



# **SCIENCE AS A CALLING**

Research on the expectations of scholars





Aran Homeijer (s0097373) University of Twente, Business Administration, HRM track First supervisor: Dr. N. Torka Second supervisor: Prof. dr. J. C. Looise Date: 07-04-2011

# UNIVERSITEIT TWENTE.

"The search for truth is more precious than its possession" -

Albert Einstein (1879-1955)

# DANKWOORD (ACKNOWLEDGEMENTS IN DUTCH)

#### ABSTRACT

The current university system is changing. It has been subjected to mass expansion, marketization, privatization (including funding), internationalization, and globalization. These changes and pressures have powerful effects upon individual scholars and universities, and such changes powerfully impact the formation, content and experience of scholars' psychological contracts. The psychological contract (PC) refers to the expectations (that can be largely unspoken and unwritten) of the scholar towards the institution regarding the behaviour of the institution based on reciprocity in the relationship between the scholar and the institution.

In this study, the focus is on the effects of the described developments on the perceptions of individuals who chose science as their profession. More precisely, this study is primarily oriented *to get insight in the expectations that scholars have of their profession and their university, and the extent to which these expectations are (being) fulfilled.* Furthermore, possible *changes in the PC* were explored. In-depth interviews were held with 18 professors connected to one department of a Dutch university.

As expected, many participants ascribed changes in their profession to reforms and changes in higher education system and academia. The participants spoke at length regarding present expectations of the profession and university as well as issues concerning these expectations. The expectations mentioned by the participants covered all seven categories identified in the 'theoretical framework'. Moreover, changes in scholars' expectations were discussed as well as the nonfulfillment of expectations and its negative consequences.

# CONTENTS

D,	DANKWOORD (ACKNOWLEDGEMENTS IN DUTCH)							
A	BSTR	ACT.		4				
1	INTRODUCTION							
	1.1	Prot	plem statement	7				
	1.2	Rele	evance	8				
	1.3	Obje	ective of the study	9				
	1.4	Res	earch model	9				
	1.5	.5 Research questions		10				
	1.6	Ove	rview of the chapters	10				
2	TH	E TR/	11					
	2.1	Hum	nboldt, Weber	11				
	2.2	Cha	nges in academia	12				
	2.2	2.1	Mass expansion of the universities	12				
	2.2	2.2	New Public Management	13				
	2.2	2.3	Funding	13				
	2.2	2.4	The Bologna process	14				
	2.3	Impl	ications for scholars	14				
3	TH	EORE	ETICAL FRAMEWORK: THE PSYCHOLOGICAL CONTRACT	18				
	3.1	Defi	nitions of the psychological contract	18				
	3.1	1.1	Classic approaches of the PC	18				
	3.1	1.2	Contemporary approaches of the PC	19				
	3.2 Nor		-fulfilment of the PC and its consequences	20				
	3.3	3.3 Content of the PC		21				
	3.3	3.1	PC of Scholars					
	3.3	3.2	PC content measurement	23				
4	ME	METHODOLOGY						
	4.1	Part	icipants	26				
	4.2	I.2 Interviews		26				
	4.3	3 Data analysis		27				
	4.4	Validity and reliability		27				
5	FIN	IDING	DINGS					
	5.1	Sch	olars' expectations at the beginning of their academic career	Error! Bookmark not defined.				
	5.2	Sch	olars' current expectations	Error! Bookmark not defined.				
	5.2	2.1	Organizational justice	Error! Bookmark not defined.				
	5.2	2.2	Reward systems	Error! Bookmark not defined.				
	5.2	2.3	Staff development and support	Error! Bookmark not defined.				
	5.2	2.4	Management and leadership	Error! Bookmark not defined.				

	5.2.	5	Employee influence	Error! Bookmark not defined.				
5.2.6 5.2.7		6	Academic life	Error! Bookmark not defined.				
		7	Facilitation	Error! Bookmark not defined.				
	5.2.	8	Open category	Error! Bookmark not defined.				
5.	3	Chai	nges in the PC	Error! Bookmark not defined.				
6	DISC	CUSS	SION	40				
6.	1 (	Con	clusions	Error! Bookmark not defined.				
6.	2	Limit	ations	Error! Bookmark not defined.				
6.	3	Reco	ommendations for future research	Error! Bookmark not defined.				
6.	4	Reco	ommendations for management	Error! Bookmark not defined.				
6.	5	The	future of academia	Error! Bookmark not defined.				
REF	ERE	NCE	ES	44				
APPENDIX 1: List of abbreviations								
APP	APPENDIX 2: Citation analysis							
APPENDIX 3: Review measurements PC content								
APPENDIX 4.2a: Interview protocol (in Dutch)								
APP	END	IX 4	.2b: Interview protocol (adapted from 3a, in Dutch)	59				
APPENDIX 4.2.2a: Initial e-mail to potential participants (in Dutch)61								
APP	END	IX 4	.2.2b: Reminder to potential participant (in Dutch)	62				

#### **1** INTRODUCTION

The title of this thesis refers to the work of Max Weber (1864-1920), and specifically to his lecture *Wissenschaft als Beruf* (1919). One could argue that the title of this thesis is misinterpreted from German, but *Beruf* can be translated as profession as well as calling. Weber (1919) refers to the latter in his lecture *Wissenschaft als Beruf*. He argues that science is more than 'just' a profession; it is (or should be) a calling. According to Weber, scientists or scholars (both referred to as scholars hereinafter) must have the ability "*to put blinkers on*" when necessary, passionately throw themselves on a problem or create a problem, and pursue the utmost perfection in solving it. It is "*the experience of science*". This passion, sometimes made ridiculous by outsiders, is extremely important, because something that cannot be done with passion has no personal significance or meaning (Weber, 1919). It is this passion for one's calling that makes individuals excel themselves. Science as a calling also refers to the "*spiritual inspired, secluded and ascetic idealism*", a life as an "*uncomprehended hermit in a world that appears like a wasteland of unscientificness*" (Boomkens, 2008, pp. 52-53, my translation).

Currently, the world of scholars is changing. Boomkens (2008) states that these days, almost a century later, science has become a crucial (social) activity, a prominent production factor and essential source of knowledge and information. And: according to him, science has become "business as usual", an everyday profession that is vital to maintain the prosperity of nations (Veerman Committee, 2010). In other words: universities have been transformed from an academy into a business (Boomkens, Von der Dunk, Gabriëls, & Klukhuhn, 2009). In many countries, the university system has been "victimized" by series of radical structural measures and financial cutbacks concerning the two most important tasks of the university: scientific research and education (Deem, 1998; Locke & Teichler, 2007). Universities have adopted organizational forms, cultures, technologies, management practices, and values that closely resemble those found in the private business sector (Deem, 1998). In such a business environment the place for "those with a calling" is under pressure, because they do not fit in the models and schedules of administrators, educationalists, and (HR-) managers, whose task is it to measure the quality and output of current academic education and research (Boomkens, 2008). However, Boomkens recognizes that there are still reasons to maintain that for many scholars and other professionals applies that they are on a certain level following a (their) calling.

#### 1.1 Problem statement

Although scholars might follow a calling, they still will need resources and a stimulating environment to do so, while securing an income at the same time. Scholars are thus depended on, for example, an institution as a university to provide these resources and this environment, for which in return they provide knowledge. This knowledge can be in the form of research being transformed in articles/books/products or the transfer of knowledge upon students. Based on the reciprocity norm (Gouldner, 1960) and the (social) exchange theory (Blau, 1964) it can be expected that when individuals exert themselves for their organization, they also expect something in return (see the fourth chapter). These expectations, which can be largely unspoken and unwritten, develop into a so-called *psychological contract* (abbreviated to PC hereinafter) (Kotter, 1973). The PC can be seen as: "A series of mutual expectations of which the parties to the relationship may not themselves be dimly aware but nonetheless governs their relationship with each other" (Levinson, Price, Munden, Mandl, & Solley, 1962, as cited in Roehling, 1997; see also Cullinane & Dundon, 2006, p. 114). Why is gaining knowledge about the PCs of scholars of such importance?

The current university system is changing and is characterized by mass expansion, marketization, privatization (including funding), internationalization, and globalization (Teichler, 2007; Boomkens, 2008; Lorenz, 2008a). These changes and pressures have powerful effects upon individual scholars and universities, and such changes powerfully impact the formation, content and experience of academics' psychological contracts (Tipples, Krivokapic-Skoko, & O'Neill, 2007). They affect not only the organization of research and education, but also the management of faculty staff. Concerning the former, the changing organization of the academic profession also means that there may be a discrepancy between the 'original' expectations of scholars and the extent in which the institution meets these expectations. Referring to the management of people, so-called Human Resource Management (HRM) seems to change. For example, in

the Netherlands, the country where this research was conducted, so called tenure-tracks have been introduced. Tenure-tracks are the formally laid down path to permanent employment for academic staff with criteria set in advance. In a nutshell: not meeting the criteria means your out, while meeting criteria means you get a permanent contract as an (associate) professor (University of Twente, 2008).

Research shows that HR policy and practices have a profound impact on the interpretations that employees make with regard to the exchange relationship between themselves and their organization (Petersitke, 2009). HR policy and practices convey messages to employees, which may or may not be intended by the organization (Freese & Schalk, 1996; Petersitzke, 2009). Therefore, a changing treatment of people migth influence the relationship between the organization and scholar, and are even expected to influence the relationship between the occupation and scholar.

Guest (1999) suggests that when the employees' expectations concerning HR practices are in line with what the organization is offering, it will result in positive outcomes such as job satisfaction, employment security, lower pressure at work and motivation. The inverse also holds true, meaning that when there is not a 'fit' between the expectations of scholars and the offered HR practices by the organizations, there is a possibility that this will have negative consequences. Non-fulfilment of expectations is known as psychological contract breach or violation (Schein, 1970, 1980) and is likely to result in increased levels of exit, voice, and neglect behaviours and decreased levels of loyalty to the organization (Turnley & Feldman, 1999a).

In this study, the focus is on the effects of the described environmental developments for the perceptions of the individuals who chose science as their profession. More precisely, this study centres on the expectations of scholars, and to what extent their expectations are being fulfilled. In so doing, psychological contract theory is chosen as theoretical fundament. Furthermore, a multiple constituency approach is adopted. This approach is normally not adopted for PC studies and is more often found in commitment studies. With regard to commitment, this approach assumes that individuals can be committed to multiple entities or foci, such as: their work, colleagues, work group, department and/or organization (Zaccaro & Dobbins, 1989; Peeters & Meyers, 1995; Marks, 2001). In this study two foci will be addressed: the profession and the institution. These foci are chosen, because the changes in Dutch academia (and other countries) not only affect the organization of research and education (the institution), but also the academic profession.

#### 1.2 Relevance

In this section the relevance of this research will be expounded. There are multiple reasons why this research is of relevance. First, as mentioned earlier, the developments in academia may change the academic profession in such a way that it also can influence the attitude of scholars towards their profession and their employer. In this context, it is important to notice that the Dutch labour market for scholars: into a scarcity scenario with "smaller pools to fish from" (Leisyte, 2007) because of the ageing of academic staff, shortages in doctoral students, and in particular female staff (particularly in exact sciences). These artifacts will most likely worsen the situation, as it may lead to insufficient number of successors in the near future (Van Dijk & Webbink, 2000; Van Vucht Tijssen, 2000). Moreover, other than purely academic qualifications are currently included in academic recruitment, especially for senior university staff, such as managerial abilities and the capacity to attract external research funding, (De Weert, 2001). This means that suitable candidates are declining for senior positions since not all candidates possess the 'required' abilities (Leisyte, 2007). Furthermore, the increased competition for academic staff will likely intensify, especially considering the performance driven systems that fuel competition (Leisyte, 2007). It is thus important for universities to be an attractive employer: not only to attract staff (also from abroad), but also continue their relationships with good performing academic staff. If universities want to realize long-term membership of their staff it is necessary to meet expectations of such individuals. Non-compliance with the expectations of individuals can severely damage the relationship between the institution and the individual, and even the relationship between the occupation and the individual. Negative outcomes of such an imbalance are negative feelings (e.g., frustration, anger, distrust, and hostility), negative employee behaviour, lower organizational commitment, and turnover (Kickul, 2001; Rousseau, 1995; Morrison & Robinson, 1997; as cited in Granrose & Baccili, 2006; Turnley & Feldman, 1999a; Zhao, Wayne, Glibkowski, & Bravo, 2007).

The relevance of this research can also be found in the scarcity of research that has been done in search of the effects of institutional changes on the PC of scholars. In general, there has been very limited empirical research on PC within academia (Tipples, Krivokapic-Skoko, & O'Neill, 2007). Some exceptions are the studies of Newton (2002) among UK scholars, Dabos and Rousseau (2004) among Latin-American scholars, and the work at "Australasian" universities (see Tipples and Krivokapic-Skoko, 1997; Tipples and Jones, 1998; Tipples, Krivokapic-Skoko & O'Neill, 2007; Krivokapic-Skoko & O'Neill, 2008). Furthermore, Conway and Briner (2005) argued that in general there were relatively few studies specifically designed to assess the contents of PCs. This study extends the limited literature on PCs in academia.

Additionally, since this thesis is part of the HRM Master track and managing employee expectations can be seen as an essential part of HRM, we are interested in the role of HR policy and practices in the development and fulfilment of these expectations. And by exploring the PCs of scholars we can find out how adequate HRM for scholars should look like.

# 1.3 Objective of the study

This study is primarily oriented to get insight in the expectations that scholars have of their profession and their university, and the extent to which these expectations are (being) fulfilled. Furthermore, possible changes in the PC will be explored. Thus, this study will cover three facets of PC research; the content of the PC (specific expectations), the fulfilment of the PC (breach/violation), and changes in the PC.

# 1.4 Research model

In order to achieve the research objective, first a so-called 'desk-research' is performed for the theoretical part of the study (see Verschuren & Doorewaard, 1999). The desk-research consists of analyzing relevant literature and building the theoretical framework necessary for the interviews. Second, scholars will be interviewed as part of the practical research. The explorative nature of this study and the objective to get insight in the expectations of scholars means that in-depth interviews will be used. These will be semistructured. In figure 1.5 a schematic representation of our research model is given (based on the model of Verschuren & Doorewaard, 1999).



Figure 1.5 Research model (based on Verschuren & Doorewaard, 1999)

#### 1.5 Research questions

Based on the aforementioned research objective a central problem statement is formulated:

What expectations do scholars have of their profession and their university, and (to what extent) does the university fulfil these expectations?

In order to answer this main research question, sub questions have been formulated. These sub questions can be divided into two categories; the first category of questions will be answered in the theoretical framework (or conceptual part) of this study and the second category will be answered by the empirical research. The first category consists out of the following questions:

- What is a psychological contract (PC)?
- What is the content of the PC?
- What is a breach or violation of the PC?
- What are the consequences of a PC breach or violation?

The second category of questions contains the following:

- What expectations did scholars have at the start of their academic career of the profession and university?
- What current expectations have scholars of their profession and university?
- Have these expectations changed over time?
- To what extent is their university fulfilling these expectations?

#### 1.6 Overview of the chapters

Chapter three provides insight into and evaluates existing literature on the PC construct, PC violation and its relationship with negative employee attitudes and behaviour. The fourth chapter consists of the expectations concerning the PC of scholars and changes in the academic profession. It also presents the analytical strategy, the design of the study and a conceptual model of the expected relations. In chapter five the results of the interviews will be presented. In the sixth (and final) chapter the conclusions of the study will be discussed as well as the limitations of this study, suggestions for further research, and implications for management.

#### 2 THE TRANSFORMATION OF ACADEMIA

In this chapter the changes and reforms in the Dutch university system will be considered as well as discussing the implications they might have for the academic profession. Before describing the current changes, the focus will be on the past.

#### 2.1 Humboldt, Weber ...

When discussing universities, Wilhelm von Humboldt (1767-1835) cannot be left unmentioned. Von Humboldt developed the theory of *Bildung*, in which the university provides *Bildung durch Wissenschaft* (education through research) (Lüth, 1998). Bildung refers to the conception of self-formation or self-cultivation of individuals (Sorkin, 1983). This vision on academic (self-) education was also introduced in the Netherlands (Klukhuhn, 1999). According to Von Humboldt academic enquiry is an ongoing process oriented towards the truth (*"unity of science"*), and philosophy is the 'true science' that incarnates this orientation to fundamental, universal principles. As a result of this orientation to what is fundamental, the process of research is regarded as a process of general edification. Participation in research by students, for example, is a necessary condition to edify them in relation to the truth. Thus an orientation towards the truth and towards the fundamental principles (that is guiding research) has an 'enlightening' potential (Simons, Haverhals, & Biesta, 2007). Students should be provided with *allgemeine Menschenbildung* (general education) which respects the individual development of each student, and only after such a general education students can proceed to specialized training (Von Humboldt, 1903-1920, as cited in Sorkin, 1983). And by providing this general education in an atmosphere of freedom, Von Humboldt hoped to foster the social bonds necessary to Bildung (Sorkin, 1983).

In *Limits of State Action (1792)*, Von Humboldt postulates freedom as a precondition of Bildung (Von Humboldt, 1792, as cited in Lüth, 1998) and uses this to justify the exclusion of the state from any influence on the processes of Bildung (Lüth, 1988, as cited in Lüth, 1998). State power should thus be reduced to the barest minimum in order to ensure freedom for individual self-cultivation (Von Humboldt, 1792, as cited in Sorkin, 1983). This means that the government should invest in the universities, but should not intervene in their operations. According to Von Humboldt (1792, as cited in Lüth, 1998) state influence would lead to uniformity and 'alien behaviour' in the nation. Only in a state of freedom individuals can assert their independence, which is a condition for educative (*bildend*) acquisition or repulsion of foreign influences. Von Humboldt states that any activity not chosen by men and women themselves in which they are "*restricted and directed*" remains alien to them (Lüth, 1998). Von Humboldt considered Bildung not only characteristic for the university, but also gave the university the task to provide a mental haven in the "*midst of the social maelstrom*". Thus providing the seclusion and freedom that are required to protect concentrated thinking (Abma, 2008), and disinterested research (Philipse, 2008).

It is argued that in recent days the relationship between education and research is still essential, but for quite different reasons than envisioned originally by Von Humboldt. Apparently the competences that promote the 'employability' of individuals overlaps quite largely with the competences (e.g. critical thinking, analyzing, arguing, independent working) involved in the exercise of the modern research activity (European Commision, 2002, p. 40). For education, given at the universities, to fulfil its educational and civic role in the *knowledge society* it must be embedded in research (Sorkin, 1983). Research can be seen as a ground for employability-orientated higher education (European Commission, 2002). So in the present European perspective, the point of departure is not the edifying potential of academic enquiry but the needs of the knowledge society (Sorkin, 1983). Bertilsson (1992) states that, in general, one could speak of a 'pragmatization' of the university. The private sector as well as the state set diverse practical demands that threaten to undermine the constitutive idea of the university. The cooperation between science and practical upbringing that Von Humboldt held out as a promise has certainly been transformed from belief in education and upbringing to a belief in material progress (Bertilsson, 1992).

Next to the vision of Von Humboldt, we also would like to discuss the work of Weber further, and in particular his notion of science. When we discuss the goal of science, one has to ask oneself why work on something

that in fact never can and will end? The pragmatist shall answer that it will help us form expectations based on scientific findings under certain circumstances (Weber, 1919). According to Weber scholars practice science for the sake of it. Not because of commercial or technological successes, or result in better nutrition, clothing and lighting, or for providing a better government. Remarkably is the striking contrast with the current situation, in which researchers are expected in an increasing extent to conduct science that is technologically, economically, and socially relevant (Teichler, 2007). This of course has consequences for the academic freedom and autonomy of researchers, which is even more reduced under the pretext of the enhancement of effectiveness and efficiency that result from the neoliberal beliefs of the Dutch and other governments that will be discussed hereinafter.

Weber also explains why serving the cause is such an important aspiration. In *Wissenschaft als Beruf* (1919), he speaks of those who have 'personality' and 'Sensation'<sup>1</sup>, in which the Sensation of what Plato ( $\pm$  428/427-347 BC) calls 'mania' (as a flash of inspiration or sudden valuable brain wave) gives meaning to the personality. Those who simply and solely serve the cause have personality on scientific level (Weber, 1919). As a consequence, it can be assumed that those who have personality will be more able to experience mania (or brainwaves) than those that do not have personality or pretend to have personality. Because without the phases of passionate question raising and all the pondering involved, the Sensation will probably not take place (Weber, 1919).

The question is why do we refer to Von Humboldt and Weber? Well, notably because the factors they refer to as essential for fruitful research and education (e.g., academic freedom, autonomy, seclusion from foreign influences) are subject to disturbing changes (see Boomkens, 2008; Lorenz, 2008). Of course, there are different notions of what fruitful (or productive) research and education is. We would like to adhere to the notions of Humboldt (*Bildung*) and Weber to pursue scientific progress instead of pursuing numbers (e.g., numbers of credits, graduates, publications, citations). In the classic notion of the university by Von Humboldt and Weber science is seen as cultural heritage whereas in the current situation science is primarily seen as an economic good (Grit, 2000). This economizing of science means a focus on efficiency and accountability, and a loss of autonomy and academic freedom for scholars, which will eventually result in the destruction of the academic profession (Parsons, 1939; Boomkens & Gabriëls, 2008; Lorenz, 2008a). We will elaborate upon this subject in the remainder of this chapter.

# 2.2 Changes in academia

The landscape for Dutch academia has changed; it has been changing since the 1960s (Neave & Van Vught, 1991; Leisyte, 2007). The changes have not only had effect on Dutch universities as institutions, but also have transformed the working lives of scholars bound to it and even had consequences for scholars attached to non-university institutes. In this section these changes that have affected both education and research will be discussed, as well as their implications for the academic profession.

# 2.2.1 Mass expansion of the universities

It the 1960s the universities were made accessible for a much larger proportion of the population, which led to the 'mass expansion' of higher education (Felt, 2002; Verbrugge, 2008). 'Exploding' student numbers caused an increase in size and complexity of the universities. While at the same time (namely) students pushed for the democratizing of the universities, resulting in the University Board Reform Act of 1971 (Wet Universitaire Bestuurshervorming, WUB). Besides democratizing the universities, the new law also intended to increase the effectiveness of the university board and safeguard the control carried out by the Dutch government (Wilterdink, 2007).

The WUB was not the only outcome of the expansion of the universities. The rapid growth made it also necessary for universities to appoint new faculty staff on short notice. The drawback of this newly appointed faculty staff was its quality, which left much to be desired in certain cases. This resulted in specified publication requirements for scholars, in order to 'stimulate' research and assess quality (Verbrugge, 2008).

<sup>&</sup>lt;sup>1</sup> The German word 'Sensation' refers to experience (see Weber, 1919).

Furthermore, the mass expansion and its 'disproportionate' costs pressured the budgets of the Dutch government and resulted in drastic structural and financial measures concerning the two fundamental tasks of the university, namely education and research (Huisman & Currie, 2005; Boomkens, Von der Dunk, Gabriëls, & Klukhuhn, 2009).

# 2.2.2 New Public Management

In the 1980s changes in governance and administration became a major issue in university reforms. These changes resulted from: the negative criticism on the former situation, the financial crisis at the time, the insistence on cost effectiveness and the growing demand for technological, economic and social relevance (Teichler, 2007). The Dutch government adopted *new public management* (NPM), which meant it reduced its detailed process regulations and controls, and instead moved to a target-setting policy. Emphasis was placed on retrospective monitoring of the results achieved in education and research (e.g., credits achieved by students, publications in peer reviewed journals) in the light of resources provided (Neave & Van Vught, 1991). The government stressed on efficiency and effectiveness, which resulted in the emphasis on quality (or excellence) insurance and with that on accountability. The Dutch universities started to adopt a business model similar to the private sector with the accompanied market demands (e.g., efficiency, quality, accountability and the university management acquired more power within the universities (Teichler, 2007).

In 1997, the University Modernisation Act (Modernisering Universitaire Bestuursorganisatie, MUB) was introduced, which caused an unprecedented strong dominance of the university governors over scholars. The university and faculty counsel changed from being powerful supervisory bodies to merely advisory bodies (Felt, 2002; Wilterdink, 2007; Boomkens et al., 2009). Scholars and also students lost (in a formal sense) many of the opportunities to (co-) decide on factors concerning education and research, as the representative bodies at the university, faculty and department levels were stripped of significant powers over the primary processes (Leisyte, 2007; Wilterdink, 2007). The management of universities is thus taking over by (external) managers, instead of management by the profession itself. According to Boomkens and Gabriëls (2008), this loss of autonomy or self-regulation means the destruction of *Wissenschaft als Beruf*.

# 2.2.3 Funding

The neoliberal policy of the Dutch government also greatly influenced the funding of universities, which gradually evolved from 'trust'-based to 'performance'-based (Sörlin, 2007). In the Netherlands, funds were initially assigned to universities based on the number of students and the established division of labour (tasks) between the different institutions. The continuing massification of the universities changed this; it became clear that the former system of funding and allocation of resources was not longer tenable (Sörlin, 2007). Student numbers and the efficiency by which students graduate started to make up the basis of universities funding (Lorenz, 2008a). ...Despite of Weber's explicit warning that emphasis on student numbers is at odds with the constitutive values of the modern university (Weber, 1919). These constitutive values will be sacrificed in order to adapt a more competitive nature in order to compete with other academic institutions and secure funds (Verbrugge, 2008).

Dutch universities receive funding through three flows of money. The first flow consists of direct funding coming from the government (Ministry of Education, Cultural Affairs and Science) and is issued as a lump sum based on the ratio between teaching and research load (Leisyte, 2007). Symbolically, it can be seen as trust in the universities by the government, because of the high degree of autonomy the university governors have over the distribution of this funding (Boomkens & Gabriëls, 2008). The increasing emphasis on competitive-driven research can be clearly seen in the proposals to transfer funds from the first flow to the second (Leisyte, 2007). This second flow is distributed directly to researchers, research project or programs by funding agencies (e.g., NWO, KNAW<sup>2</sup>) and comes indirectly from the government. Researchers, projects or projects compete with each other over funds distributed by research councils (KNAW, 2006). The underlying thought is 'valorisation': according to Boomkens, an economical term that refers to social

<sup>&</sup>lt;sup>2</sup> In the Netherlands the second flow of funds consists of two organizations that receive funds from the Dutch government: the NWO (Nederlandse Organisatie voor Wetenschappelijk Onderzoek) and the KNAW (Koninklijke Nederlandse Akademie van Wetenschappen). Further are there international research organizations that also disperse funds. (See also: http://www.onderzoekinformatie.nl/nl/oi/landschap/inhoud/financiering/, http://www.nwo.nl and http://www.knaw.nl

relevance, meaning that research should be profitable and be in direct favour for the society. The third flow consists of funds that are not acquired through the government or intermediary agencies; these funds originate from private organizations, non-profit or charity organizations, or come from abroad (KNAW, 2006). The funds acquired through this third flow are increasing over the last two decades; both in teaching and research, universities are increasingly selling their services in markets (Leisyte, 2007). According to Leisyte (2007) the expectation for the coming years is that the funding of the universities will be increasingly competition driven.

#### 2.2.4 The Bologna process

The last important issue is that of the Bologna process. The Bologna process, called process because it actually consists out of multiple declarations (e.g., Bologna, 1988; Paris, 1998; Bologna, 1999; Lisbon, 2000), intends to achieve a uniform higher education system in Europe. The Bologna Declaration defines the common goal of the European countries as follows: "to create a European space for higher education in order to enhance the employability and mobility of citizens and to increase the international competitiveness of European higher education" (Bologna Declaration, 1999, p. 4). This mobility and cooperation is deemed necessary in order to compete with the rest of the world. In order to form one European higher education system, all the basic structures of the individual national education systems are made uniform: the introduction of the same education cycles, unit of credits, certificates and the same systems for quality assurance regarding education and research (Lorenz, 2006, 2008a).

Student mobility, graduate employability and study program comparability appear to be the cornerstones of the Bologna process (Amaral & Magalhaes, 2004), but there are reasons to think otherwise. So what are the driving forces behind the Bologna process? The declarations and plans concerning the Bologna process all contain an economic view of education, treating higher education primarily in it function for the European economy and in terms of marketable commodity, and thus as a product like any other (Lorenz, 2006). The underlying thought behind the Bologna process appears to be economical, accordingly an increase in scale should lead to greater efficiency, which should lead to cost reduction and thus a better competitive position worldwide (Lorenz, 2006, 2008a).

It is striking, how well the Bologna process matches the neoliberal politics and policy that is pursued in the Netherlands since the 1980s. Lorenz (2006, 2008a) identified six characteristics of the Dutch higher education policy since the 1980s: the radical economization of higher education, the political preference for changing the educational institutions from public into private institutions, preference for the enlargement of scale of the institutions (including the merger of universities and professional schools), preference for *"managerial colonization"*, preference for saving policies at whatever costs, and the preference for *"talking up quality"*. Bologna can be interpreted as the extension, on a European scale, of this neoliberal policy and its characteristics (Lorenz, 2006, 2008a) and is 'just' another move in the neoliberal movement to decrease the state's social responsibility. The Bologna process seems to contribute to the loss of autonomy by higher education's institutions and the emergence of a new centralized European higher education bureaucracy (Amaral & Magalhaes, 2004). This could lead to a narrow and rigid set of norms and values, leading to a lower degree of diversity of the higher education systems, which until very recently was considered as one of Europe's competitive advantages (Amaral & Magalhaes, 2004).

#### 2.3 Implications for scholars

Now that we have discussed the changes in academia, we will now turn our focus towards the implications that these changes have for the academic profession.

Firstly, student numbers are still growing strong. In 1995, some 29,946 first-year students enrolled at Dutch universities, this figure grew in 2008 to 47,512 (CBS, 2009). The continuing massification of the universities, the limited hire of new permanent faculty staff and the strong focus on efficiency by the Dutch government has caused such a work pressure that scholars often have to sponge off their research time (Boomkens et al., 2009). This research time is further reduced by all the extra tasks they have to obtain in recent years, such as: writing proposals, developing contacts, elaborate e-learning programs, engaging in technology transfers,

raising funds, managing research projects based on external funding, supervising postgraduate students, and finding internships for students (Leisyte, 2007; Musselin, 2007).

Second, the problem of the neoliberal policy of the Dutch government is that it is taken to its very extreme (Boomkens, et al., 2009). A consequence is that the university gradually is reduced to a 'knowledge factory', by which it cannot withstand the (short-term and opportunistic) goals of the government (Huisman & Currie, 2005), turning members of the academic profession into academic production workers (Musselin, 2007). In this knowledge factory the autonomy of researchers is seen as a cause of inefficiency and is described as an obstacle to private funding and the transformation of science into applied innovation (Musselin, 2007), and thus needs to be 'controlled'. The academic freedom, considered as the freedom to teach and do research on subjects chosen by the academic self, as well as the freedom to organize him or her own work (Ramboer, 2008), has become more and more limited. The "*university is no longer a place welcoming and sheltering academic activities, but rather it has increasingly taken on attributes of an employer*" (Musselin, 2007, p.5). This includes the increased involvement with the allocation of the tasks of scholars and time dedicated to these tasks, and thus significantly reducing the freedom of scholars (Musselin, 2007).

While the 'steering from a distance' by the Dutch government may appear to have an increasing effect on the autonomy of the universities, because the notion suggests less interference by the Dutch government, this is not quite the case (see Boomkens, 2008). It was expounded before that the government adopted an ex post approach and in addition tries to meet the demands of the labour market and research needs of the (business) community. The government's role as a buffer between the universities and the community is changing. The autonomy over processes within universities is transferred from the government to the university management, thus the university will (in theory) posses greater institutional autonomy (Neave & Van Vught, 1991). There is a catch, since universities have to operate as efficiently as possible and focus on economical growth, technological successes, and industrial innovation, thus direct towards output (Van Vught, 1990). Thus while the autonomy over the day-by-day conduct and operations is increased for the management on efficiency, economical growth, technological successes and industrial innovations. This is, of course, not the *Von Humboldtian* seclusion and freedom from external influence that the state is required to offer, in order to protect concentrated thinking and disinterest thinking (see also Abma, 2008; Lüth, 1998; Philipse, 2008).

However, the government is not the only external force the university has to take in account, there are also other actors that influence universities, especially through funding (second and third cash flow). Universities are expected to increase the raising of funds for their activities from other sources than the government. Scholars are also expected to secure funding for their research, so that they obtain and maintain research time. Slaughter and Leslie (1997, as cited in Felt, 2002) state that scholars are getting increasingly more entangled in research financed by private corporations In some fields (e.g., biomedical science) fundamental research is largely financed by private corporations and it is self-evident that these corporations are interested in research that produces short-term and profitable results. Dependence on external actors means that the autonomy of researchers is being pressured, as well as their academic freedom. This is clearly formulated in the following:

Individuals become scholars through induction into disciplines, communities of scholars who develop and apply epistemic rules of inquiry and testing, and evaluate criteria such as logic, use of evidence, conceptual and theoretical rigour and creativity, and the disinterested pursuit of truth. They thus constitute a highly specialized and relatively small system, dependent on self-regulation and freedom from external pressures that might distort that quest, notably, although not exclusively, pressures from the state. (Henkel, 2000, p. 16).

This 'new' system of funds allocation resulted in a universal trend of decreasing basic discretionary funding for research (Sörlin, 2007). After all, research is not always valuable in terms of commercializing potential and profitability (Boomkens, 2008) or to put it another way: research does not always have a great deal of *valorisation* potential. We call upon Boomkens and Gabriëls (2008) to exemplify this:

Which company or public institution will allocate money for research concerning the Big Bang, the missing link in the evolution, the grammar of the Assyrian, the arguments for the existince of God by Anselm of Canterbury, the 'original position' of John Rawls, a new vision upon the Eighty Years' War or the compartmentalization of society, excavations in Kenya or Egypt, or the vanishing languages in Siberia or the Amazon? (Boomkens & Gabriëls, 2008, p. 115).

At this point, a parallel will be drawn with the forest described in the article of Scott (1998). This forest was managed in such a way that it maximized the profit that originated from selling timber that could be used for e.g., firewood and building material. Trees, plants and other flora that were not considered to be profitable had to make way for those that were considered profitable in the short run. This led to a mono-cultural forest with only trees that were useful for firewood or lumber and plants that were considered as crops. In the long run this mono-cultural forest led to all kinds of problems (e.g., diseases, reduced fauna), the term Waldsterben (forest death) was used to describe the worst cases. Apparently an exceptionally complex process, involving soil building, nutrient uptake, and symbiotic relations between fungi, insects, mammals, and flora (which were, and still are, not entirely understood) was disrupted. Thus managing the forest with a strong focus on performance and efficiency led to very undesirable consequences. This may also holds true for the Dutch university system. Because of the focus on performance and efficiency, the landscape of universities might also become mono-cultural. Only popular and economic relevant studies and courses will 'survive'. In the short run this may is effective for the institutions, because they will receive much funding because of the high amounts of registered students with little effort and high efficiency. The same goes for research that is not of direct interest in terms of business and profitability (e.g., fundamental research). Even though, in the long run, those studies, courses and research topics can be of great importance. Disappearance of study programs and courses can lead to shortages of gualified people in certain areas. Furthermore, it will also mean that it will block innovations and prevent coming major (and also smaller and incremental) discoveries from happening.

'Products' are becoming increasingly uniformized by the quality criteria implemented in academia. Boomkens (2008) states that the current evaluation practices leads to a certain standardization of the academic profession. Scholars are pushed by bureaucratic agencies such as the university, faculty, the Association of Cooperating Universities in the Netherlands (Verenigde Samenwerkende Nederlandse Universiteiten, VSNU), Dutch Organization for Scientific Research (Nederlandse Organisatie voor Wetenschappelijk Onderzoek, Accreditation Organization of the Netherlands and Flanders NWO). (Nederlands-Vlaamse Accreditatieorganisatie, NVAO), and thus indirectly by the Dutch government, into a certain design of their research (Verbrugge, 2008). Publishing articles in Anglo-Saxon journals for the profession and a focus on research is the most distinctive requirement in order to obtain a high score in evaluations. This means that publishing books, publishing articles in other languages than English, publishing in national journals, publishing in other research fields or a focus on education are considered less important (Boomkens, 2008).

Furthermore, scholars are expected to secure a certain 'productivity' that results in a measurable output (e.g., articles, products). Whether or not they are internal or external financed, money follows the production and the production follows the money (Verbrugge, 2008). Consequently, the internal organization and the governance of the academic research are becoming increasingly more from a technocratic, pluralistic and bureaucratic nature, directed towards production and distribution of as much 'products' possible (Verbrugge, 2008). This development can be seen as the devolution of the Humboldt University, provoked by the stronger external influences over the academic institutions that resulted from the business-like approach to the organizing and managing of those institutions. This leads to the breakdown of internal value systems that sustain academic freedom and independent critical scholarship (Bleikie & Kogan, 2007; Sörlin, 2007).

In the new system of quality control, the quality of scholars is no longer considered from the academic profession standpoint, referring to intrinsic attitude (Weber's personality) and inspiration. Instead, quality is defined as the extent to which they can 'sell' their 'products' within a competitive international network. Scientific quality is thus reduced to an external quantity that can be measured and described in terms of efficiency and effectiveness (Verbrugge, 2008). The efficiency and effectiveness can be seen as the ratio between invested time and the extent to which the 'products' are 'purchased' within the network. The uptake

of the 'products' determines the value of the 'product' (e.g., citation index) by which research funds can be acquired; this of course means that the research products are degraded to 'normal' products. The focus on performance also means that individuals will come up with creative ways of increasing the number of publications such as co-authoring and publishing research through as much articles as possible (Osterloh & Frey, 2008). Furthermore, the high workload of scholars makes in-depth evaluations almost impossible. These developments will obviously negatively affect the true quality of research.

The last development that we will discuss is the Dutch University Position Disposition (Universitaire Functie Ordening, UFO). The official reason behind this 'intervention' is to create more uniformity and greater flexibility within the workforce. In reality it created a new hierarchy with managers holding all the higher positions, while lowering the average labour costs for academic staff (Lorenz, 2008a). The UFO supports the policy of reducing the salaries of academic staff, since the 1980s, and the transfer of occupational costs from the organization to the academic. Furthermore, it was deemed necessary in order to 're-balance' the top-heavy character of the academic staff. Another measure that was introduced in order to 're-balance' the academic staff was a hold on upward mobility (Lorenz, 2008a). However, these measures, seen in the light of the NPM-policy, can be seen as no more than a cost-reduction method in order to improve efficiency.

In this chapter we have discussed the changes in academia. In the following chapter, the focus is on the possible influence of these changes for the psychological contracts of scholars who have cope with these changes.

# **3 THEORETICAL FRAMEWORK: THE PSYCHOLOGICAL CONTRACT**

This chapter offers a theoretical overview of the psychological contract (PC) literature and provides insight into its relation with other constructs, and employee behaviour and attitudes. First, the notions and definitions of the PC will be discussed, before discussing PC breach and violation and its consequences. Finally, the PC of scholars in specific will be discussed as well as the categories that will help identify specific PC content.

#### 3.1 Definitions of the psychological contract

Based on the work of Argyris (1960) and Levinson et al. (1962), Torka, Van Riemsdijk, and Looise (2007) state that expectations are not by definition explicit; they can be unspoken and can precede the employeremployee relationship. Employees have expectations of the employer because they exert themselves for the latter: the employer-employee relationship is reciprocal and thus creates mutual obligations (Gouldner, 1960). Gouldner suggests that the norm of reciprocity in its universal form has two minimal demands, namely that *"people should help those who have helped them and people should not injure those who have helped them"* (Gouldner, 1960, p. 171). This norm of reciprocity within exchange relationships has been used extensively by researches as a framework for understanding employee attitudes and behaviors (Coyle-Shapiro & Kessler, 2002). Subsequently, Blau (1964) describes that social exchange entails obligations (often unspecified); where an individual does another individual a favour, there is an expectation of some future return (Coyle-Shapiro & Kessler, 2002). When an employee expects that the contributions he or she makes obligate the employer to do something in return, then a 'psychological contract' emerges (Rousseau, 1989). In this section we expound the PC construct, which can be distinguished in the classic PC and the contemporary PC.

#### 3.1.1 Classic approaches of the PC

Argyris (1960) and Levinson et al. (1962) were the first to introduce the term psychological contract (as cited in Roehling, 1997). Argyris descibed in his book the relationship between workers and foremen that he called the 'psychological work contract'. The formen realized that the way to get the employees to behave in the desired manner was to adopt a passive (or sympathetic) leadership style and maintain an informal employee culture with accompanied norms. The outcome is positive worker behavior, which can be seen in e.g., higher productivity, less complaints, as long the foreman not violates the norms of the informal culture (e.g., garantees a certain autonomy, adequate pay, work security). The PC that Argyris described involved a (perhaps largely unspoken) mutual agreement; the parties had the same understanding of what they were obliged to do in order for the contract to be maintained (Roehling, 1997). Levinson et al. (1962, as cited in Roehling, 1997) observed during their study that when individuals spoke about their work, they also spoke of expectations and these expectations seemed to have an obligatory character "as if the company were dutybound to fulfill them" (p. 20). As stated in the introduction, Levinson et al. (1962) defined the PC as "a series of mutual expectations of which the parties to the relationship may not themselves be dimly aware but nonetheless governs their relationship with each other" (as cited in Roehling, 1997; Cullinane & Dundon, 2006). These mutual expectations have two characteristics: first, they are largely implicit and unspoken, and second, they frequently antedate the relation of the individual and the organization (Roehling, 1997).

Schein (1965) based his notion of the PC conctruct on the works of Argyris (1960) and Levinson et al. (1962). According to Schein, employees develop their expectations from their inner needs, what they have learned from others, traditions and norms which may be operating, their own past experience, and "*a host of other sources*" (Schein, 1980, p. 24). Schein states that people expect the organization to treat them like people, thus that the organization facilitates work that meets human needs and not affects human dignity. Furthermore, that the organization provides opportunities for growth and further education and offers feedback about peoples functioning and so on The organization as well has subtle and implicit expectations of employees, e.g., that the employee will enhance the organization's image, will show loyalty to the organization. Schein also states that as needs and external forces change, so do expectations, making the PC dynamic and interactive, and thus must be constantly be 'renegotiated' (Schein, 1965, 1980). The expectations and needs of individuals change over time, as individuals' priorities also change over time. The

specific content of these priorities is obviously highly related to career stages and events in private lives (Van der Heiden et al., 2008).

#### 3.1.2 Contemporary approaches of the PC

Initially there was scarcely interest for the PC construct. The more extensive consideration of the construct started not until three decennia later with the seminal work of Rousseau (1989), which marked a transition from early approaches to the contemporary approaches in the PC literature. The focus of research shifted from the relational level to the one-sided level of the individual employee (Cable, 2008; Cullinane & Dundon, 2006; Roehling, 1997): the employee has a PC and the organization does not (see below). To give an indication of the leading school in the field of the PC construct, we have performed a limited citation analysis, in which multiple bibliographical database (Scopus, Web of Science, Scholar) were used. This analysis (see Appendix 2) shows that a number of authors are leading (seen the number of citations) with regard to PC literature. The leading school of authors is Rousseau, Robinson and Morrison. Especially Rousseau (1989, 1990, 1995, 2001) can be seen as responsible for the 'renewed' interest (renaissance) of the PC construct (Cullinane & Dundon, 2006) and her work is considered to have the greatest influence in the PC literature since the traditional writings (Roehling, 1997).

Rousseau (1989, p.123) defines the PC as "an individual's belief regarding the terms and conditions of a reciprocal exchange agreement between that focal person and another party". In other words an individual perceives that contributions he or she makes obligate the organizations to reciprocity (or vice versa) (Rousseau, 1989). It is suggested that the basis for the beliefs constituting the contract were the promises perceived by the individual (Cable, 2008). A PC thus emerges when "one party believes that a promise of future return has been made (e.g., pay for performance), a contribution has been given (e.g. some form of exchange) and thus, an obligation has been created to provide future benefits." (Robinson & Rousseau, 1994, p. 246). Note that these are beliefs or perceptions regarding promises and acceptance, and that each party believes that both parties have made promises and that both parties have accepted the same contract terms. However, it does not mean that both parties share a common understanding of all contract terms, because PCs are subjective and reside in the 'eyes of the beholder' each party only believes that they share the same interpretation of the contract (Robinson & Rousseau, 1994).

According to Schalk, De Jong and Freese (2007, as cited in Torka, et al., 2007) there are two fundamental differences between the classic approach to the PC (see Argyris, 1960; Levinson et al, 1962; Schein, 1965) and Rousseau's approach to the PC. Firstly, Rousseau states that only employees have a PC, which contradict the notions of the classic authors (and also other authors) who argue that employers also carry implied contracts with their employees. Secondly, the focus on promised based obligations sets Rousseau's conceptualization apart from every conceptualization of the PC that preceded her (Roehling, 1997). Therefore, her definition is more restricted than those of other authors, because it does not include the broadly based expectations (in which we are interested) but only the limited individual perception of 'obligations based on promises' (Robinson & Rousseau, 1994). Furthermore, promises presume a (verbal or nonverbal) communicative act, between at least two actors (the employee and [a representative of] the organization), concerning the current or future organization of labour (Austin, 1955; Torka, et al., 2007). However, the PC does not only develop within the relationship, but largely antedates the relationship and thus antedates any communicative act with the organization. Past experiences, knowledge and factors in the individual's environment also shapes the PC (see Levinson et al, 1962; Roehling, 1997; Schein, 1980). Levinson et al. (1960) viewed the expectations of individuals, which were said to frequently antedate the relationship of the individual and the employer, as a product of the individual's needs and motives, tempered by the individual's past experience and knowledge of the current situation (Roehling, 1997).

It is because of these differences that in this study the classic notion of the PC construct is adopted. This means that the definition that will be used is based on the works of Levinson et al. (1962) and Schein (1965). We are interested in the perception of scholars and thus formulated a definition focussed solely on their perspective: The psychological contract refers to the expectations (that can be largely unspoken and unwritten) of the scholar towards the institution regarding the behaviour of the institution based on reciprocity in the relationship between the scholar and the institution. The reciprocity in the relationship refers to the

contributions being made in return for intrinsic as well as extrinsic rewards. Thus employees have expectations that they can perceive as obligations that employers have to towards them, based on the norm of reciprocity.

#### 3.2 Non-fulfilment of the PC and its consequences

As discussed in the first chapter, the focus of this study is on the extent scholars perceive fulfilment of their PC. In so doing, attention also has to be on the failure to fulfill expectations. Especially non-fulfilment of the PC has been an area of interest for many scholars (e.g., Robinson & Rousseau, 1994; Turnley & Feldman, 1998, 1999a). The reason for this is that non-fulfilment of the PC can have serious consequences for the behaviour and attitudes of individuals (Robinson & Rousseau, 1994; Morrison & Robinson, 1997; Turnley & Feldman, 1998, 1999a; Robinson & Morrison, 2000). Turnley & Feldman (1998; 1999a) have found that non-fulfilment of the PC leads to employees who are:

- attempting to find alternative employment (exit);
- voicing their complaints about perceived injustices (voice);
- less likely to defend the organization to outsiders (loyalty);
- showing higher levels of neglectful behaviours (e.g., lateness, doing personal business at work, wasting time at work, absenteeism) (neglect).

These consequences described by Turnley and Feldman are all behavioural aspects. However, non-fulfilment is also likely to influence the attitudes of individuals and through this behaviour (see also Table 3.2). One must think of feelings of mistrust, anger, frustration, hostility, disappointment, less identification with, and attachment or commitment to the employer (Kickul, 2001; Zhao et al., 2007; Bal et al., 2009).

When evaluating literature on non-fulfilment of the PC it becomes apparent that some scholars refer to a breach in the PC, while others are referring to PC violation. From an employee's perspective, both (PC breach and PC violation) are used to indicate a situation in which the institution has failed to meet the expectations of the employee. Some scholars distinguish between a breach and a violation of the PC. Morrison & Robinson (1997) state that contract breach can be defined as an employee's belief that the institution has failed to fulfil its (perceived) obligations to the employee. When the perceived breach of the PC is significant it constitutes a violation, which refers to an emotional and affective state that may follow the breach cognition

However, in general this distinction between breach and violation is not applied (Sonnenberg, 2006; Van den Brande, Overleat, Sels, & Janssens, 2008) and both terms are often used interchangeable (e.g., Coyle-Shapiro & Kessler, 2000; Kickul, 2001). Moreover, research on PC breach and violation show great overlap in the discovered consequences (see Table 3.2). Therefore we will consider both terms to be interchangeable in this study, both referring to the non-fulfilment of perceived obligations (expectations) towards the employee by the employer

Author(s)	Occupational group	N	Negative consequences
PC breach			
Bal Lange Jansen Velde (2008)	Range of occupations (meta- analysis)	-	Less trust, lower job satisfaction and lower affective commitment
Bunderson (2001)	US hospital clinicians	167	Lower job satisfaction, less organizational citizenship, thoughts of turnover and actual turnover
Coyle-Shapiro & Kessler (2000)	UK public service employees	6953	Lower organizational commitment
Johnson & O'Leary-Kelly (2003)	Bank employees	103	Lower commitment, lower job satisfaction, organizational citizen behaviour, in-role performance, absenteeism
Kickul (2001)	US MBA-students	151	Express negativity, lack of loyalty, feelings of anger, frustration, hostility, and disappointment, lower feelings of identification with and attachment to the employer, and turnover intention
Lo & Ayree (2003)	MBA part-time students	137	Intention to leave, psychological withdrawal, organizational citizen behaviour (OCB)
Robinson (1996)	Alumni of a Midwestern graduate business school	125	Lower performance, civic virtue behaviour, and intentions to stay
Zhao, Wayne, Glibkowski, & Bravo (2007)	Range of occupations (meta- analysis)	-	Feelings of violation and mistrust, job satisfaction, turnover intentions, in-role performance, organizational citizen behaviour (OCB), organizational commitment
PC violation			
Knights & Kennedy (2005)	Australian Senior Public Servants	251	Lower job satisfaction and organizational commitment
Turnley & Feldman (1999a)	US managers	804	Exit, voice, loyalty, and neglect

#### Table 3.2 Overview of consequences of PC breach/violation

#### 3.3 Content of the PC

Relatively few studies cover the content of the PC (Conway & Briner, 2005). It is also important to mention that there is no universal agreement about how the content of the PC should be measured, with different scholars developing varying measurements and operationalizations based on both theoretical and empirical foundations (Rousseau & Tijoriwala, 1998; Conway & Briner, 2005; Freese & Schalk, 2008).

In Appendix 3.3 an overview is given of the aspects assessed by several existing PC content measurements. In this overview, the targeted occupational group is also mentioned. The most common factors are job security, high/fair pay, career development, advancement opportunities (e.g., promotion), training, and fairness (in pay, benefits, treatment, application of rules, promotion). Other factors are, for example: meeting personal and family needs (helping with problems outside work), interesting and challenging work, involvement in decision-making, sufficient power and responsibility, open communication, pleasant/safe work environment, and not to make unreasonable demands of employees (Kotter, 1973; Rousseau, 1990;

Robinson, 1996; Herriot, Manning, & Kidd, 1997; Coyle-Shapiro & Kessler, 2000; Guest & Conway, 1998, 2002).

#### 3.3.1 PC of Scholars

The changes in the university system and the academic profession are expected to have effect on how scholars perceive their profession and their employment relationship with the university. In this shifting occupational landscape the psychological contract is central to understanding employee responses to these changes in the profession and the employment relationship (Hallier & James, 1997). The psychological contract can thus serve as a framework to explore the changes that occur in the profession and the exchange relationship between scholars and institutions, through the eyes of the scholars (Coyle-Shapiro & Kessler, 2000). Changes of such impact (e.g. business strategy, restructuring, job changes) have been argued to necessitate that organizations manage PCs systematically, so that employees perceive the exchange relationship to be balanced and perceive their organizations to act in line with the employee's expectations (Granrose & Baccili, 2006).

There is a considerable amount of research spanning the past decades, which has predicted that the PC between individuals and organization will shift due to changes in the nature and the organization of work (Marks, 2001). In accordance, Millward and Hopkins (1998) noted that the PC is primarily a job-level rather than an organization-level phenomenon, suggesting it is a reflection of the individual's own experience of work and their attachment to the organization. This means that a distinction can be made between the relationship between scholar and profession, and scholar and organization. After all, individuals might have different expectations of their profession than they will have of their organization. The term *profession* (which in itself refers to professional) appears to be linked to personal qualities of the worker, to the autonomy in work organization, to features of occupational organization, and to relations of superordination or equality with other occupations or workers (Murray, Dingwall, & Eekelaar, 1983). Thus the PC of scholars can be broken up in two foci: expectations they have of their profession and the expectations they have of their institution (see also Peeters & Meyer, 1995; Milward & Hopkins, 1998). However, both foci are interrelated (see below).

Bunderson (2001) suggests that the psychological contract between a professional and his or her employing organization is shaped by both professional and administrative work ideologies. In this 'ideologically pluralistic work setting', ideologies of professional work bump up against ideologies of administrative organization and describe much of the academic work in a university. The role of the organization as an administrative body is to be a coordinated and efficient (bureaucratic) system organized to pursue common goals as well as a competitive business with market legitimacy and presence. The professional role of the organization is to be a collegial society organized to achieve excellence in the work of the profession as well as a foundation organized to apply professional expertise to benefit the community or society. In performing the two professional roles, the organization should provide a collegial work setting, defend professional autonomy and standards, and help fulfil a profession's ethical obligation to the larger community. Thus the organization is inextricably linked to the profession.

According to research by Richman (2007) scholars base their decision to join and stay with an organization on different factors than their corporate counterparts. Scholars join an organization because of factors like the faculty/colleagues, reputation of the academic unit and opportunities for career development. Corporate employees on the other hand indicate that they join an organization because of advancement opportunities, pay/salary, job security and benefits. Scholars stay with an organization because of the faculty/colleagues and the ability to balance work with personal life, before salary and compensation package and location. While corporate employees also stay because of the ability to balance work with personal life, they tend to value pay, job security, benefits, and advancement opportunities higher than scholars. Scholars seem to differ from corporate employees in the factors they value in their work and organization. Therefore it seems to be necessary to identify specific HR practices and other factors that are likely to be of great importance for scholars.

#### 3.3.2 PC content measurement

Empirical research on PCs within academia has been very limited. There are a handful of empirical studies, represented in the works by Newton (2002), Dabos and Rousseau (2004), and research at Australasian universities initiated in the middle 1990s (Tipples & Krivokapic-Skoko, 1997; Tipples & Jones, 1998), which is recently renewed by O'Neill, Krivokapic-Skoko, Foundling (2007, as cited in Tipples, et al., 2007), Tipples and colleagues (2007), Krivokopic-Skoko and O'Neill (2008), and Krivokopic-Skoko, O'Neill, and Dowell (2009).

Especially the empirical studies among Australasian scholars (see Tipples, et al., 2007; Krivokopic-Skoko & O'Neill, 2008) revealed several important factors in the PCs of scholars. Their universities also operate in a manageralist and market-orientated revolution with the accompanied consequences. The increased pressures associated with managerialism, greater external and internal accountability, tighter funding and a higher level of scrutiny by funding bodies have resulted changes in the context and conditions of academic work in Australasia (Curtis & Matthewman, 2005; Tipples et al., 2007). In focus group discussions held by Tipples and colleagues, scholars were asked what they believed the university owed them in return for their services (Tipples et al., 2007; Krivokopic-Skoko & O'Neill, 2008). O'Neill, et al. (2007, as cited in Tipples et al., 2007) conclude that common themes emerged from the statements referring to employer responsibilities. Scholars want to be recognized and treated as professionals. Much of the discussions centred on the expectations of leadership, fairness and transparency in promotion and recognition of one's personal commitment to the profession, the students and the university. Consequent upon these discussions, several key themes emerged in which scholars' expectations can be categorized: leadership & management, empowerment, fairness, recognition, career, work, and payments. Subsequent, Krivokopic-Skoko et al. (2008; 2009) identified eight factors based upon these discussions: fair treatment in promotion, staff development and support, good management and leadership, academic life, fairness and equity, appropriate remuneration, reward performance, and good workplace relations. These themes and factors identified by focus group analysis of Australasian scholars' expectations combined with the PC measurements discussed earlier (see also Appendix 3.3) can be rearranged into seven categories (see model below). Table 3.3 summarizes these categories.



#### Figure 3.3.2: Model of scholars' expectations

*Organizational justice.* Organizational justice is used to describe fairness and justice in organizations, and can be seen as a multi-facetted construct that consists of four factors: distributive justice, procedural justice, interpersonal justice, and informational justice (Colquitt, 2001; Colquitt, Conlon, Wesson, Porter, & Ng, 2001). Distributive justice refers to the fairness of outcome distributions or allocations of, for example, rewards and promotions, while procedural justice refers to the fairness of the procedures used to determine outcome distributions or allocations (Colquitt et al., 2001). Leventhal's (1980, as cited in Colquitt et al., 2001) theory of procedural justice judgements focussed on six criteria, which a procedure should meet to be considered fair. Procedures have to a) be applied consistently (across people, across time); b) be free from bias; c) ensure that accurate information is collected and used in decision-making; d) have some mechanism to correct flaws and inaccuracies; e) conform to personal or prevailing standards; and f) take in account the opinions of the groups affected by the decision. Interpersonal justice reflects the degree to which authorities (or third parties) treat individuals with politeness, dignity, and respect. Informational justice relegates to the explanations provided to individuals about why procedures are used in a certain way or why outcomes are distributed in a certain fashion (Colquitt et al., 2001).

*Reward systems.* Reward systems, the second category, do not only include pay systems, but can also refer intrinsic rewards (Beer, Spector, Lawrence, Mills, & Walton, 1984). Intrinsic rewards refer to finding work rewarding primarily for its own sake, because the work itself is interesting, engaging, or in some other way satisfying (Amabile, Hill, Hennessey, & Tighe, 1994). Recognition can also be interpreted as an intrinsic reward, as well as the sense of achievement, sense of responsibility and relationship with colleagues (Maguire, 2002). Intrinsic rewards are somewhat harder to influence by the organization, because the organization can only influence them indirectly. Extrinsic rewards include: high wages, incentive pay, promotion/advancements, and perquisites. 'Appropriate remunerates' and 'rewarding performance', both, fall under this category.

Staff development and support. As stated earlier, it refers to the support for staff in terms of promotion, career development and professional development, as well as creating an environment that is contributes to development. Providing adequate education and training are also part of this factor.

Management and leadership. This category refers to effective leadership and management (provide good management and leadership), including the reduction of excessive regulations and formal rules (bureaucratic "red tape"). Weaknesses of management include failure to provide contracts, breaching confidentiality, dishonesty, and giving conflicting advice.

*Employee influence.* The fifth factor, employee influence, refers to the delegated levels of authority, responsibility and power to the employees. Employee influence comprises three components: information, voice and participation (Torka, 2007). Employee influence also includes consulting and communicating with employees on matters that affect them.

Academic life. Academic life encompasses many elements that are (or at least used to be) synonymous to the academic profession and working in an academic environment. Autonomy, academic freedom, job security, and respect for the demand of family/personal relationships are some of the key notions associated with academic life (Krivokopic-Skoko, O'Neill, & Dowell, 2009). These notions are grounded in the professional ideology of academia. Scholars interact with their employing organization both as professionals and as employees. As professionals, they ascribe the role of providing these notions, which are consistent with the ideology of professional work, to the organization (Bunderson, 2001).

*Facilitation.* The last factor that we would like discuss is facilitation. What do we mean by facilitation? Scholars depend upon their institution to provide among others (financial) resources and administrative support. As employees, they ascribe particular roles to the organization that are consistent with the ideology of administrative organization. (Bunderson, 2001).

# Table 3.3: Categories of expectations

Category	Description
Organizational justice	Consists of multiple facets: distributive, procedural, interpersonal, and informational justice (Colquitt, 2001; Colquitt, et al., 2001).
Reward systems	Do not only include pay systems and benefits, but can also refer intrinsic rewards (Beer, et al., 1984). Intrinsic rewards include finding work interesting, engaging, or otherwise satisfying.
Staff development and support	Refers to the support for staff in terms of promotion and career development, as well as creating an environment that contributes to development (Krivokopic-Skoko, et al., 2009).
Management and leadership	Concerns effective leadership and management, including the reduction of bureaucratic "red tape" (excessive regulation and formal rules) (Krivokopic-Skoko, et al., 2009).
Employee influence	Refers to the delegated levels of authority, responsibility and power to the employees. Employee influence comprises three components: information, voice and participation (Torka, 2007).
Academic life	Refers to many elements synonymous to working in an academic environment, such autonomy and academic freedom (Krivokopic-Skoko, et al., 2009).
Facilitation	Includes (financial) resources and administrative support.

#### 4 METHODOLOGY

Relatively few studies specifically designed to assess PC contents (Conway & Briner, 2005). Moreover, only a small percentage of these studies were based on qualitative data from interviews: a vast majority of studies were based on cross-sectional or longitudinal surveys. Furthermore, as stipulated earlier there are only a handful of studies who address PCs in academia (Newton, 2002; Dabos & Rousseau, 2004; Tipples & Krivokapic-Skoko, 1997; Tipples & Jones, 1998; O'Neill, et al., 2007; Tipples, et al., 2007; Krivokopic-Skoko et al., 2008, 2009). This study attempts to help fill this 'knowledge gap' by exploring the contents of the PCs of scholars.

A semi-structured format was used to guide the interviews. Through these interviews we get insight in the "truth" as how it is perceived in real-life by the participants. In a semi-structured interview the questions and answers are not predetermined like in structured interviews or questionnaires with close-ended questions. Instead there are topics that need to be explored. The interviewer asks usually only one question in order to start the conversation and then (when necessary) continues to ask questions in order to stimulate the participant to give his or her opinion about a certain topic (Baarda, De Goede, & Van der Meer-Middelburg, 1996). The topics addressed in the interviews are based on existing and relevant research that has been discussed in the theoretical part of this thesis. The topics cover the expectations of scholars in the past and present, and the extent to which their institution(s) fulfilled these expectations in the past and present. Furthermore, they address explanations about possible differences between the past and present expectations of scholars, and explanations about possible differences in the fulfilment of expectations when comparing the past with the present. For the complete interview protocol (in Dutch) see appendix 4.2a.

This qualitative approach is chosen because it leaves room and freedom for the participants to discuss what they think is relevant, within the boundaries of the predefined topics. It is characterized by the nonnumeric examination and interpretation of observations, for the purpose of discovering underlying meanings and patterns of relationships (Babbie, 2009). Furthermore, this approach is characterized by an individual and subjective truth, which means that it is explanatory from the perspective of scholars (definition of the situation given by the scholars themselves) (Swanborn, 1994). Numeric analysis models abstract from the everyday meaningful relations, they transform the everyday 'normal' language in an artificial numerical language (Maso & Smaling, 1998). Furthermore, as Wilhelm Dilthey (1833-1911) stated: *"We explain nature, the soul (der Mensch) 'Verstehen wir'* " (Redactie Synthese, 1937). Thus behaviour cannot be explained without the consideration of the perception or perspectives of the individuals themselves (Swanborn, 1994). Individuals have to be studied in their changing environment in order to *Verstehen*. In the next section the method will be discussed by which the perceptions of scholars and their environment are going to be investigated.

#### 4.1 Participants

E-mails (see appendix 4.2.2a) were send, in Dutch, to professors of a Dutch university with the question whether they were willing to participate in an interview concerning their expectations about their profession and institution. In total, 47 professors were addressed through e-mail. The process of mailing these professors was split up in two days, in order to make it possible to respond immediately to any reaction of the targeted individuals. Three weeks later 17 reminders (see appendix 4.2.2b) were send to the individuals whom did not respond to the initial e-mail. Eventually, 18 interviews were conducted with professors (from May – September 2010), thus yielding a response rate of 38 percent. Participants were of various ages.

#### 4.2 Interviews

After the first two interviews the introduction of the interview protocol has been slightly adopted, since both participants got the feeling that there was a lot repetition in the questions. This is comprehendible, because the formulation of the questions is alike while covering the past and present. For the adapted interview protocol (in Dutch) see appendix 4.2b.

The interviews were mostly conducted in Dutch at the offices of the professors. There were a few exceptions. One participant was too busy to meet in person, so the interview was conducted over the telephone while the

participant was driving to work. Another interview was conducted at the home of the participant (due to a certain external factor). Furthermore, one interview was conducted in English. The duration of the interviews ranged from 50 minutes to three hours. In one case an appointment was made after the initial interview for a follow-up, which was conducted a few days later.

# 4.3 Data analysis

The audiotaped interviews were transcribed, after which due to confidentiality the recordings were deleted from the recording device. Participants were mailed a verbatim transcript of their interview that they could correct or extend. These corrections can also enhance the internal validity of this study (see below). Only two participants made use of this opportunity. Three participants provided some additional materials (articles) and/or made recommendations for books/articles.

The transcripts were carefully read and important statements were marked. The categories framed in the previous chapter were used to identify the voiced expectations of participants: what kind of expectations do the participants refer to? Furthermore, an additional 'open' category was created for quotes that did not fit the one of the aforementioned categories.

# 4.4 Validity and reliability

There are two primary sources of error in the interview: those pertaining the validity and those pertaining the reliability (Babbie, 2009; Kaplan & Saccuzzo, 2008). First, validity will be discussed. The internal validity refers to the validity within a study and concerns primarily the quality of the collected data, research design and analysis that have led to the research conclusions. The collected data, research design and analysis should be as free as possible from systematic distortions (Maso & Smaling, 1998). An important source of error stems from the inability of a human being (in this case the researcher) to remain completely objective (researcher bias). Individuals have tendencies to draw general conclusions about another individual that are based on just the data of a first impression, which limits the meaning and accuracy of interview data (e.g., the halo effect, standoutishness) (Kaplan & Saccuzzo, 2008). Another important source of error is what is called the observer-expectancy effect, the experimenter may subtly communicate their expectations for the outcome of the study to the participants, causing them to bias their behaviour to conform to those expectations (Dooley, 2001).

But subjectivity by the researcher can be positive for the reliability and validity. Research conclusions are always statements regarding the research object, and thus is it of importance to do justice to the research object. This is the core of objectivity as methodological term. Methodological objectivity is only an aspiration that never entirely can be met, due to the mere fact that the research object can change in the course of the study. However, this aspiration is a necessary condition for every empirical study in order to attain methodological quality. The researcher should not try to eliminate him or her from the study. The pursuit of objectivity does not mean the exclusion of subjectivity of the researcher. Actually, it should consist out of reflecting upon the objectivity and the intelligent, positive application of the researcher's subjectivity (Maso & Smaling, 1998).

In order to increase the internal validity the following measures were taken:

- Making of notations during the interviews and a brief reflection report after the interviews in order to counteract a bias due to selective memory (see Maso & Smaling, 1998).
- The interviews will be recorded and thus can be listened back upon a later point in time. They will be transcribed and by doing so it will counteract a bias due to selective memory further (see Maso & Smaling, 1998). One of the advantages of audio taping and transcribing them is the opportunity to use the interviews for subsequent analysis (possible by others) (see Mays & Pope, 1995).
- Furthermore, methodological and theoretical notes will be made when necessary. These notes will discuss the methodological qualities, possible doubts and flaws, as well as ideas about possible interpretations and explanations. The notes will not only support the memory, but will also be part of

the discussion. In addition, this information will benefit the reflection upon this thesis and will be part of the brief reflection report that will be written after every interview.

 Finally, the participant validation will be used as a source of extra information. The transcribes will be send back to the participant, in order to see if they regard the findings as a reasonable account of their experience (see McKeganey & Bloor, 1981, as cited in Mays & Pope, 1995). Participants can complement the transcription if they feel that something has been left out that should have been discussed.

Reliability is also an inevitable weakness with semi-structured interviews. Not only makes the semi-structured character of the interviews it harder to repeat the study. The reliability of the data has also been measured primarily in terms of agreement among interviewers on certain variables, such as expectations (Kaplan & Saccuzzo, 2008). It is thus important to discuss the methodology of the study in detail.

Another limitation of in-depth qualitative research is that there are only a limited amount of cases that are to be examined, because of the time consuming matter of collecting data (Torka, 2003). And since qualitative data collection is such a time consuming matter, it is not practicable to use a probability sample, which is often used in quantitative studies. However, statistical representativeness is not a prime requirement when the objective is to understand social processes (Mays & Pope, 1995). An alternative approach is to use a systematic, non-probabilistic sampling to identify specific groups of people who either posses characteristics or live in circumstances relevant to the social phenomenon being studied (Mays & Pope, 1995). In this study professors were approached, who often have worked in academia for a considerable time and thus have experienced the changes in academia first hand.

5 FINDINGS
## **DISCUSSION**

#### REFERENCES

Abma, R. (2008). Calculerend of reflecterend. Ublad, 33 (39).

Amabile, T. M., Hill, K. G., Hennessey, B. A., & Tighe, E. M. (1994). The work preference inventory: Assessing intrinsic and extrinsic motivational orientations. *Journal of Personality and Social Psychology*, 66(5), 950-967.

Amaral, A., & Magalhaes, A. (2004). Epidemiology and the Bologna saga. Higher Education, 48 (1), 79-100.

- Aselage, J., & Eisenberger, R. (2003). Perceived organizational support and psychological contracts: A theoretical integration. *Journal of Organizational Behavior*, 24, 491-509.
- Austin, J. L. (1955). How to do things with words. Boston, MA: Harvard University Press.
- Baarda, D., De Goede, M., & Van der Meer-Middelburg, A. (1996). *Basisboek open interviewen. Praktische handleiding voor het voorbereiden en afnemen van open interviews.* Groningen: Stenfert Kroese
- Babbie, E. (2009). The practice of social research. Belmont: Wadsworth.
- Bal, P. M. (2009). Age and psychological contract breach in relation to work outcomes. Vrije Universiteit Amsterdam, Faculteit der Economische Wetenschappen en Bedrijfskunde. Amsterdam: VU Amsterdam/FEWB.
- Bal, P., De Lange, A., Jansen, P., & Van Der Velde, M. (2008). Psychological contract breach and job attitudes: meta-analysis of age as a moderator. *Journal of Vocational Behavior, 72*(1), 143-158.
- Beer, M., Spector, B., Lawrence, P. R., Mills, D. Q., & Walton, R. E. (1984). *Managing human assets.* New York: The Free Press.
- Bertilsson, M. (1992). From university to comprehensive higher education: On the widening gap between 'Lehre und Leben '. *Higher Education, 24*, 333-349.
- Blau, P. M. (1964). Exchange and power in social life. New York: John Wiley & Sons.
- Bleikie, I., & Kogan, M. (2007). Organization and governance of universities. *Higher Education Policy, 20*, 477-493.
- Blumer, H. (1954). What is wrong with social theory? American Sociological Review, 19 (1), 3-10.
- Bologna Declaration. (1999). *The European higher education area: Joint declaration of the European ministers of education convened in Bologna at the 19th of June 1999.* Retrieved November 8, 2009, from http://europa.eu.int/comm/education/bologna\_en.html
- Boomkens, R. (2008). Topkitch en slow science. Amsterdam: Van Gennep.
- Boomkens, R., & Gabriëls, R. (2008). Paradoxen van het academisch kapitalisme. In C. Lorenz (Ed.), *If you're so smart, why aren't you rich?* (pp. 107-130). Amsterdam: Boom.
- Boomkens, R., von der Dunk, T., Gabriëls, R., & Klukhuhn, A. (2009). De universiteiten worden halverinefabrieken. *De Groene Amsterdammer,* 20 mei 2009.
- Bunderson, J.S. (2001). How work ideologies shape the psychological contracts of professional employees: Doctors' responses to perceived breach. *Journal of Organizational Behavior, 22*, 717-741.
- Cable, D. A. (2008). *The psychological contract: The development and validation of a managerial measure.* University of Waikato. Hamilton: University of Waikato.

- CBS. (2009). CBS Statline: Hoger onderwijs, eerstejaarsstudenten naar vooropleiding en studierichting [Data file]. Retrieved March, 23, 2010, from <a href="http://statline.cbs.nl/StatWeb/publication/?VW=T&DM=SLNL&PA=70961NED&D1=0&D2=a&D3=0&D4=0-1,42,89,110,116,141,149,181,217,233,270,297&D5=0&D6=0&D7=0&D8=5,10,15,17-18&HD=100426-1100&HDR=T,G6,G5,G4,G2,G1,G7&STB=G3</a>
- Colquitt, J. A. (2001). On the dimensionality or organizational justice: A construct validation of a measure, *Journal of Applied Psychology, 86* (3), 386-400.
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O. L. H., & Ng, K. Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research, *Journal of Applied Psychology, 86* (3), 425-445.
- Conway, N. & Briner, R. B. (2005). Understanding psychological contract at work: A critical evaluation of theory and research. Oxford: University Press.
- Coyle-Shapiro, J. A., & Kessler, I. (2000). Consequences of the psychological contract for the employment relationship: A large scale study. *Journal of Management Studies, 37*, 903-930.
- Coyle-Shapiro, J. A., & Kessler, I. (2002). Exploring reciprocity through the lens of the psychological contract: Employee and employer perspectives. *European Journal of Work and Organizational Psychology, 11* (1), 69-86.
- Cullinane, N., & Dundon, T. (2006). The psychological contract: A critical review. International Journal of Management Reviews, 8 (2), 113-129.
- Curtis, B., & Matthewman, S. (2005). The managed university: The PBRF, its impacts and staff attitudes. *New Zealand Journal of Employment Relations, 30* (2), 1-17.
- De Boer, H., Goedegebuure, L., & Huisman, J. (2005). *Gezonde spanning: Beleidsevaluatie van de MUB. Eindrapport.* University of Twente, Cheps. Enschede: Cheps/UT.
- De Bruin, H. (2002). Performance management in the public sector: Strategies to cope with the risks of performance measurement. *The International Journal of Public Sector Management, 15* (7), 578-594.
- De Weert, E. (2001). Pressures and prospects facing the academic profession in the Netherlands. *Higher Education, 41*, 77-101.
- Dabos, G. E., & Rousseau, D. M. (2004). Mutuality and reciprocity in the psychological contracts of employees and employers. *Journal of Applied Psychology*, 89 (1), 52-72.
- Deem, R. (1998). New managerialism and higher education: The management of performances and cultures in universities in the United Kingdom. International Studies in Sociology of Education, 8 (1), 47–70.

Dooley, D.D. (2001). Social Research Methods (4th ed.). New Jersey: Prentice Hall.

- European University Association. (2011). *Impact of the economic crisis on European universities (11 January).* Retrieved 2011, 18<sup>th</sup> January from: http://www.eua.be/News/11-01-07/Impact\_of\_the\_economic\_crisis\_on\_European\_higher\_education\_EUA\_publishes\_latest\_update\_ahea d\_of\_major\_new\_report.aspx
- European Commision, Strata-Etan Expert Group (Bourgeois, E., rapporter). (2002). Developing foresight for the development of higher education/research relations in the perspective of the European Research Area (ERA). Brussels: European Commision, Directorate General for Research.
- Felt, U. (2002). *University autonomy in Europe: Changing paradigms in higher education policy.* Vienna: University of Vienna, Vienna Interdisciplinary Research Unit for the Study of (Techno)Science and Society.

- Freese, C., & Schalk, R. (1996). Implications of differences in psychological contracts for human resource management. *European Journal of work and organizational psychology, 5* (4), 501-509.
- Freese, C., & Schalk, R. (2008). How to measure the psychological contract? A critical criteria-based review of measures. *South African Journal of Psychology, 38* (2), 269-286.
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review, 25* (2), 161-178.
- Granrose, C. S., & Baccili, P. A. (2006). Do psychological contracts include boundaryless or protean careers. *Career Development International, 11* (2), 163-182.
- Grit, K. (2000). Economisering als probleem: een studie naar de bedrijfsmatige stad en de ondernemende universiteit. Assen: Van Gorcum.
- Hallier, J., & James, P. (1997). Management enforced job change and employee perceptions of the psychological contract. *Employee Relations, 19*(3), 222-247.
- Herriot, P., Manning, W.E.G., & Kidd, J.M. (1997). The content of the psychological contract. *British Journal* of Management, 8, 151-162.
- Henkel, M. (2000). Academic identities and policy change in higher education. London: Jessica Kingsley Publicers.
- Houston, D., Meyer, L. H., & Paewai, S. (2006). Academic staff workloads and job satisfaction: Expectations and values in academe, *Journal of Higher Education Policy and Management, 28*(1),17-30.
- Huisman, J., & Currie, J. (2005). Accountability in higher education: Bridge over troubled water? *Higher Education, 48* (4), 529-551.
- Kaplan, R., & Saccuzzo, D. (2008). Psychological testing: Principles, applications, and issues. Belmont: Wadsworth.
- Kotter, J.P. (1973). The psychological contract: Managing the joining up process. *California Management Review*, *15* (3), 91-99.
- Kickul, J. (2001). Promises made, promises broken: An exploration of employee attraction and retention practices in small business. *Journal of Small Business Management , 39* (4), 320-335.
- Klukhuhn, A. (1999). Liever de Gifbeker: over de universiteiten en de markt. Ons Erfdeel, 42 (1), 3-10.
- KNAW. (2006). *Financiering (www.onderzoeksinformatie.nl)*. Retrieved 2009, 30<sup>th</sup> September from KNAW Onderzoek Informatie: <u>http://www.onderzoekinformatie.nl/nl/oi/landschap/inhoud/financiering/</u>
- Krivokapic-Skoko, B., & O'Neill, G. (2008). University academics' psychological contracts in Australia: A mixed method research approach. *The Electronic Journal of Business Research Methods, 6*(1), 61-72.
- Krivokapic-Skoko, B., O'Neill, G., & Dowell, D. (2009). Assessing the contents of the psychological contracts: A cross-sectional survey of the academics at an Australian university. *New Zealand Journal of Employment Relations*, 34(2), 4-28.
- Lüth, C. (1998). On Wilhelm von Humboldt's theory of bildung. Journal of Curriculum Studies, 30, 43-59.
- Leisyte, L. (2007). University governance and academic research: Case studies of research units in Dutch and English universities. University of Twente. Enschede: CHEPS/UT.
- Levinson, H. (1965). Reciprocation: The relationship between man and organization. *Administrative Science Quarterly. 9* (4), 370-390.

- Locke, W., & Teichler, U. (2007). Introduction. In W. Locke, & U. Teichler, *The changing conditions for academic work and careers in select countries* (pp. 7-13). Kassel: International Centre for Higher Education Research Kassel, University of Kassel.
- Lorenz, C. F. G. (2006). Will the universities survive the European integration? Higher education policies in the EU and in the Netherlands before and after the Bologna Declaration. *Sociologia internationalis: internationale Zeitschrift für Soziologie und Sozialpsychologie, 44,* 123-151.
- Lorenz, C. F. G. (2008). If you're so smart, why aren't you rich? Amsterdam: Boom.
- Lorenz, C. F. G. (2008a). Van homo academicus naar homo economicus. In C. F. G. Lorenz (Ed.), *If you're so smart, why aren't you rich?* (pp. 41-65). Amsterdam: Boom.
- Lorenz, C. F. G. (2008b). De universiteiten en het new public management. In C. F. G. Lorenz (Ed.), *If you're so smart, why aren't you rich?* (pp. 165-196). Amsterdam: Boom.
- Marks, A. (2001). Developing a multiple foci conceptualization of the psychological contract. *Employment Relations, 23* (5), 454-467.
- Maso, I., & Smaling, A. (1998). Kwalitatief onderzoek: Praktijk en theorie. Amsterdam: Boom.
- Mays, N., & Pope, C. (1995). Qualitative Research: Rigour and qualitative research, British Medical Journal, 311, 109-112.
- Milward, L. J., & Hopkins, L. J. (1998). Psychological contracts, organizational and job commitment. *Journal of Applied Social Psychology, 28* (16), 1530-1556.
- Morrison, E. W., & Robinson, S. L. (1997). When employees feel betrayed: A model of how psychological contract violation develops. *Academy of Management Review*, 22 (1), 226-256.
- Murray, T., Dingwall, R., & Eekelaar, J. (1983). Professionals in bureaucracies: Solicitors in private practice and local government, in R. Dingwall, & P. Lewis (Eds.) *The sociology of the professions* (pp. 195-220). London: Macmillan.
- Musselin, C. (2007). *The transformation of academic work: Facts and analysis.* University of California, Center for Studies in Higher Education. Berkeley: Research & Occational Paper Series: CSHE, 4.07.
- Neave, G., & Van Vught, F. A. (1991). Conclusion. In G. Neave, & F. A. Van Vught, Prometheus bound. The changing relationship between government and higher education in Western Europe (pp. 239-255). Oxford: Pergamon Press.
- Newton, J. (2002). Barriers to effective quality management and leadership: Case study of two academic departments. *Higher Education, 44*, 185-212.
- Osterloh, M., & Frey, B. S. (2008). Evaluitis: De ziekte van de 'gecontroleerde' wetenschap. In C. Lorenz (Ed.), *If you're so smart, why aren't you rich?* (pp. 235-242). Amsterdam: Boom.
- Parsons, T. (1939). The Professions and Social Structure. Social Forces, 17(4), 457-467.
- Peeters, M. C. W., & Meijer, S. (1995). Betrokkenheid bij de organisatie, de afdeling en het werk: Een zinvol onderscheid? *Gedrag en Organisatie, 8* (3), 153-165.
- Petersitzke, M. (2009). Developing an Integrated Perspective on Managing Employee Perceptions of Obligations *Supervisor Psychological Contracts Management* (pp. 119-129). Wiesbaden: Gabler Verlag.
- Philipse, H. (2008). De universiteit als vierde macht: Een pleidooi voor de tetras politica. In C. Lorenz (Ed.), *If you're so smart, why aren't you rich?* (pp. 27-40). Amsterdam: Boom.

- Pilkington, A. (2009). *Alan Pilkington Bibliometric Techniques*. Retrieved 2009, 24<sup>th</sup> June from Alan Pilkington Enterprise Engineering: http://personal.rhul.ac.uk/uhtm/001/BibliometricTechniques.html
- Ramboer, R. (2008). Het universitair bedrijf van de Bolognaverklaring en de Lissabondoelstellingen: Berichten uit België. In C. Lorenz (Ed.), *If you're so smart, why aren't you rich?* (pp. 215-234). Amsterdam: Boom.
- Redactie Synthese. (1937). De synthetische gedachte in het buitenland: Over verstaan. Synthese, 2 (1), 146-148.
- Robinson, S. L., & Morrison, E. W. (2000). The development of psychological contract breach and violation: A longitudinal study. *Journal of Organizational Behavior*, 21 (5), 525-546.
- Robinson, S. L., & Rousseau, D. M. (1994). Violating the psychological contract: Not the exception but the norm. *Journal of Organizational Behavior*, *15* (3), 245-259.
- Robinson, S. L., Kraatz, M. S., & Rousseau, D. M. (1994). Changing obligations and the psychological contract: A longtudinal study. *The Academy of Management Journal , 37* (1), 137-152.
- Roehling, M. V. (1997). The origins and early development of the psychological contract construct. *Journal of Management History*, *3* (2), 204-217.
- Ross, M. (1989). Relation of implicit theories to the construction of personal histories. *Psychological Review*, 96 (2), 341-357.
- Rousseau, D. M. (1990). New hire perspectives of their own and their employer's obligations: A study of psychological contracts. *Journal of Organizational Behavior*, *11* (5), 389-400.
- Rousseau, D. M. (1989). Psychological and implied contracts in organizations. *Employee responsibilities and rights journal*, 2 (2), 121-139.
- Rousseau, D. M. (1996). Changing the deal while keeping the people. Academy of Management Executive, 10, 50–61.
- Rousseau, D., & Greller, M. (1994). Human resource practices: Administrative contract makers. *Human Resource Management-New York, 33* (3), 385-402. doi: 10.1002/hrm.3930330308
- Rousseau, D., & Tijoriwala, S. A. (1998). Assessing psychological contracts: Issues, alternatives and measures. *Journal of Organizational Behavior, 19,* 679-695.
- Sörlin, S. (2007). Funding diversity: Performance-based funding regimes as drivers of differentiation in higher education systems. *Higher Education Policy*, 20, 413-440.
- Schalk, R. (2004). Changes in the employment relation across time. In J. A. Coyle-Shapiro, L. M. Shore, M. S. Taylor, & L. E. Tetrick (Eds.), *The employment relationship: Examining psychological and contextual perspectives* (pp. 284-311). Oxford: Oxford University Press.
- Schein, E. H. (1978). *Career dynamics: matching individual and organizational needs.* Massachusetts: Reading.
- Schein, E. H. (1965, 1970, 1980). Organizational Psychology. New Jersey: Engelwood Cliffs.
- Scott, J. C. (1998). Seeing like a state: How certain schemes to improve the human condition have failed. New Haven and London: Yale University Press.
- SenterNovum. (2009). *SenterNovum SmartMix*. Retrieved 2009, 20<sup>th</sup> September from SenterNovum Web site: http://www.senternovum.nl/smartmix/

- Simons, M., Haverhals, B., & Biesta, G. (2007). Introduction: The university revisited. *Studies in Philosophy* and *Education*, 26, 395-404.
- Smeenk, S. G., Eisinga, R. N., Teelken, J. C., & Doorewaard, J. A. (2006). The effects of hrm practices and antecedents on organizational commitment among university employees. *International Journal of Human Resource Management*, 17 (12), 2035-2054.
- Sonnenberg, M. (2006). The signalling effect of HRM on psychological contracts of employees: A multi-level perspective. Rotterdam School of Management (RSM) Erasmus University, Erasmus Research Institute of Management (ERIM). Rotterdam: RSM/ERIM.
- Sorkin, D. (1983). Wilhelm von Humboldt: The theory and practice of self-formation (bildung), 1791-1810. Journal of the History of Ideas , 44 (1), 55-73.
- Swanborn, P. G. (1994). Methoden van sociaal-wetenschappelijk onderzoek. Meppel: Boom.
- Teichler, U. (2006). Changing structure of the higher education systems: The increasing complexity of underlying forces. *Higher Education Policy*, *19*, 447-461.
- Teichler, U. (2007). Germany and beyond: New dynamics for the academic profession. In W. Locke, & U. Teichler, *The changing conditions for academic work and careers in select countries* (pp. 15-38). Kassel: International Centre for Higher Education Research Kassel, University of Kassel.
- Thomas, H. D. C., & Anderson, N. (1998). Changes in newcomers' psychological contracts during organizational socialization: A study of recruits entering the British army, *Journal of Organizational Behavior, 19*, 745-767.
- Tipples, R. S., & Jones, P. (1998). Extra contractual relations: The substance of academics' psychological contracts in New Zealand, in Harbridge, R., Gadd, C. and Crawford, A. (eds.) *Current Research in Industrial Relations – Proceedings of the 12th. AIRRANZ Conference*, Victoria University of Wellington, 377-385.
- Tipples, R. S., & Krivokapic-Skoko, B. (1997). New Zealand academics and performance management. International Journal of Employment Studies, 5 (2), 103-116.
- Tipples, R. S., Krivokapic-Skoko, B., & O'Neill, G. (2007). University academics' psychological contracts in Australia and New Zealand. *New Zealand Journal of Employment Relations*, *32* (2), 31-52.
- Torka, N. (2003). Flexibel maar toch betrokken: De samenhang tussen contractrelatie en betrokkenheid. University of Twente. Enschede: Twente University Press.
- Torka, N., Looise, J. K., & van Riemsdijk, M. (2007). Employers commitment: An employee view. *IIRA HRM* Study Group Working Papers in Human Resource Management, 22, 1-37.
- Torka, N., van Riemsdijk, M., & Looise, J. K. (2007). Werkgeversbetrokkenheid. *Tijdschrift voor Arbeidsvraagstukken*, 23 (1), 45-59.
- Trow, M. (1996). Trust, markets and accountability in higher education: A comparative perspective. *Higher Education Policy*, *9* (4), 309-324.
- Turnley, W. H., & Feldman, D. C. (1999b). A discrepancy model of psychological contract violations. *Human Resource Management Review , 9* (3), 367-386.
- Turnley, W. H., & Feldman, D. C. (1998). Psychological contract violations during corporate structuring. Human Resource Management, 37 (1), 71-83.

- Turnley, W. H., & Feldman, D. C. (2000). Re-examining the effects of psychological contract violation: Unmet expectations and job dissatisfaction as mediators. *Journal of Organizational Behavior*, *21* (1), 25-42.
- Turnley, W. H., & Feldman, D. C. (1999a). The impact of psychological contract violations on exit, voice, loyalty, and neglect. *Human Relations*, *57*(7), 895-922.
- Van der Heiden, B. I., Schalk, R., & Van Veldhoven, M. J. (2008). Ageing and careers: European research on long-term career development and early retirement. *Career Development International*, 13 (2), 85-94.
- Van Dijk, M., & Webbink, D. (2000). Shortages of scientists. CPB Report 00/04: Quarterly Review of CPB Netherlands Bureau for Economic Policy Analysis, pp. 14-17.
- Van Vucht Tijssen, B. E. (2000). *Talent voor de toekomst, toekomst voor talent*. Den Haag: Ministerie van Onderwijs, Cultuur en Wetenschap.
- Van Vught, F. A. (1990). State regulation and innovations in higher education. *Higher Education Management*, 2 (1), 27-46.
- Veerman Committee. (2010). Differentiëren in drievoud omwille de kwaliteit en verscheidenheid in het hoger onderwijs: Advies van de Commissie Toekomstbestendig Hoger Onderwijs Stelsel. Breda: Koninklijke Broese & Peereboom.
- Verbrugge, A. (2008). De globalisering van de universiteit. In C. Lorenz (Ed.), *If you're so smart, why aren't you rich?* (pp. 131-164). Amsterdam: Boom.
- Verschuren, P., & Doorewaard, H. (1999). Designing a Research Project. Utrecht: Lemma.
- Weber, M. (1919). Wissenschaf as beruf. (E. A. Engberts, & E. Tellegen, Trans.) Berlin: Duncker & Humblot.
- Wilterdink, N. (2007). Van wub naar mub: De teloorgang van democratie in de universitaire sector. In J. Duyvendak, G. Engbersen, M. Teeuwen, & I. Verhoeven (Eds.), *Macht en verantwoordelijkheid: Essays voor Kees Schuyt* (pp. 255-266). Amsterdam: University Press.
- Wright, P., & Nishii, L. (2004). Strategic hrm and organizational behaviour: Integrating multiple level analysis. *HRM: What's Next? Conference* (pp. 1-26). Rotterdam: CAHRS Working Papers.
- University of Twente. (2008). Detailed proposal of the tenure rack memorandum career perspective for excellent young academic staff. Retrieved from http://www.utwente.nl/hr/en/Information\_about/Personeelsbeleid/Uitwerking%20Notitie%20Tenure%20Tra ck%207%200%20%28definitief%20juni%202008%29\_EN.doc/1\_introduction.html
- Zaccaro, S. J., & Dobbins, G. H. (1989). Contrasting group and organizational commitment: Evidence for differences among multilevel attachments. *Journal of Organizational Behaviour, 10,* 267-273.
- Zhao, H., Wayne, S. L., Glibkowski, B. C., & Jesus, B. (2007). The impact of psychological contract breach on work-related outcomes: A meta-analysis. *Personnel Psychology*, 60, 647-680.

### **APPENDIX 1: List of abbreviations**

CvB	College van Bestuur, Executive Board of the University
HR	Human Resource
HRM	Human Resource Management
KNAW	Koninklijke Nederlandse Akademie van Wetenschappen, Royal Dutch Academy of Arts and Sciences
MinOCW	Ministerie van Onderwijs, Cultuur en Wetenschappen, Ministry of Education, Culture and Sciences
MUB	Modernisering Universitaire Bestuursorganisatie, University Government Modernisation Act
NPM	New Public Management
NWO	Nederlandse organisatie voor Wetenschappelijk Onderzoek, Dutch Organization for Scientific Research
PC	Psychologisch contract, psychological contract
WUB	Wet Universitair Bestuur, University Board Reform Act
UFO	Universitaire Functie Ordening, University Position Disposition

#### **APPENDIX 2: Citation analysis**

Bibliometrics is the quantitative analysis of bodies of literature (such as articles, books and patents) and their references: citations and co-citations. In this case we have used a citation analysis, a bibliometric technique, which is based on the premise that heavily cited articles are likely to have exerted a greater influence on the subject than those less frequently referenced and thus are indicators of activity or importance to a field. Although this assumption may have its weaknesses (such as failure to illustrate the structure of influence within a field), a citation analysis, with adequate screening and a sufficiently large sample, can provide useful insight into which journals, papers, and authors are considered influential (Pilkington, 2009).

In order to get an indication of the influence of authors in the PC construct field, we have performed a limited citation analysis. By prompting search queries (used term: psychological contract) into Scopus, Scholar (Google) and ISI Web of Knowledge (Web of Science) we have attempted to outline the activity or importance to the field. The results of the queries can be found in the table hereunder.

Bibliographic database	Ranking	Author(s) & year of publication	№ of citations
Scopus (Scopus citations)	1	Robinson, S.L. (1996) <sup>3</sup>	341
	2	Rousseau, D.M. (1989) <sup>4</sup>	286
	3	Morrison, E.W., Robinson, S.L. $(1997)^5$	264
Scopus (non-Scopus)	1	Rousseau, D.M. (1995) <sup>6</sup>	701
	2	Robinson, S.L., Rousseau, D.M. (1994) <sup>7</sup>	261
	3	Robinson, S.L., Kraatz, M.S., Rousseau, D.M. (1994) <sup>8</sup>	209
	4	Rousseau, D.M. (1990) <sup>9</sup>	197
	5	Robinson, S.L., Morrison, E.W. (1995) <sup>10</sup>	145
ISI Web of Kwowledge	1	Robinson, S.L. (1996) <sup>1</sup>	291
(Web of Science)	2	Morrison, E.W., Robinson, S.L. (1997) <sup>3</sup>	221
	3	Robinson, S.L., Rousseau, D.M. (1994) <sup>5</sup>	220
	4	Robinson, S.L., Kraatz, M.S., Rousseau, D.M. (1994) <sup>6</sup>	188
	5	Robinson, S.L., Morrison, E.W. (1995) <sup>8</sup>	126
Scholar (Google)	1	Robinson, S.L. (1996) <sup>1</sup>	784
	2	Rousseau, D.M. (1989) <sup>2</sup>	704
	3	Robinson, S.L., Rousseau, D.M. (1994) <sup>5</sup>	627
	4	Morrison, E.W., Robinson, S.L. (1997) <sup>3</sup>	604
	5	Rousseau, D.M. (1990) <sup>7</sup>	486
Scholar (Google)	Note	Rousseau, D.M. (1995) <sup>4</sup> (book)	1534

Table A.2: Overview of number of citations of literature PC constru-	ct (data recovered on May 28th 2009)
--	--------------------------------------

<sup>3</sup>Robinson, S.L. (1996). Trust and breach of the psychological contract. *Administrative Science Quarterly, 41*(4), 574-599.

<sup>4</sup>Rousseau, D.M. (1989). Psychological and implied contracts in organizations. *Employee Responsibility and Rights Journal, 2*(2), 121-139.

<sup>5</sup>Morrison E.W., Robinson, S.L. (1997). When employees feel betrayed: A model of how psychological contract violation develops. *Academy of Management Review, 22*, 226-256.

<sup>6</sup>Rousseau, D.M. (1995). *Psychological contracts in organizations*. Thousand Oaks, CA: Sage.

<sup>&</sup>lt;sup>7</sup>Robinson, S.L., & Rousseau, D.M. (1994). Violating the psychological contract: Not the exception but the norm. *Journal of Organizational Behavior*, *15*, 245-259.

<sup>&</sup>lt;sup>8</sup>Robinson, S.L., Kraatz, M.S., & Rousseau, D.M. (1994). Changing obligations and the psychological contract: A longitudinal study. Academy of Management Journal, 37, 137-152.

<sup>&</sup>lt;sup>9</sup>Rousseau, D.M. (1990). New hire perceptions of their own and their employer's obligations: a study of psychological contracts. *Journal of Organizational Behavior, 11,* 389-400.

<sup>&</sup>lt;sup>10</sup> Robinson, S.L., & Morrison, E.W. (1995). Organizational citizenship behavior: A psychological contract perspective. *Journal of Organizational Behavior*, *16*, 289-298.

Author(s)	Occupational group	Ν	Items/aspects assessed
Kotter (1973)	-	-	<ul> <li>Sense of meaning or purpose in the job</li> <li>Personal development opportunities</li> <li>Interesting work</li> <li>Challenge in work</li> <li>Power and responsibilities in the job</li> <li>Recognition and approval for good work</li> <li>Status and prestige in the job</li> <li>Friendliness of the people, the congeniality of the work group</li> <li>Structure in the environment (general practices, discipline, regimentation)</li> <li>Security in the job</li> <li>Advancement opportunities</li> <li>Feedback and evaluation</li> </ul>
Herriot, Manning, & Kidd (1997)	UK employees + UK managers	184+ 184	<ul> <li>Adequate training</li> <li>Fairness in selection, appraisal, promotion, and redundancy</li> <li>Meeting personal en family needs</li> <li>Consultation on matters affecting employees</li> <li>Discretion in how employees do their job</li> <li>Humanity, acting in a responsible and supportive way towards employees</li> <li>Recognition for special contribution</li> <li>Safe and congenial environment</li> <li>Justice in the application of rules and discipline</li> <li>Pay- equitable with respect to market and across the company</li> <li>Benefits – fairness and consistency of</li> <li>Providing job security as much as possible</li> </ul>
Rousseau (1990); (measures also used in Robinson, Kraatz, & Rousseau, 1994)	MBA graduates	224	<ul> <li>Promotion</li> <li>High pay</li> <li>Pay based on current level of performance</li> <li>Training</li> <li>Long-term job security</li> <li>Career development</li> <li>Support with personal problems</li> </ul>
Coyle-Shapiro & Kessler (2000)	UK public service employees	6953	<ul> <li>Long term job security</li> <li>Good career prospects</li> <li>Involvement in decision-making</li> <li>Support to learn new skills</li> <li>Pay increases to maintain standard of living</li> <li>Fair pay in comparison to employees doing similar work in other organizations</li> <li>Fair pay for responsibilities in the job</li> <li>Fringe benefits that are comparable to employees doing similar work in other organizations</li> </ul>
Robinson (1996)	Alumni of a Midwestern graduate business school	125	<ul> <li>Promotion and advancement</li> <li>High pay</li> <li>Pay based on current level of performance</li> </ul>

## **APPENDIX 3: Review measurements PC content**

			<ul> <li>Training</li> <li>Long-term job security</li> <li>Career development</li> <li>Sufficient power and responsibility</li> </ul>
Guest & Conway (1998)	UK workers	1000	<ul> <li>Fair treatment by managers and supervisors</li> <li>Job security</li> <li>Fair pay for work</li> <li>Career</li> <li>Interesting work</li> <li>Organization helps with problems outside work</li> </ul>
Guest & Conway (2002)	Mixed; 80 managers and staff at different levels from 4 organizations; 3,000 senior members of the CIPD (professional body for HR practitioners)	80	<ul> <li>Training and development opportunities</li> <li>Opportunities for promotion</li> <li>Recognition for innovative of new ideas</li> <li>Feedback on performance</li> <li>Interesting work</li> <li>Fair pay</li> <li>Attractive benefits</li> <li>Not to make unreasonable demands of employees</li> <li>Fair treatment</li> <li>Reasonable job security</li> <li>Pleasant work environment</li> <li>Safe working environment</li> <li>Open two-way communication</li> </ul>

# APPENDIX 4.2a: Interview protocol (in Dutch)

APPENDIX 4.2b: Interview protocol (adapted from 3a, in Dutch)

APPENDIX 4.2.2a: Initial e-mail to potential participants (in Dutch)

APPENDIX 4.2.2b: Reminder to potential participant (in Dutch)

Appendix 5:	Overview of	scholars'	expectations
-------------	-------------	-----------	--------------

Category	Number of participants	
Organizational justice		
Beta vs. Alfa & Gamma (distributive justice)	-	
External vs. Current staff (distributive justice)	-	
Follow procedures (procedural justice)	-	
Act appropriately (interpersonal justice)	-	
Providing information (informational justice)	-	
Reward systems		
Salary	-	
Recognition	-	
Staff development and support		
Professional development	-	
HR department	-	
Guidance (at the beginning of the career) <sup>1</sup>	-	
Support for talented scholars (e.g., resources) <sup>1</sup>	-	
Career opportunities <sup>1</sup>	-	
Management and leadership		
Strategy of the University	-	
Educational reforms and changing financial models	-	
Bureaucratic red tape	-	
Accounting model	-	
Keeping agreements	-	
Employee influence		
Information	-	
Communication	-	
Academic life		
Academic freedom	-	
Job security	-	
Time and administrative tasks	-	
Colleagues	-	
Understanding academic life	-	
Facilitation		
Resources (e.g., financial)	-	
Working facilities (e.g., desks, computers)	-	
Ratio scientific staff vs. non-scientific staff	-	
Open category		
One overall expectation		
Pursuing the same goals		

<sup>1</sup> Expectations at the beginning of their career as a scholar.