequate resourcing and support for teaching, which formed part of our institutional resources variable.

Any study which attempts to understand job satisfaction must contend with the difficulties of adequately operationalising what job satisfaction means. For international comparative studies, this takes upon additional challenges. In the classic paper "What is job satisfaction", Locke (1969) claims "Job satisfaction is the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values" (p. 316). While this type of definition appears straightforward and able to be operationalised through a comprehensive and standardised questionnaire, Locke elaborates that "the causes of job satisfaction are not in the job nor solely in man but lie in the relationship between them" (p. 319). Not only do academic jobs differ across countries, but as this study has shown, the relationship between particular elements of academic jobs and job satisfaction also varies considerably across countries. For example, the relationship between job-related strain and self-reported job satisfaction is not the same in Japan as it is in the UK. Perceptions of administrative processes and their relationship with job satisfaction also differ. Although the diversity in job satisfaction and its correlates may be an accurate reflection of cross-national and intercultural differences, there are inevitable problems of measurement error associated with the translation of terms, such as "cumbersome administrative processes".

Overall, this chapter has shown that most academics report being satisfied with their jobs and career choices, notwithstanding the resounding negativity towards administrative processes. However, the results for what factors are associated with job satisfaction remain ambiguous. Future international comparative studies of academic job satisfaction will probably face similar challenges. It is difficult to devise a reliable, multi-item composite measure of academic job satisfaction which is internationally consistent because cultural differences influence the degree of satisfaction one derives from different elements of academic work and the environment. The often-cited paradox is that academics may be highly critical of various aspects of their jobs but still report being satisfied overall. Unlike other organisations, where job satisfaction may be reflected through absenteeism or staff turnover as dissatisfied workers move on to better alternatives, universities offer unique and rewarding careers where, given their time over, most academics would readily sign up to again.

Appendix

National Classifications for Academic Rank

Country	Senior rank	Junior rank
Argentina	Titular, asociado	Adjunto, jefe de trabajos prácticos, ayudante de 1ra, others
Australia	Level E, level D	Level C and below
Brazil	Full professor, associate professor	Assistant professor, assistant, others not on career track
Canada	Professor	Associate professor, assistant professor
Finland	Professor, assistant professor, principal lecturer, other senior	Researcher, senior researcher, assistant, lecturer, other junior
Germany	Professor C4, W3, C3, W2, C2 or similar	Junior professor, other professor (Hochschullehrer), other academic position above entry level, other academic position on entry level or below, other
Japan	Professor, associate professor	Lecturer, research associate, other
Malaysia	Professor, associate professor	Senior lecturer, assistant professor, lecturer, other
Portugal	University full professor, university associate professor, polytechnic coordinating professor	All other ranks
South Africa	Director, postgraduate academic assistant, principal lecturer, head of division	Researcher, chief programmer, technician
UK	Professor, senior lecturer/researcher/ reader	Lecturer, researcher, other
USA	Professor, associate professor	Assistant professor, lecturer, other

References

Altbach, P. G. (1980). The crisis of the professoriate. *The Annals of the American Academy of Political and Social Science, 448*(1), 1–14.

Altbach, P. G. (Ed.). (1996). *The international academic profession: Portraits of fourteen countries*. San Francisco: Jossey-Bass.

Altbach, P. G. (Ed.). (2003). *The decline of the guru: The academic profession in developing and middle-income countries*. New York: Palgrave Macmillan.

August, L., & Waltman, J. (2004). Culture, climate, and contribution: Career satisfaction among female faculty. *Research in Higher Education, 45*(2), 177–192.

Barry, J., Chandler, J., & Clark, H. (2001). Between the Ivory tower and the academic assembly line. *Journal of Management Studies, 38*(1), 88–101.

Barry, J., Berg, E., & Chandler, J. (2003). Managing intellectual labour in Sweden and England. *Cross Cultural Management: An International Journal, 10*(3), 3–22.

Bozeman, B., & Gaughan, M. (2011). Job satisfaction among university faculty: Individual, work, and institutional determinants. *Journal of Higher Education, 82*(2), 154–186.

Burns, R. B., & Burns, R. A. (2008). *Business research methods and statistics using SPSS*. London: Sage.

Chen, X. (2003). The academic profession in China. In P. G. Altbach (Ed.), *The decline of the guru: The academic profession in developing and middle-income countries* (pp. 107–134). New York: Palgrave-Macmillan.

Clark, B. R. (1998). *Creating entrepreneurial universities: Organizational pathways of transformation. Issues in higher education*. New York: Elsevier.

Coates, H., Dobson, I., Edwards, D., Friedman, T., Goedegebuure, L., & Meek, L. (2009). *The attractiveness of the Australian academic profession: A comparative analysis*. Melbourne: LH Martin Institute, EPI & ACER, Melbourne.

Currie, J. (1998). Globalization practices and the professoriate in Anglo-Pacific and North American Universities. *Comparative Education Review, 42*(1), 15–29.

Economist. (2011, May 26). Academic publishing: Of goats and headaches; one of the best media businesses is also one of the most resented. *Economist*. http://www.economist.com/node/18744177. Accessed 11 Oct 2012

Enders, J. (1999). Crisis? What crisis? The academic professions in the 'knowledge' society. *Higher Education, 38*(1), 71–81.

Enders, J., & de Weert, E. (2009). Towards a T-shaped profession: Academic work and career in the knowledge society. In J. Enders & E. De Weert (Eds.), *The chan ging face of academic life* (pp. 251–271). Houndmills: Palgrave.

Enders, J., & Teichler, U. (1997). A victim of their own success? Employment and working conditions of academic staff in comparative perspective. *Higher Education, 34*(3), 347–372.

Etzkowitz, H., Dzisah, J., Ranga, M., & Zhou, C. (2007). The Triple Helix Model for innovation: The university-industry-government interaction. *Asia Pacific Tech Monitor, 24*(1), 14–23.

Gagné, M., & Deci, E. L. (2005). Self determination theory and work motivation. *Journal of Organizational Behavior, 26*(4), 331–362.

Grunwald, H., & Peterson, M. W. (2003). Factors that promote faculty involvement in and satisfaction with institutional and classroom student. *Assessment Research in Higher Education, 44*(2), 173–204.

Hagedorn, L. S. (1994). Retirement proximity's role in the prediction of satisfaction in academe. *Research in Higher Education, 35*(6), 711–728.

Hagedorn, L. S. (2000). Conceptualizing faculty job satisfaction: Components, theories, and outcomes. In L. S. Hagedorn (Ed.), *New directions for institutional research* (Vol. 2000, pp. 5–20). San Francisco: Jossey-Bass.

Hakala, J. (2009). The future of the academic calling? Junior researchers in the entrepreneurial university. *Higher Education, 57*(2), 173–190.

Herzberg, F., Mausner, B., & Snyderman, B. B. (1993). *The motivation to work*. New Brunswick: Transaction Publishers.

Hood, C. (1995). The "new public management" in the 1980s: Variations on a theme. *Accounting Organisations and Society, 20*, 93–109.

Iiacqua, J. A., Schumacher, P., & Li, H. C. (1995). Factors contributing to job satisfaction in higher education. *Education, 116*(1), 51–61.

Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological Bulletin, 127*(3), 376–407.

Lacy, F. J., & Sheehan, B. A. (1997). Job satisfaction among academic staff: An international perspective. *Higher Education, 34*(3), 305–322.

Lafferty, G., & Fleming, J. (2000). The restructuring of academic work in Australia: Power, management and gender. *British Journal of Sociology of Education, 21*(2), 257–267.

Lee, M. N. N. (2003). The academic profession in Malaysia and Singapore: Between bureaucratic and corporate cultures. In P. G. Altbach (Ed.), *The decline of the guru: The academic profession in the third world* (pp. 135–166). Chestnut Hill: Boston College.

Locke, E. A. (1969). What is job satisfaction? *Organizational Behavior and Human Performance, 4*(4), 309–336.

Mamiseishvili, K., & Rosser, V. J. (2010). Examining the relationship between faculty productivity and job satisfaction. *Journal of the Professorate, 5*(2), 100–132.

Meek, V. L., & Davies, D. (2009). Policy dynamics in higher education and research: Concepts and observations. In V. L. Meek & M. L. Kearney (Eds.), *Higher education, research and innovation: Changing dynamics. Report on the UNESCO forum on higher education, research and knowledge 2001–2009* (pp. 41–84). Kassel: INCHER-Kassel.

Meyer, J. W., Ramirez, F. O., Frank, D. J., & Schofer, E. (2007). Higher education as an institution. In P. J. Gumport (Ed.), *Sociology of higher education: Contributions and their contexts* (pp. 187–221). Baltimore: John Hopkins University Press.

Neave, G. (2009). The academic estate revisited: Reflections on academia's rapid progress from the Capitoline Hill to the Tarpeian Rock. In J. Enders & E. de Weert (Eds.), *The changing face of academic life: Analytical and comparative perspectives* (pp. 15–35). Basingstoke: Palgrave Macmillan.

Petersen, E. B. (2011). Staying or going? Australian early career researchers' narratives of academic work, exit options and coping strategies. *Australian Universities Review, 53*(2), 34–42.

Ramsden, P. (1998). *Learning to lead in higher education*. London: Routledge.

Scott, P. (2006). The academic profession in a knowledge society. In U. Teichler (Ed.), *The formative years of scholars* (pp. 19–30). London: Portland Press.

Scott, P. (2009). Markets and new modes of knowledge production. In J. Enders & E. de Weert (Eds.), *The changing face of academic life: Analytical and comparative perspectives* (pp. 58–77). Basingstoke: Palgrave Macmillan.

Slaughter, S., & Leslie, L. L. (1997). *Academic capitalism: Politics, policies, and the entrepreneurial university*. Baltimore: The Johns Hopkins University Press.

Ssesanga, K., & Garrett, R. M. (2005). Job satisfaction of university academics: Perspectives from Uganda. *Higher Education, 50*(1), 33–56.

UNESCO. (1978). *Recommendation concerning the international standardization of statistics on science and technology*. Paris: UNESCO.

Welch, A. R. (1997). All change? The professiorate in uncertain times. *Higher Education, 34*(3), 299–303.

Welch, A. (1998). The end of certainty? The academic profession and the challenge of change. *Comparative Education Review, 42*(1), 1–14.

Welch, A. (2005). Challenge and change: The academic profession in uncertain times. In A. Welch (Ed.), *The professoriate. Profile of a profession* (pp. 1–19). Dordrecht: Springer.

Ylijoki, O.-H. (2003). Entangled in academic capitalism? A case-study on changing ideals and practices of university research. *Higher Education, 45*(3), 307–335.

Ylijoki, O. H. (2005). Academic nostalgia: A narrative approach to academic work. *Human Relations, 58*(5), 555–576.

Ylijoki, O.-H. (2011). Boundary-work between work and life in the high-speed university. *Studies in Higher Education*, 1–14. DOI: 10.1080/03075079.2011.577524