Assessing the Contents of the Psychological Contracts: A Cross - Sectional Survey of the Academics at an Australian University

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Abstract

This paper addresses the content of psychological contracts within academia and provides some empirical evidence from an Australian University. Using exploratory factor analysis of the data collected from the cross-sectional survey this research classified the academics' obligations to the University as meeting academic expectations, commitment; and 'above and beyond'. With regard to the University's obligations as perceived by the academics the research identified the following eight underlying factors: fair treatment in promotion; staff development and support; good management and leadership; academic life; fairness and equity; appropriate remuneration; rewarding performance; and, good workplace relations. The initial cluster analysis allowed for some unpacking of the effects of such characteristics as gender, age, position level, union membership, and length of employment upon the content of the psychological contract. What emerged from the analysis is that each of these dimensions is an important factor with regard to psychological contract content and effects. It is critical for the University and the academics to be sensitive to possible differences in expectations, since unrealised expectations may result in de-motivation, decreased commitment, increased turnover, and loss of trust in the organisation. These contracts motivate employees to fulfil commitments made to employers when they are confident that employers will reciprocate and fulfil their side of the contracts.

Introduction

Australian universities have become increasingly commercial as organisations, and are increasingly competitive with each other in their pursuit of funds and students. Australian academics now work within universities that have been characterised as increasingly managerialist (Marginson and Considine, 2000), universities where traditional academic freedoms and autonomy have declined, and performance expectations have sharply increased (Winter and Sarros, 2000). Ongoing change has become the norm, and we have seen the practice and language of business come to dominate the practice and language of university leaders and managers (Curtis and Matthewman, 2005). In many universities, staff/student ratios have reached new highs, and value conflict between principles and practices associated with managerialism and commercialisation and those traditionally associated with a commitment to teaching, learning and scholarship has become a widely recognised problem (Winter and Sarros, 2000; Marginson and Considine, 2000; Jarvis, 2001).

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Further complicating the landscape is the fact that the long-established Australian universities[1] with their stronger financial and research resources appear to be better positioned to operate and prosper in this context, while others, such as the university that was the site of our empirical research[2], face more complex and challenging futures.

It is in this context of ongoing change in university practices, structures and processes that our research into the content of the psychological contracts of academics from an Australian university business faculty has been undertaken. We hold that the psychological contract is a relevant and powerful construct to explain, and even manage, contemporary academic workplace relations, especially in times of considerable workplace change. We argue that understanding the formation and content of academics' psychological contracts is crucial to understanding and managing the work performance of academics.Further, we argue that understanding and effectively managing the psychological contracts that academic employees develop can assist universities to meet their performance goals. The remainder of this paper is divided into two sections: the first briefly addresses some key features of the psychological contract, and discusses past empirical research conducted on psychological contracts within academia; and, the second presents the results of our empirical research.

Psychological Contracts within Academia

Numerous researchers agree that the psychological contract plays an important role in understanding the contemporary employment relationship (see, for example: Wellin, 2007; de Vos, Buyens and Schalk, 2005). In essence, the concept of the psychological contact encapsulates aspects of the employment relationship which far exceed those addressed in formal contractual agreements[3]. There are, broadly speaking, two main conceptualisations of the psychological contract. The first is based on the idea that there are two parties in the employment relationship who have mutual obligations to each other: the organisation and the employee (Herriot, Manning and Kidd, 1997). These mutual obligations may have been explicitly communicated through formal contracts, or they may be implied through the explicit or implicit expectations of organisations and employees. The second conceptualisation focuses upon the psychological contract as it is formulated in the mind of the employee only. This approach gives emphasis to:

> Individual beliefs, shaped by the organisation, regarding the terms of an exchange between individuals and their organisation. A key feature of the psychological contract is that the individual voluntarily assents to make and accept certain promises as he or she understands them (Rousseau, 1995: 9-10).

The psychological contract encompasses employee's subjective interpretations of their employment deal. For example, the employee may believe that the organisation has made certain commitments, such as providing job security, high pay, promotion, and training in exchange for the employee's hard work and loyalty (Rousseau, 1990).

Since the 1990s most researchers of psychological contracts have adopted the second conceptualisation, thereby emphasising the importance of the individual employee's

sense of obligations (Turnley and Feldman, 1999; Robinson, 1996; Morrison and Robinson, 1997; Robinson, Kraatz and Rousseau, 1994). Our study also aligns with this second conceptualisation, and more specifically Rousseau's individual-based definition that focuses on what each individual (in our case an academic) expects from the organisation and what they hold to be the organisation's expectations of them.

Beyond consideration of who is actually party to a psychological contract, the difficulties of accurately defining these contracts arise from the fact that they are a subjective and idiosyncratic phenomenon. To begin with, the perceptual and individual nature of psychological contracts makes them distinct from formal written contracts. Further, these contracts are subjective and grounded in the social and cultural contexts where employers and employees believe they have reciprocal obligations and presumably share a common understanding of the nature of these obligations. However, the understanding of the expectations and mutual obligations may not be consistent because the two parties have different and changing perceptions of the other and their expectations.

Employee perceptions, while diverse, are considered to be influenced by whether the employee desires a transactional or a relational employment exchange with their employer (Rousseau, 1990). Transactional contracts are based on the achievement of extrinsic benefits such as pay for performance, whereas relational contracts are based on the intrinsic rewards of employment such as developing relationships, fulfilment of personal goals and a higher degree of personal involvement (Rousseau, 1990). Adding to the diversity in perceptions are the outcomes each individual hopes to achieve as a result of employment. The perceptual and individual nature of psychological contracts is further illustrated by the quantity of elements psychological contracts incorporate. In general, these elements include the responsibilities the employee is prepared to accept and the responsibilities that the employee perceives that the employer is obligated to provide in return.

There is an increasing body of the research which shows how the psychological contract can impact on the behaviour and performance of employees (de Vos et al., 2003; Conway and Briner, 2005). The psychological contract has the potential to enhance organisation performance, to facilitate engagement of employees, and employee alignment with organisational decisions and planned organisational changes (Wellin, 2007). It has even been argued that perceived obligations within the psychological contract are frequently more important to job-related attitudes and behaviour than are the formal and explicit elements of contractual agreements (Thomson and Bunderson, 2003). Studies have indicated that violation of employee's elements of psychological contracts may influence work outcomes, including job satisfaction, participation in development activities, and intention to remain with the current employer (Cavanaugh and Noe, 1999; Freese and Schalk, 1996; Dabos and Rousseau, 2004).

As a result of the complex nature of psychological contracts, a diverse range of contract elements have been addressed and measured in the literature (Thomas and Anderson, 1998; Kickul and Lester, 2001; Guest and Conway, 2002; Thompson and Bunderson, 2003). A comprehensive review of the various elements listed in the literature (Krivokapic-Skoko, Ivers and O'Neill, 2006) sought to differentiate the

contractual elements into varied sub groups. Employee responsibilities can be categorised into four groups: (a) organisational citizenship behaviour; (b) basic obligations; (c) work environment; and (d) loyalty. These four categories specified the behaviours and responsibilities that employees were prepared to be accountable for in return for the employer upholding what their employees believe to be their obligations. Employers' responsibilities can be classified into six categories: (a) payment/ benefits; (b) management; (c) work environment; (d) fairness; (e) empowerment; and, (f) personal needs. These six categories covered the payments and benefits that employers were obligated to provide to their employees, the way in which the organisation was managed, and again the day-to-day work environment within the organisation. Further, employees considered that employers were obligated to ensure that that employees were empowered, treated fairly, and that their employee's personal needs were addressed.

While empirical research on psychological contracts has developed significantly during the past decade (Coyle-Shapiro and Conway, 2005; Freese and Schalk, 1996; Cavanaugh and Noe, 1999; Turnley and Feldman, 1999; DelCampo, 2007; Nadin and Cassell, 2007; O'Donohue, Donohue, and Grimmer, 2007a), empirical research on psychological contracts within academia has been very limited. It is represented by the studies of Dabos and Rousseau (2004), Newton (2002), Tipples and Krivokapic-Skoko (1996, 1997), Tipples and Jones (1998) and more recent Australian based focus group research discussed in O'Neill, Krivokapic-Skoko and Foundling (2007) and Tipples, Krivokapic-Skoko and O'Neill, (2007). Research on the psychological contracts established by scientists/knowledge workers (O'Donohue, Sheehan, Hecker and Holland, 2007b) can be also understood as addressing the subject area of academia.

Dabos and Rousseau's (2004) survey based research among academics employed by a research-focused School of bioscience in Latin America identified how mutuality and reciprocity between employees and employers can develop and result in very beneficial outcomes for both sides of the employment relationship. This mutual understanding of the obligations resulted in positive outcomes for both researchers (career advancement and promotion) and the employers (increased research productivity). Very interestingly, there was convergence in perceptions of employees and employers with regard to psychological contracts. Newton (2002) used the concept of psychological contracts to discuss collegiality, professional accountability, reciprocity and mutual trust at a UK college of higher education. Based on the in-depth empirical research, the author argued that a lack of reward and recognition for academic work, as perceived by the staff members, can be also explained by not taking into account the existence of the psychological contracts.

The empirical research undertaken at Lincoln University, New Zealand, by Tipples and Krivokapic-Skoko (1996; 1997), indicated that the academics' psychological contracts were in a very poor state. Apart from qualitative interviews and the use of documentary sources, the authors conducted a questionnaire survey of academic colleagues and used an alternative research method based on critical incidents to explore the staff members' beliefs and expectations about their relations with the University. The empirical research pointed at the Work Environment as the major component of the psychological contract established by the academics. Generally, the academics were not satisfied with the extent to which the University had met what

were perceived as its promised obligations. That dissatisfaction was consequently associated with a low level of job satisfaction. Apart from low Job Satisfaction, the academics identified Career Development, Payment, Long Term Job Security and Promotion as common areas for violation of the psychological contract. Support with personal problems was also an area where academics stated they felt they were owed by the university. More specifically, the University respondents noted matters relating to Promotions, Research Support, and Management Support, where issues of Confidentiality and Honesty were singled out. Many academics thought that the university was losing direction through poor management and communication, which was contributing to a loss of trust within the organisation. Administrative issues were the major concern, followed by the greater demands on academic staff with decreased resources and rewards. Another theme which was also apparent, as a result of violation, was the increase of auditing type arrangements, and the development of a 'them/us' antagonistic culture, which relates to an increased administrative workload and intensified relations with the bureaucracy at the University. The initial research undertaken at Lincoln University, New Zealand, by Tipples and Krivokapic-Skoko (1996; 1997) was based on Rousseau's conceptualisation of the psychological contract. The follow up research involving the same empirical site (Tipples and Jones, 1998) was based on critical incident approach as advocated by Herriot et al (1997). The results indicated that the academics' obligations to the University centred around the issues of Hours (to work the hours contracted), Work (to do a good job in terms of quality and quantity) and Loyalty (staying with the University, putting the interests of the University first). Obligations of the University centred around Fairness, Consult (consulting and communicating), Recognition, Environment (provision of safe and friendly environment) and Job Security.

The focus group research conducted with business school academics at an Australian university (O'Neill et al, 2007; Tipples et al, 2007) provided some insights into the formation, content and effects of Australian academics' psychological contracts. Like Tipples and Krivokapic-Skoko (1996; 1997), they identified the existence of considerable disappointment and dissatisfaction with perceived breach of promises, however, morale and job satisfaction did not appear to be as low as was the case at Lincoln University. O'Neill et al (2007) and Tipples et al (2007) argued that the academics' commitments to students, society, academic discipline, and the university (understood as an important institution within civil society fostering social good) had powerful effects on their psychological contracts. The academics very strongly indicated that they had a professional responsibility and spoke to a significant social role which effectively extended beyond the boundaries of the psychological contracts they established with the university. In the face of what most perceived to be an environment of work intensification that was marked by increasing demands for quality research outcomes and teaching excellence, shifting rules and expectations regarding promotion, and increasing administrative burden, these commitments were deemed to have strongly mediated psychological contract 'violations'.

Similarly, the findings by O' Donohue et al (2007b) indicated that scientists and knowledge workers were more concerned with ideological/societal concepts (scientific contributions and knowledge accumulation within the organisation) within their work than with the transactional or relational psychological contracts established with their organisation. The need for the knowledge workers to contribute to 'knowledge' was to the fore, and there was general agreement that the organisation

would reciprocate appropriately. Thus, continuous contribution to knowledge, public access to knowledge, and the furthering of Australia's knowledge base are vitally important to these professionals, thereby forming core elements of their psychological contracts.

While referring to the general literature on the psychological contracts Conway and Briner (2005) argued that there were relatively few studies specifically designed to assess the contents of the psychological contract. The research discussed below represents an attempt to address this 'knowledge gap' by exploring the contents of the psychological contacts established by academics. It is our objective to unpack the contents of the 'deal' between academics and their University by exploring the results of research completed using a set of multi-item measures and exploratory factor analysis. The discussion also extends the limited literature on psychological contracts in academia.

Research Design: Sample, Measurements and Methods

In reviewing the conceptual development and empirical assessment of the concept of the psychological contract Conway and Briner (2005) indicated that most researchers assessing the content of the contract used self report questionnaires. For instance, 70% of the empirical studies reviewed by Conway and Briner (2005; 89) were based on the cross-sectional questionnaire survey, 20% were based on the longitudinal questionnaire surveys and only 10% were based on qualitative data from interviews. Empirical assessment of psychological contracts as done by Kickul and Liao-Troth (2003), Rousseau (1990), Freese and Schalk (1996), Cavanaugh and Noe (1999), Janssens, Sels and Van den Barnde (2003) was based on the survey questionnaires. Most commonly, a five or seven point Likert scale has been used extensively to indicate the degree to which employees agree with particular elements of psychological contracts, such as the degree to which their employers had fulfilled or failed to fulfil perceived promises. The 'list of promises and obligations' as outlined in the seminal work by Rousseau (1990) were mainly used as the psychological contract measures and completed from an employees' perspective.

Sample

Following this most common approach to empirical assessment of psychological contracts – the use of quantitative analyses and the cross-sectional survey - this research was based on the survey questionnaire distributed to the full time academics employed by a University business faculty. Using a variation of the Total Design Method (Dillman, 1978), a total of 117 questionnaires were mailed out (using postal mail), and of these 60 questionnaires were completed and returned (51% response rate). Initially, all respondents were contacted via email to make them aware of the research and to ask for their assistance. Next, a questionnaire and a cover letter were sent to each of the respondents, which yielded 41 responses. This was followed with a reminder letter (gaining another nine responses) and finally a second questionnaire and another letter, netting the final ten responses. Most of the surveys were completed in full, meaning few (2) were discarded due to respondent error.

Item Selection

The items used in the questionnaire came from two sources. Existing psychological contract literature provided some items and other measurement items were based on the focus group analysis of psychological contracts by O'Neill et al (2007). The existing items were adopted from Janssens et al (2003) and de Vos et al (2003), but were altered to reflect the university context of the research. The focus groups analysis of the academics' psychological contracts (O'Neill et al 2007) provided a number of insights, which were used to develop items included in the questionnaire for this research. In total, 31 items were included to measure perceived university obligations (summarised in Table 1), while 13 were included to measure the obligations of the individual academic to the university (summarised in Table 2). In accordance with previous research (Kickul and Liao-Troth, 2003; Janssens, et al, 2003; Rousseau, 1990) five point Likert scales were used. This allowed the respondents to agree or disagree to varying levels with statements about themselves or the university. The survey was designed to identify what academics bring to their work that is not explicitly stated in the employment contract, and what they believe the University has promised them in return. As with the approach taken by Westwood, Sparrow and Leung (2001) this study first assessed the promises and commitments employees (academics) perceived their organisation (the University) has made to them, followed by an assessment of the obligations which employees (academics) perceive they themselves have to the organisation. To examine academics obligations towards the university and the obligations that academics perceive they have to the university a factor analysis and cluster analysis has been used to develop understanding.

Factor Analysis

Once the data were collected, factor analysis was used to investigate the two key variables (1) academics' obligations to the University and (2) academics' perception of the University's obligations to them. Principle components analysis was utilised due to its ability to identify a parsimonious set of factors (Hair, Black, Babib, Anderson and Tatham, 2006, Malhotra, Hall, Shaw and Oppenheim, 2002) and its suitability for exploratory research (Malhotra et al, 2002). A Varimax rotation was used to ensure the factors were easy to interpret through the simplest structure (Hair et al, 2006, Aaker, Kumar, Day and Lawley, 2006). The first factor analysis revealed eight factors that related to the academics' perceptions of University's obligations to them and in the second factor analysis three factors were found relating to the academics' obligations to the University.

The findings from the factor analysis are included in Table 1 (University's obligations to the academics) and Table 2 (academics' obligations to the University). The number of factors was decided by including eigenvalues of above one. In the universities obligations to the academics eight eigenvalues were above one and in the academics obligations three eigenvalues were above one. The variance explained was also acceptable (74% and 58%) further indicating that the factor solutions are eight and three. As can be seen in the tables, there are some instances of cross loading, however, all factors are reliable. Each factor has a Cronbachs alpha of 0.60 or above (Appendix 1) which is acceptable for exploratory research of this nature (Hair et al, 2006). Further supporting the factor solutions, each factor had a KMO above 0.60 and

each factor had a significant Barlett's test of Sphericity, and there were correlations of above 0.3 for each item included, thus exceeding Hair et al's (2004) levels of acceptability.

The first factor analysis completed analysed academics perceived obligations of the university. The eight factors are: 'fair treatment in promotion'; 'staff development and support'; 'good management and leadership'; 'academic life'; 'fairness and equity'; 'appropriate remuneration'; 'rewarding performance'; and, 'good workplace relations'. The eight factors all present face validity and give an impression of what obligations are important to academics. The first factor, 'fair treatment in promotion', incorporates items that were associated with treatment by management in relation to promotion. In many respects an extension of this first factor is the second factor, 'staff development and support'. Here the key themes were support for staff in terms of promotion and career development as well as the creation of an environment conducive to employee development. The third factor, 'good management and leadership', is concerned with effective leadership and management, including the reduction of bureaucratic 'red tape'. The fourth factor, 'academic life', contains many of the elements synonymous with working in an academic environment. The items within 'fairness and equity' relate to the expectation that university management will act ethically and will be fair with regard to managing change. The sixth factor, 'appropriate remuneration', is about salary and expectations of some comparability between public and private sector remuneration. The seventh factor, 'rewarding performance', relates to recognition of performance in diverse ways, while the eighth factor, 'good workplace relations', includes items surrounding workplace flexibility and even union membership.

The second factor analysis contains the items relating to academics perceived obligations to the university. Three factors were identified: 'meets academic expectations'; 'commitment'; and, 'above and beyond'. The first factor,' meet academic expectations', relates to academics meeting typical expectations with regard to teaching, research, and associated administration. The second factor, 'commitment', relates to the commitments academics make to the university, including, for example, a commitment to stay employed by the university for several years, commitment to travel for work, and commitment to collegial practice. The third factor, 'above and beyond', is not concerned with completing 'normal' assigned tasks, but completion of tasks beyond the typical job description, including commitment to quality teaching and student development in the face of competing demands on time.

Factor Items	Factor Loading							
	Factor 1: Fair treatment in promotion	Factor 2: Staff development and support	Factor 3: Good management and leadership	Factor 4: Academic life	Factor 5: Fairness and equity	Factor 6: Appropriate remuneration	Factor 7: Rewarding performance	Factor 8: Good workplace relations
Provide clear and consistent requirements for promotion	0.85							
Treat you fairly and equitably with regards to promotion	0.82							
Be fair and equitable in its treatment of academics	0.74							
Provide opportunities for career development		0.76						
Support ongoing professional development		0.73						
Provide opportunities promotion		0.69						
Provide remuneration that is comparable to other universities		0.61						
Provide a safe and comfortable work environment	0.52	0.60						
Ensure that staff act collegially		0.51						
Provide good management			0.76					
Provide good leadership			0.75					
Minimise the impact of red tape			0.72					
Provide security of ongoing employment				0.68				
Allow you autonomy to act as a professional academic				0.66				
Maintain academic freedom				0.62				
Respect the demands of family/personal relationships				0.62				
Communicate important information to you				0.56				

	Factor 1: Fair treatment in promotion	Factor 2: Staff development and support	Factor 3: Good management and leadership	Factor 4: Academic life	Factor 5: Fairness and equity	Factor 6: Appropriate remuneration	Factor 7: Rewarding performance	Factor 8: Good workplace relations
Acknowledge the long hours you devote to work					0.83			
Act ethically					0.79			
Manage the pace of change so that it does not adversely affect you					0.57			
Provide remuneration that is similar to the private sector						0.84		

Factor Items	**Factor Loading**							
	Factor 1: Fair treatment in promotion	Factor 2: Staff development and support	Factor 3: Good management and leadership	Factor 4: Academic life	Factor 5: Fairness and equity	Factor 6: Appropriate remuneration	Factor 7: Rewarding performance	Factor 8: Good workplace relations
Provide remuneration that is similar to the public sector						0.81		
Recognise your non-university experience						0.56		
Reward excellence in teaching through the promotion system							0.79	
Reward excellence in research through the promotion system							0.62	
Reward excellence in admin/management through the promotion system						0.53	0.56	
Be honest in its communications with you								
Offer flexibility regarding working from home								0.86
Respect the role of academic unions in the workplace								0.62

Table 1: University's Obligations Factor Scores

Factor Items	Factor Loading		
	Factor 1: Meets academic expectations	Factor 2: Commitment	Factor 3: Above and beyond
Comply with University rules and regulations	0.74		
Act ethically at work	0.65	0.40	
Advance your discipline	0.62	0.58	
Publish scholarly research	0.58		
Work effectively and efficiently	0.57	0.45	
Stay employed by the University for the next 2 years		0.77	
Travel for work		0.73	
Act collegially		0.61	
Work long hours to complete tasks		0.52	0.51
Complete tasks that are not strictly part of your job			0.78
Complete tasks that are asked of you			0.66
Provide teaching quality	0.52		0.61
Enhance student development	0.58		0.59

Note: *Mean scores for academics' obligations factors are listed in Appendix 3.*

Table 2: Academics' Obligations Factor Scores

Cluster Analysis

While the factor analysis yielded interesting results, these are limited as the academics' characteristics (for example, sex, tenure and length of employment) were a major influence on their preferences, thereby limiting the results. Hence, to overcome this limitation, cluster analysis was used to further examine the factors and the individuals associated with them. Cluster analysis allows us to see which groups of respondents value certain factors which we identified in the factor analysis (Hair et al 2006). Cluster analysis is suited to descriptive research where understanding of the sample is sought (Hair et al 2006). In the case of this research, we will be able to see groups of people within the sample and their preferences for the factors identified earlier.

A hierarchical clustering method was used, as understanding of a few, rather than many, clusters is sought. That noted, the size and single industry nature of the sample mean that this would likely be the case anyway. Wards method was adopted as it is well suited to this type of exploratory analysis and also minimises the number of clusters identified (Hair et al 2006). Further, somewhat even clusters sizes are expected, which is another reason to use Wards method (Hair et al 2006). The Squared Euclidian Distance was used in the two cluster procedures that were run as it is normally used in conjunction with Wards method and because similarity was sought (Hair et al 2006). A number of techniques were used to establish validity. Multinomial logit models, ANOVA and further clustering methods were all used to establish that clusters were significantly different. In the case of ANOVA and multinomial logit modelling, the sample size inhibits any real insight from this analysis. These were still performed with some positive results. When ANOVA was used with the categorical variables utilised to profile the

cluster solutions, the findings indicated that some (not all) of the demographic variables were different across clusters in both procedures. The logit modelling was more successful, as it was found that several of the demographic variables were significantly different from cluster to cluster. K-means clustering was also used to confirm the hierarchical clustering results. Again, limited support was found indicating that a four cluster solution for both procedures is a reasonable conclusion. Finally, a two step cluster procedure was used to confirm the hierarchical findings, and this indicated a similar clustering solution thereby deeming that the findings were appropriate. None of the validity findings are certain; however, this is an exploratory study. That noted, the combination of methods used to examine validity provide enough evidence to suggest the findings are worth reporting.

Multiple cluster procedures were run, as there are two different perceptions being examined. The first cluster procedure was for the academics' perceptions of the University's obligations and the second was for the academics' obligations to the University. To identify the correct number of clusters in the University's obligations to the academics procedure three to seven solutions were examined, and for the academics' obligations to the university three to five cluster solutions were examined. In both cases, the agglomeration schedule, dendrogram and frequencies were used to determine the number of clusters to be examined. The agglomeration schedule indicated that between three and four clusters was appropriate for both cluster procedures. The dendrogram also indicated that four clusters was the most suitable solution, as did the frequencies. Using four cluster solutions, the factors, and the demographic information collected in the survey, the following insights into the clusters were developed (note: the clusters are profiled according to the factors and the demographic details collected).

The first cluster procedure was conducted on the factors related to academics' perceptions of the University's obligations to them, and Figure 1 outlines the four clusters with factors scores.

Figure 1: University's Obligations Clusters with Factor Scores
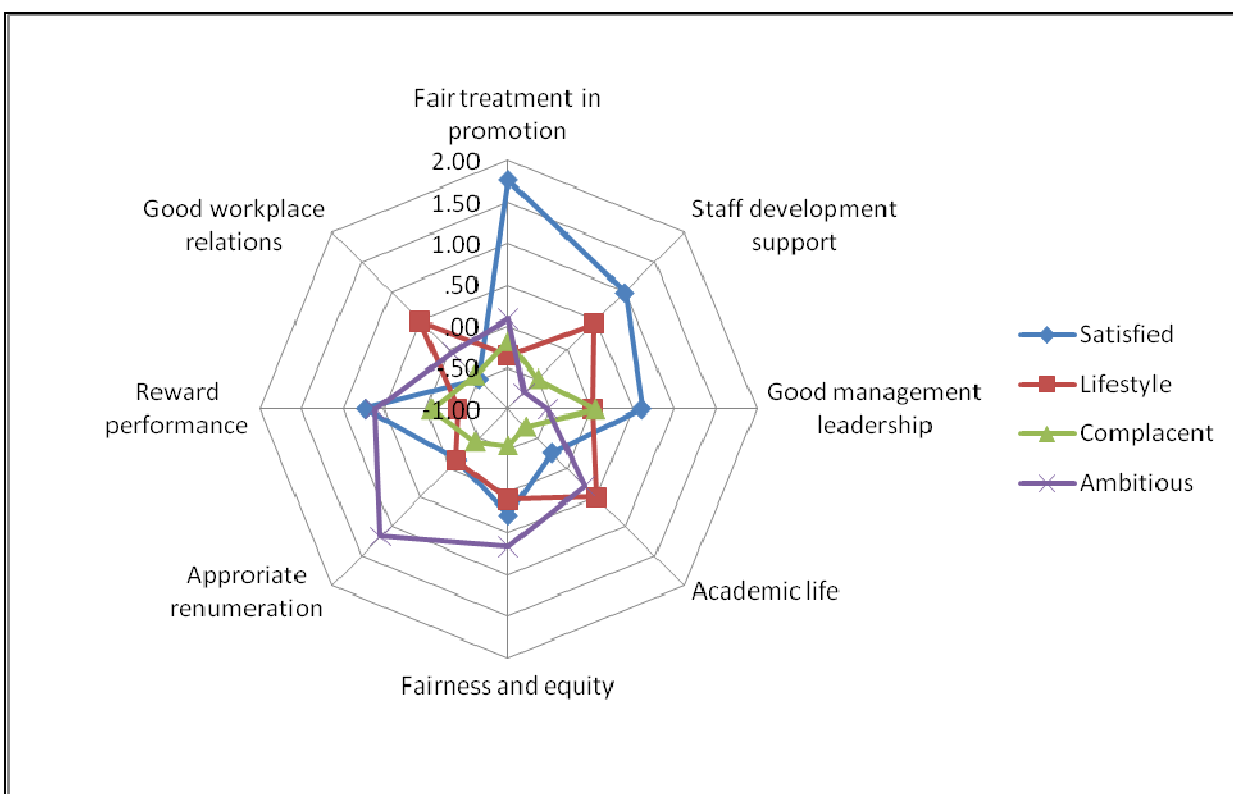
Cluster 1*: Satisfied*

The respondents in this cluster scored highest on fair treatment in promotion, staff development support, reward for performance, and workplace relations. This was, however, the smallest group representing only 10% of the sample. Strongly concerned with teaching and research, and ignoring administration and management, they reflect what many would see as traditional University employment preferences. They also have, on average, been employed at their current institution for longer (12.7 years) than any of the other clusters. Their average age was 47 and they had also spent on average 7.25 years at another university. The group was also predominantly male, to a much greater extent than any of the other clusters, and they were employed in more senior positions. Interestingly, members of this group were less frequently union members. In summary, this cohort exhibited a high level of faith in the University's systems and indicated belief that the University will fulfil its obligations.

Cluster 2: *Lifestyle*

The respondents in this cluster were most concerned with academic lifestyle, placing greater emphasis on this issue than any of the other groups. While the group did exhibit interest in fair remuneration, they displayed the lowest interest in reward for performance and performance based promotion. The largest cluster, with 38% of the sample, they also appear somewhat disinterested in the quality of management and leadership provided. In contrast, they highly valued, more than any of the other groups, collegial workplace relations. In terms of demographics, the group had the second longest length of service at their current institution (11.6 years), however, they had spent less time at other universities than any of the other group. They more often originated from the public sector, and more often migrated from another faculty within their current University, than those in the other clusters. Further, the group was less concerned with the traditional teaching and research role and more concerned with management, administration and professional development. They have been, on average, at their current academic staff level for around six years. They were also the oldest group, had the highest number of females, and the lowest level of completed doctorates.

Cluster 3*: Complacent*

Those in the 'complacent' cluster had the lowest interest in all of the areas that the clusters were assessed on. Academics in this cluster were, on average, the second oldest and this was second largest group (32% of the sample). The group expressed the least interest in academic life, workplace equity and concern for appropriate remuneration. Limited interested was indicated in relation to reward for performance, good management/leadership, staff development, and fair treatment in promotion. This group is characterised by having the lowest academic level positions and they have spent the most amount of time at their current position level. Their primary role at the University more frequently includes administration or management than the other groups. On average, they have spent around 10 years at their current university and over six years at their previous university. While expressing very little interest in workplace conditions and promotions, this group had the largest number of union members. Finally, this was the most ethnically diverse group.

Cluster 4: *Ambitious*

The academics in this cluster are very eager to receive appropriate remuneration and rewards for their performance. They also expressed high concern for equitable treatment but placed relatively little importance on the quality leadership and management or good workplace relations. They place a moderate amount of value on academic life and fair treatment in promotion. The youngest of all four cohorts, members of this cluster have the shortest length of service with their current institution, as well as the shortest amount of time at their current position level. Interestingly, on average they have the longest service with previous universities and have the highest levels of education on average. Those in this cluster were also more likely to be students before they joined their current institution. In general, they are a younger more career minded cohort than any of the others. They also saw themselves as having greater career mobility.

The second cluster procedure was conducted using the factors relating to the academics' perceptions of their obligations to the University. This also generated four clusters as shown in Figure 2.

Figure 2: Academics' Obligations Clusters with Factor Scores
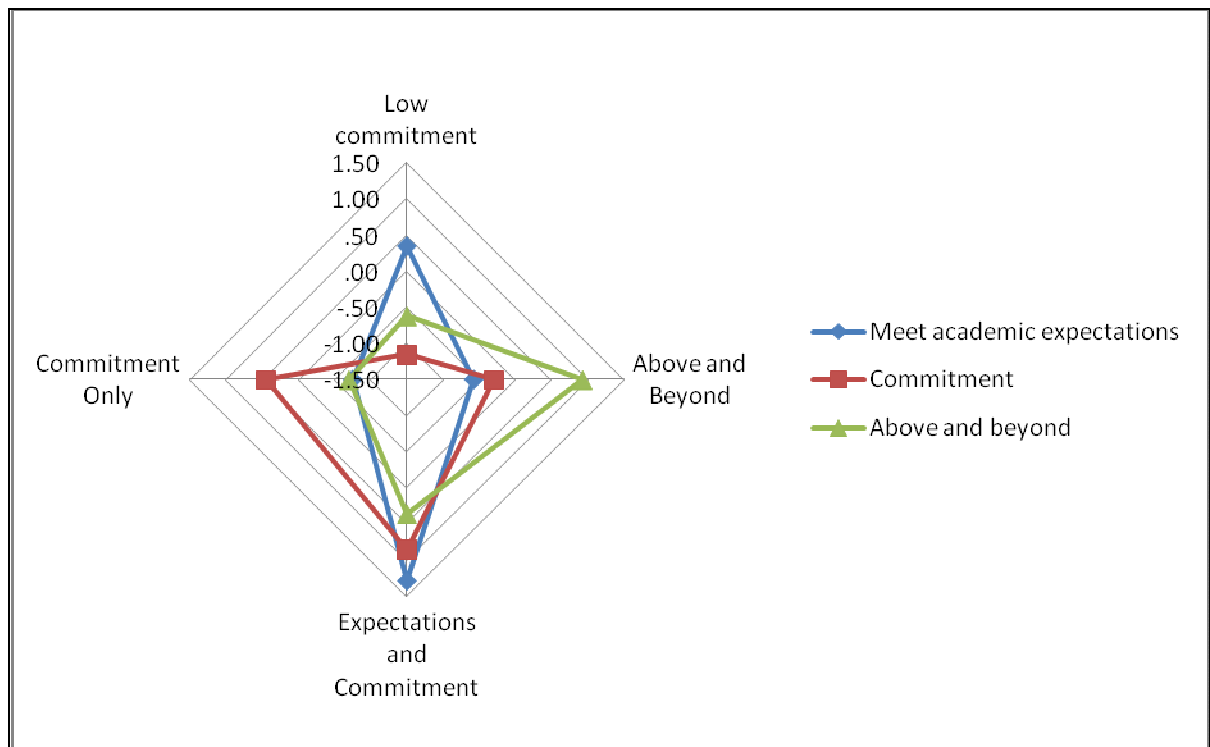
Cluster 1: *Low commitment*

As a cohort, this was the smallest group accounting for 20% of the sample. This group expressed the least interest in issues associated with commitment to their work and the University. While they have the second highest interest in meeting University

expectations, they expressed very little interest in going 'above and beyond' standard University expectations. In terms of demographics, the group had by far the largest union membership, were the oldest, had the highest proportion of males, had spent the most time at other universities, and had been at their current academic level for the longest period. This cluster expressed strong interest in teaching and research.

Cluster 2: *Above and Beyond*

This cluster was the second largest group, containing 25% of the sample. This group expressed the highest level of interest in working 'above and beyond' standard University expectations. This group was the youngest of the four clusters, had the lowest level of union membership, and the least number of years of service with their current University and other universities. Given their limited employment duration, it is not surprising that they have the shortest period at their current level. As the youngest cluster, generational differences associated with lower concern regarding security of tenure, relative comfort with career movement and mobility, and lower commitment to employers seem to be in play.

Cluster 3: *Expectations and Commitment*

Cluster three accounted for 22% of the overall sample. This group had the highest level of interest in meeting 'academic expectations' and expressed the highest level of 'commitment'. They also indicated a strong interest in going 'above and beyond' basic expectations. On average, this group held the highest academic positions and had been employed by the University for one year more than the other groups. They also possessed the highest education levels and lowest number of incomplete postgraduate degrees.

Cluster 4*: Commitment Only*

The final cluster in this procedure is the largest, with 27% the sample. The only factor that had a positive weighting for this cluster was 'commitment'. The group had the lowest level of interest in working 'above and beyond' and in meeting 'academic expectations'. The demographics of this group differed to each of the other clusters, having the highest percentage of females and the highest level of incomplete postgraduate degrees. On average, they were second highest cluster in terms of academic positions, had been employed by the University second longest, and had the second longest period of employment with their previous institution.

Implications for Management

Having completed two cluster analysis procedures, we now move to briefly address some management issues and implications that emerge from consideration of our cluster analysis findings. For while Wellin (2007) has noted that research and discussion of effective management of psychological contracts has been very limited, as noted earlier, extensive empirical research has pointed to the powerful effects of psychological contracts on employee engagement, commitment, motivation, and responses to change (see, for example: Conway and Briner, 2005; Dabos and Rousseau, 2004; Thomson and Bunderson, 2003; and Wellin, 2007). It is widely accepted that the maintenance of positive psychological contract can help facilitate the achievement of positive morale, a

favourable organisational culture, and employee support for planned organisational change.

Research into the negative impact of breaches of the psychological contract has made the implications of dishonesty, and failure to deliver on perceived commitments, abundantly clear (see, for example: Conway and Briner, 2005; and, Wellin, 2007). Disappointment, dissatisfaction, and disaffection are just some of the negative consequences of poor management of the psychological contract, and such feelings will negatively impact academic commitment and performance. Performance appraisal meetings, and discussions around work and career planning, are good examples of sites of opportunity for managers where they can carefully address expectations, and even reciprocity, with staff. There are, of course, risks where managers seek to make the implicit explicit and then fail to deliver on perceived obligations and promises. Indeed, failure to deliver on explicit promises may create a more intense negative response from academics than failure to deliver on an implicit 'perceived' promise. That noted, as leadership research has shown (see: Avolio, Walumbwa and Weber, 2009), managers must take care not to reduce their approach to 'managing' staff, and their psychological contracts, to the 'transactional' performance management practices but seek to inspire staff to pursue goals that align with their beliefs, commitments and sense of obligation.

Focusing specifically on the university context, there are opportunities for university managers to influence the development of academics' psychological contracts. However, given that so much of the psychological contract is implicit, understanding the content is not a simple matter of managers reflecting upon what academics expect and are willing to do. Further, as our research has shown, there is very considerable variation in the content of the psychological contracts of business school academics. As such, careful research into the content of academics' psychological contracts is warranted. Such research can be of very considerable benefit to university management as it can provide powerful insights in to factors affecting employment relations and university performance. Managers can then act in a more informed manner to help develop and maintain organisationally favourable psychological contracts. They can have some influence on the development of psychological contract content so that academics' expectations of the university might better align with what the university can deliver to them. The obligations that academics perceive that they have to the university might also be influenced by managers.

In seeking to influence academics' psychological contracts honesty and openness around expectations, working conditions, and career development opportunities are crucially important, and this honesty and openness should be evident from the recruitment phase (Lester and Kickul, 2001). Negotiation and consultation are critically important if change is to be realised in the content of psychological contracts. Imposition of change will encounter resistance, and often result in problematic workplace relations and behaviour, where academics perceive that the psychological contract has been breached. The work of Turnley and Feldman (1998) provides insight into how university managers might mitigate against the reactions to psychological contract violations by carefully and honestly explaining the reasons for change. Indeed, it can be expected that academics will react less negatively to changes in psychological contracts when they attribute the change to "legitimate, external events' outside management's control" (Turnley and Feldman, 1998: 81). As Turnley and Feldman (1998) also noted building cohesive relationships among employees and supervisors is important in order to buffer the negative consequences of psychological contract violations. Rousseau (1995) and Morrison and

Robinson (1997) pointed to the benefits of 'open-book' management where sharing information allows employees to understand the reasons for change and also recognise their contribution and significance to the work of the organisation.

Our cluster analysis signposted the complexities associated with managing and leading academics. It also highlighted the need for university managers to recognise the variability in the content of the psychological contracts that are formed by academics. The research pointed to the existence of quite divergent expectations, interests, motivations and levels of commitment to the university. Sensitivity to such variations, and tailoring of management initiatives and messages, is therefore important if the university is to achieve its goals. The academics in our sample will, for example, respond variably to teaching, research and administrative goals and performance objectives. They will also respond variably to different leadership and management styles, and to the pace and extent of workplace change they encounter. Managing ongoing change in the university requires careful re-negotiation of the content of psychological contracts, especially when expectations of academics change and/or when what the university is providing to staff changes. Managers must also be sensitive to the cumulative effects that interactions with, and between, staff have upon the state of psychological contracts. They impact academics' commitment and performance.

Clearly, the psychological contract can be leveraged to enhance university performance. Knowing what different academic staff perceive to be their obligations to the university, and the university's obligations to them, means that managers can carefully select and motivate academics most likely to support and champion particular initiatives around research, teaching, or administration. Understanding academics' differences will prove valuable. For example, the 'satisfied' cluster might quickly become dissatisfied if they perceive poor management and leadership, and/or few professional development opportunities and poor treatment in relation to promotion. Similarly, academics within the 'complacent' cluster might lose their complacency, becoming more motivated and focused through effective management and leadership, or even angry and oppositional if they find their efforts in management and administration are somehow thwarted. Those in the cluster who value the traditional academic 'lifestyle', placing a premium upon autonomy, academic freedom, collegiality, and workplace flexibility, will respond negatively to many of the changes commonly associated with the creeping managerialism that is evident across the university sector. Clearly, this poses a real management challenge, as academics in this 'lifestyle' cluster place limited value on transactional performance rewards. Obviously, management can quickly alienate those in the 'ambitious' cluster by blocking career opportunities or not recognising and rewarding their efforts.

The second cluster procedure, which analysed the obligations that academics felt towards the university, provided insight into different management challenges. Key insights relate to how university managers can best harness the obligations and commitments that the academics feel to assist them in facilitating the realisation of faculty and university goals and objectives. Those in the 'low commitment' pose a considerable challenge to managers wanting to achieve more or realise considerable change. Being the most the most highly unionised academics, and those in their current positions for the longest period, they demand carefully tailored management if they are to move beyond meeting standard workplace expectations. The 'above and beyond cluster' are willing to do more in the workplace and might be usefully be mobilised by managers as champions for

particular goals, initiatives and change. Given the relative strength of their commitment to the university and meeting performance targets, the academics in third cluster, 'expectations and commitment', can be called upon to do more with the least risk resistance, loss of motivation and commitment. Understanding their perceived obligations allows managers the opportunity to harness their commitment and efforts, even in the face of considerable change. These academics, and their values, attitudes and beliefs, could serve as exemplars, and they could be mobilised to support the realisation of desired change in workplace culture. The 'commitment only' cluster are an especially challenging group to manage as their expressed commitment to the university seems outweighed by low levels of interest in working 'above and beyond' or even meeting 'academic expectations'. This cluster demands further analysis as they constitute the largest group of academics and seem to treat their work as 'just a job'. Motivating academics around such a 'limited commitment' is an especially challenging management exercise.

Concluding Comments

Building upon the empirical evidence gathered from the cross-sectional survey, this paper has revealed the content and key elements of the psychological contracts formed by academics within an Australian university business faculty. The exploratory factor analysis identified eight factors in relation to the University's obligations to its employees and three underlying factors which explain individual academic's obligations to the University. In terms of expectations of the university, the following were identified as the key issues: 'fair treatment in promotion'; 'staff development and support'; 'good management and leadership'; 'academic life'; 'fairness and equity'; 'appropriate remuneration'; 'rewarding performance'; and, 'good workplace relations'. This partially reinforces the findings of some earlier empirical research on psychological contracts within academia (Tipples and Krivokapic-Skoko, 1997; Tipples and Jones, 1998) that identified the importance of leadership and management, fairness and equity (particularly when it comes to promotion), and provision of opportunities for career development. The three underlying factors explaining academics' obligations to the University that were identified were: meets 'academic expectations'; 'commitment'; and, going 'above and beyond'.

In addition to re-enforcing the importance of quite 'generalised' expectations already identified in the literature on psychological contracts, including the provision of good management, an appropriate work environment, and opportunities for career development (see, for example: Rousseau, 1990), our survey findings pointed to the perceived importance of maintaining academic freedom and allowing academics to act as professionals. Many of the academics we surveyed expected the University to reward excellence in teaching through the promotion system, offer flexibility through working from home, and provide support for research. Many strongly indicated that they have obligations beyond meeting basic academic expectations. The survey pointed to the academics' strong personal commitments to quality teaching and enhancing student development, both of which are seen as being part of their obligation to the University. These latter insights demonstrate that it would be limiting to attempt to understand the content of the psychological contract in narrow work performance terms.

This was the first empirical study to use cluster analysis to further examine the factors scores of perceived employer and employee obligations within a university context, and it

proved useful as a means of deepening understanding of academics' psychological contracts, variation among them, and their possible workplace effects. The analysis identified four clusters in relation to what academics perceive that the university is obliged to provide to them. These were: the 'satisfied' academics; the academics most concerned with maintenance of the academic 'lifestyle'; the 'complacent' academics; and, the 'ambitious' academics. The cluster analysis also produced four clusters in relation to what the academics perceived obligations to the university. These were labelled 'low commitment', 'above and beyond', 'expectations and commitment', and 'commitment only'.

We noted that prior research and the finding from this study indicate that university managers can and should act to maintain positive academic psychological contracts. We argued that universities will benefit where managers are able to deliver on academics varied expectations. Further, we believe that the insights that analysis of psychological contracts provide can allow managers to better manage and harness staff motivation, commitments, and personal interests to deliver on desired university outcomes. By knowing the content of psychological contracts, knowing academics' perceived expectations and obligations, university managers can better understand, predict and manage how academics will respond to various work pressures, demands, incentives and change.

Clearly, the weaknesses of the questionnaire survey do impact the validity and generalisability of the findings. The survey was based on respondents from a single organisation and used self-reporting questionnaires to assess variables which were framed in terms of promises and obligations. As the data was collected at a single point in time the research was not able to provide insights into the development of the contracts over time. Further, the sample consisted of academics only, and the sample size is small. Sample size limited some of the analysis as, for example, logit regression and ANOVA require larger samples to be fully effective. Therefore, caution must be used in generalizing the results of this study and comparing across different empirical settings.

Other limitations of this study result from the conceptual framework used to evaluate the psychological contract. As Cullinane and Dundon (2006: 116) pointed out, under Rouseaau's approach "organisations are deemed to be something of an anthromorphic identity for employees, with employers holding no psychological contract of their own". Since this research followed Rousseau's conceptualisation of the psychological contracts it included only academics' subjective interpretations and evaluation of their 'employment deal' with the university. Further research could usefully include the perspective of the employer, the university, in order to provide further insight into mutual and reciprocal obligations. However, bringing the employer's perspective into the psychological contract would be challenging, not least because of the difficulty of identifying and articulating the university perspective.

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Appendix 1: Factor Reliability Scores

Factor	Cronbach alpha score
University Obligations	
Fair treatment in promotion	0.89
Staff development and support	0.83
Good management and leadership	0.74
Academic life	0.66
Fairness and equity	0.80
Appropriate remuneration	0.72
Rewarding performance	0.75
Good workplace relations	0.68
Individual Obligations	
Meet academic expectations	0.74
Commitment	0.60
Above and beyond	0.69

Appendix 2: Mean Scores for University's Obligations Factors

	Satisfied	Lifestyle	Complacent	Ambitious
Fair treatment in promotion	1.77	-.35	-.18	.09
Staff development and support	.99	.46	-.49	-.73
Good management and leadership	.62	.02	.06	-.52
Academic life	-.25	.51	-.70	.31
Fairness and equity	.29	.10	-.55	.66
Appropriate remuneration	-.13	-.12	-.44	1.17
Rewarding performance	.73	-.39	-.07	.61
Good workplace relations	-.49	.50	-.43	-.05

Appendix 3: Mean Scores for Academics' Obligations Factors

	Low commitment	Above and beyond	Expectations and Commitment	Commitment Only
Meet academic expectations	.34	-.58	1.28	-.75
Commitment	-1.15	-.29	.85	.44
Above and beyond	-.62	.93	.36	-.70

Notes

[1] Notably the universities known as the Group of Eight: Australian National University; University of Adelaide; University of Melbourne; Monash University; University of Sydney; University of New South Wales; University of Queensland; and University of Western Australia.

[2] Academics employed within the business faculty of a multi-campus Australian university were the subjects of the study. Just two decades old, the university was created through amalgamation of a number of pre-existing 'colleges of advanced education' where the key focus was on 'teaching' and academic research was accorded relatively little importance or emphasis. The university, however, accords ever-increasing importance to the generation of quality research outcomes. The university has strong internal, distance and international operations and student enrolments exceed 30,000.

[3] This paper does not provide a detailed history of psychological contract research, nor does it engage in discussion of the origin of the construct. For such information, the reader is advised to consult abbreviated histories of the construct such as those completed by Tipples and Verry (2006) and Tipples, Krivokapic-Skoko and O'Neill (2007). The

origins and early development of the psychological contract construct are also effectively outlined in Roehling (1997), while a more detailed review of contemporary psychological contract research can be found in Conway and Briner (2005) or in Taylor and Teklab (2004).