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WORKING PAPER

MANAGING THE PSYCHOLOGICAL CONTRACT OF GRADUATE RECRUITS: A CHALLENGE FOR HUMAN RESOURCE MANAGEMENT

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MANAGING THE PSYCHOLOGICAL CONTRACT OF GRADUATE RECRUITS: A CHALLENGE FOR HUMAN RESOURCE MANAGEMENT

ABSTRACT

This paper explores graduate students' prior beliefs regarding the terms of the exchange relationship with their forthcoming employer and the impact of career variables on these beliefs. Among those students who already signed an employment contract at the time of the survey, the relationship between their beliefs and the promises and expectations conveyed during the recruitment process has been examined. Based on literature on psychological contracts, it is assumed that graduates' prior beliefs regarding their employment relationship will include perceived employer and employee obligations corresponding with those entailed in employees' psychological contracts. This was confirmed by an empirical study among a sample of 135 graduating students. Factor analysis resulted in four prior belief components: Organizational Support, HR Practices, Employee Commitment and Exchange. A second objective of this study was to examine the impact of career variables (Careerism, managerial orientation and orientation towards professional expertise) on the nature of prior beliefs. Subjects' expectation to change employers frequently during their career (defined as Careerism) was related to high scores on the Employee Commitment component of prior beliefs. Managerial career orientation was related to high scores on the HR Practices, Employee Commitment and Exchange components of prior beliefs, while a career orientation towards professional expertise was related to high scores on the Organizational Support component.

Among those subjects who already signed an employment contract at the time of the survey (n = 53), some significant correlations were found between expectations and promises conveyed during the recruitment process and subjects' scores on the belief components. Although it was not possible to measure the relative impact of these variables through regression analyses (given the small number of subjects in this group), our findings suggest that the information exchanged during the recruitment process have an impact on the psychological contract.

Together, our findings provide evidence for the importance of understanding graduate recruits' prior beliefs and their career expectations if HRM wants to develop a positive psychological contract with its new employees, based on mutual understanding. Moreover, they suggest that HRM pay attention to the kind of promises and expectations conveyed during the recruitment process. This information will influence recruits' prior beliefs and in turn, these beliefs will probably determine employees' evaluation of the extent to which the organization has realized its promises. As prior research has shown, this evaluation forms an important antecedent of their motivation and the intention to leave the organization.

INTRODUCTION

Within our contemporary economic environment, employees have become a critical resource for many organizations. Technological developments and the growing importance of service industry have caused organizations to compete for employees with scarce competencies. Attracting and retaining qualified employees by fostering a positive psychological contract has become a major challenge for human resource professionals (Butler & Waldroop, 1999; Herriot, Hirsch & Reilly, 1998; Makin, Cooper & Cox, 1996; Millward & Brewerton, 2000; Rousseau, 1996; Ulrich, 1997). At the same time it appears that the traditional terms of the psychological contract have changed. Employers are no longer willing or able to offer long-term job security and promotion in exchange for loyalty and productivity. The 'new deal' may be defined in terms of flexibility, pay-for-performance and employability (Cappelli, 1997; Sparrow, 1998; Sparrow & Cooper, 1998). Additionally, the use of contingent workers is becoming more widespread. Organizations are focusing on retaining those employees whose competencies are most closely linked to the organizational strategy and who are critical for the development of the organization's core competencies, while establishing a short-term and market-driven relationship with non-core employees (Blancero, Johnson & Lakshman, 1996; Herriot *et al.*, 1998).

Many researchers argue that psychological contracts are playing an increasingly important role in helping to define and understand the contemporary employment relationship and that the study of psychological contracts may be most critical for management. (e.g. Anderson & Schalk, 1998; Cooper, 1999; Millward & Brewerton, 2000; Rousseau, 1995; Schalk & Freese, 1997; Turnley & Feldman, 1998). In general, *contracts* are a central characteristic of employment relationships, establishing inducements and contributions that are basic to membership in an organization (Kallenberg & Reve, 1996; March & Simon, 1958). *Psychological contracts* consist of individuals' beliefs regarding the terms and conditions of the exchange agreement between themselves and their organizations (Rousseau, 1989). They refer to the way the employment contract is interpreted, understood and enacted by employees at the interface between themselves and their employing organization (Millward & Brewerton, 1999).

A body of literature exists indicating that the psychological contract is an important motivator for employees. It shows that when individuals perceive a breach of promises or a lack of reciprocity between employer and employee contributions, their motivation and commitment to the organization decrease and they become more likely to leave their jobs. A positive psychological contract, by contrast, breeds commitment, intention to remain with the organization and organizational citizenship behaviors that go beyond the formal job description (e.g. Coyle-Shapiro & Kessler, 2000; Freese, Heinen & Schalk, 1999; Turnley & Feldman, 1999; 2000). Given this evidence, it is important to gain insight in the factors affecting the development of the psychological contract. This knowledge is not only relevant from a scientific point of view. From a practical, managerial perspective, it is important for organizations to know how to foster a

positive psychological contract among its employees. Managing the psychological contract is especially important when introducing new employees in the organization (Anderson & Thomas, 1996). Their motivation, commitment and length of stay with the organization will be affected by their perceptions regarding the terms of their employment relationship and the perceived fulfillment of these terms (Morrison & Robinson, 1997; Rousseau & Greller, 1994). For this reason, understanding newcomers' beliefs about the terms of their employment relationship is important from a managerial viewpoint since this will allow organizations and especially human resource professionals responsible for recruitment and selection to take into account and to actively manage the factors affecting employees' perceptions of the terms of their psychological contract. The costs of recruiting and socializing new employees are substantial for the organization and within our contemporary environment the retention of employees with scarce competencies has become of utmost strategic importance. Therefore, it is important to obtain a better insight in the individual antecedents that allow us to understand the beliefs of graduate recruits regarding the terms of their forthcoming employment relationship. This can provide important information for the development and implementation of effective HR-policies regarding new employees.

Two major directions can be found in existing research on psychological contracts. On the one hand, scholars have investigated the content of the psychological contract and have addressed *shifts from « old » to « new » psychological contracts*, mainly due to economic forces. Although not all studies subscribe the presumed shift in contracts, a major body of research provides evidence for the changing nature of psychological contracts among diverse groups of employees such as production workers and middle managers (e.g. Dopson & Neuman, 1998; Freese, Heijnen & Schalk, 1999; Freese & Schalk, 1997; 1999; Herriot, Pemberton & Hawtin, 1996; Herriot, Manning & Kidd, 1997; Martin, Staines & Pate, 1998; Sparrow, 1996; Guest & Conway, 1997; 1998). On the other hand, several researchers have focused upon *the evaluation of the degree of psychological contract fulfillment* or, expressed in a negative sense, contract breach. Within this framework, factors influencing the perception of contract breach have received substantial attention and this has resulted in the development of a conceptual model of contract breach (e.g. Ho, 1999; Lewis-McLear & Taylor, 1998; Morrison & Robinson, 1997; Robinson & Rousseau, 1994; Robinson et al., 1994; Schalk & Freese, 1997; Shore & Tetrick, 1994; Turnley & Feldman, 1998; 2000).

In contrast with this body of prior work, there is a dearth of knowledge about factors influencing the development and content of the psychological contract. Previous research and theoretical work suggest that these antecedents be situated at the organizational as well as the individual level (e.g. Herriot & Pemberton, 1996; Nicholson & Johns, 1985; Rousseau, 1995; Rousseau & Greller, 1994). However, empirical research explicitly addressing the antecedents of the psychological contract is scarce. It is assumed that the process of psychological contracting starts during the recruitment phase (Rousseau, 1990) and that during the employment relationship, several administrative and human contract makers will influence the individual employee's psychological contract (Rousseau & Greller, 1994; Rousseau & Wade-Benzoni, 1994). Human resource management plays a major role in this respect. Besides organizational

factors, individual characteristics are also assumed to influence employees' perceptions of their psychological contract (e.g. Herriot *et al.*, 1998; Rousseau, 1990; Sparrow, 1996).

It is the objective of this study to contribute to the understanding of individual characteristics influencing the psychological contract, by focusing on individuals' prior beliefs regarding the terms of their forthcoming employment relationship. Moreover, we address the question, to which extent career variables have an impact on these prior beliefs, thereby influencing the development of the psychological contract. We also want to explore the impact of promises and expectations conveyed during the recruitment process as an organizational antecedent of new recruits' psychological contracts.

PSYCHOLOGICAL CONTRACTS AND PRIOR BELIEFS

The concept "psychological contract" was first used by Argyris (1960) and has been further developed by Levinson *et al.* (1962), Schein (1978; 1980) and Rousseau (1989; 1995). The psychological contract refers to the exchange relationship between an employee and his or her organization. It encompasses the expectations and perceived obligations of both parties to the exchange relationship. Since these expectations and perceptions are situated at two different levels (individual and organization), the major body of research concentrates on the individual perspective on the psychological contract, defining it as *the individual's beliefs regarding the terms and conditions of the reciprocal exchange agreement between himself and the organization* (Freese & Schalk, 1997; Rousseau, 1989, 1995; Rousseau & Tijoriwala, 1998; Shore & Tetrick, 1994).

Expectations versus promise-based beliefs

« The satisfactions human beings experience in their social associations depend on the expectations they bring to them as well as on the actual benefits they receive in them » (Blau, 1964, p. 143). The expectations of people govern the satisfactions they find in social life and hence their reactions to social experiences. Aside from general expectations, which define overall needs and aspirations regardless of the source from which they are met, individuals also have particular expectations of specific situations. Within the psychological contract literature, it is generally argued that the construct « psychological contract » is distinct from the broader concept of expectation. Although all psychological contracts entail expectations that a person or firm will act in a particular way, not all expectations are contractual. An important characteristic of a psychological contract is that the beliefs comprising that contract result from promises (Rousseau & Tijoriwala, 1998). Rousseau speaks of « promise based obligations » (1990, p. 390). She argues that when individual employees believe they are obligated to behave or perform in a certain way and also believe that the employer has certain obligations toward them, these individuals hold a psychological contract.

Relative impact of expectations and beliefs. One way of examining the distinctiveness of both concepts is to investigate their relative impact on outcome variables such as job performance or work-related attitudes. A body of research exists that examines the effects of newcomers' unmet expectations (Wanous et al, 1992). Unmet expectations are operationalized as the difference between initial expectations (or needs) and actual experiences on the job. The unmet expectations approach hypothesizes that dissatisfaction and turnover result from disconfirmed expectations, similar to a 'broken promise' effect (Louis, 1980). In their meta-analysis of existing unmet expectations research, Wanous et al. (1992) provide evidence for the relationship between unmet expectations and job satisfaction, organizational commitment, intent to remain with one's employer and job survival. When comparing these findings with research on psychological contract breach, both unmet expectations and perceived contract breach seem to influence the same job-related outcome variables, suggesting that both constructs are closely related. In the only study examining both unmet expectations and psychological contract breach, Robinson (1996) found that employees' unmet expectations were a mediator of the relationship between perceived psychological contract breach and two outcome variables: performance and intention to remain with one's employer. Psychological contract breach was found to produce unmet expectations but unmet expectations alone could not account for psychological contract breach. She concludes that although both constructs are related, they are in fact distinct and complementary to one another.

These findings provide evidence for the distinctiveness of unmet expectations and psychological contract breach. They do not, however, provide insight in the relatedness of the constructs « psychological contracts » and « expectations », defined in their positive sense. Although both constructs appear to have different effects when there is a perception of contract breach or unmet expectations, we do not know to which extent the content of both constructs is the same. As stressed by Rousseau & Tijoriwala (1998), there are three types of psychological contract assessment: content-oriented, feature-oriented and evaluation-oriented assessments. Research on psychological contract breach is evaluation-oriented, as is the research on unmet expectations. Content-oriented research, on the other hand, assesses the terms and interrelationships among terms defining the content of the psychological contract. This type of research addresses the terms and reciprocal obligations that characterize an individual's psychological contract. No research exists in which the terms of the psychological contract are compared with the elements entailed in subjects' expectations towards their employment relationship.

Previous research on expectations formed prior to the beginning of the employment relationship has focused upon realistic expectations, that is, whether the recruit has received accurate information regarding the new job (Porter & Steers, 1973; Premack & Wanous, 1985). Rousseau (1990, p. 398) states that such expectations differ from the terms of a psychological contract in that expectations are more general beliefs regarding employment conditions, including intrinsic and extrinsic rewards. But she stresses that all expectations are not obligations. On the other hand, there are differences in the extent to which expectations are binding. Terms of the psychological contract, which have been made explicit, will

be perceived as an obligation and will create expectations with a binding character. Elements that are not explicitly addressed or formally written down will rather be perceived as a promise and they create expectations that are less binding (Levinson *et al.*, 1962).

Operationalization of the psychological contract: expectations and/or beliefs. Despite the general emphasis on beliefs based on promises, not all scholars define the psychological contract in terms of perceived promises. Schein (1980, p. 22) defines it as « an unwritten set of expectations operating at all times between every member of an organization and the various managers and others in that organization ». Levinson *et al.* (1962) point out that the psychological contract frequently antedates the employment relationship. When the employee goes to work, he or she brings expectations with him/her. The company tacitly accepts them when it accepts the employee. In turn, the employee accepts the company's expectations towards him/her. These mutual expectations have an obligatory quality. It is as if both the employee and the organization are saying to each other 'you *must*, for I require it' (p. 36). Both parties are bound together by their mutual expectations when they enter into an employment relationship. Together, these expectations constitute the psychological contract. Kotter (1973) also strongly relates the psychological contract to expectations. In order to reduce the negative effects of unmet expectations, he suggests a strategy for 'managing the joining-up process' of newcomers, by developing a psychological contract between the newcomer and the supervisor in which each one's expectations are clarified and exchanged, with the aim of matching both parties' expectations.

Based on our review of the existing literature, we conclude that *psychological contracts are implicit but that they have a binding character*. They are *specific* in the sense that expectations and perceived obligations are focused upon the organization the focal person is working for. In that respect, the distinction has to be made with more general expectations or values not directed towards a specific organization (Vandenbrande, 1999). But at the same time this implies that these general expectations and values can have an impact on the perceived obligations and expectations being part of the psychological contract, given the subjective nature of the mental model representing the psychological contract in the mind of the employee.

In view of the above reasoning, we propose that the perceived obligations entailed in the psychological contract will already be present to some extent in the beliefs regarding the terms of the employment relationship existing before the formal start of this relationship. As explained above, before entering the employment relationship people will have both general and more specific expectations towards their future employer. Those specific expectations regarding the terms of the exchange relationship will be closely related to the perceived psychological contract terms of employees. We will investigate this proposition among inexperienced graduate students who are entering the labor market since their expectations will not be influenced by their previous work experiences. We expect that these subjects will have a perception of their employment relationship, which reflects the basic employer and employee obligations

found in research on the psychological contract. Given the explorative nature of this research question, no concrete hypothesis is formulated. By answering this research question, we hope to contribute to a better understanding of the emergence of the psychological contract among organizational newcomers.

Transactional versus relational beliefs

Scholars generally agree about the existence of two types of contracts, anchoring both ends of a contractual continuum (MacNeal, 1985). Transactional contracts involve specific, monetizable exchanges between parties over a well-specified time period. Relational contracts, on the other hand, are open-ended agreements to establish and maintain a relationship including both monetizable and nonmonetizable exchanges. Relational contracts are more pervasive in scope and are subjectively interpreted and understood by both parties, while transactional contracts are more narrowly focused, containing more tangible and concrete terms (Rousseau, 1990). Prior studies have provided evidence for the existence of both types of contracts and their relative prominence in different types of employment relationships and in different groups of employees (Herriot et al., 1997; Robinson et al., 1994; Robinson & Morrison 1995; Robinson & Rousseau, 1994; Rousseau, 1990; Turnley & Feldman, 1998). Relational contracts include elements such as job security, career development and training, whereas transactional contracts consist of elements like high pay, performance-based pay and short time employee investments. Given the prominence of this typology in a major body of research about psychological contracts, we propose that this distinction will also exist among graduate students' prior beliefs.

It is generally acknowledged that the length of the employment relationship will have an impact on the content of the psychological contract. The longer the relationship endures, the deeper the relationship the employee perceives and the broader the array of contributions and inducements that might be involved (Guzzo & Noonan, 1994; Rousseau, 1989; Van Dyne, Graham & Dienesch, 1994; Wayne et al., 1997). When the beginning employee comes to work, he is not always certain what he wants, what he himself is offering for his side of the transaction or even what relationships he may establish with others (Levinson et al., 1962, p. 36). Moreover, trust, which is regarded as an essential element of social exchange, will influence the nature of the perceived obligations (Robinson, 1996). As mutual trust is built during the evolving employment relationship, the exchange will become more relational (Blau, 1964; Robinson et al., 1994). For these reasons, we expect the beliefs of graduate students will contain a majority of transactional obligations.

Hypothesis 1A: The beliefs of graduate students regarding the terms of their forthcoming employment relationship can be categorized into transactional and relational obligations.

Hypothesis 1B: The majority of the beliefs of graduate students regarding the terms of their forthcoming employment relationship will be about transactional employer and employee obligations.

INDIVIDUAL ANTECEDENTS OF THE PSYCHOLOGICAL CONTRACT

Subjectivity

A major characteristic of the psychological contract is its subjective and idiosyncratic nature (Ho, 1999; Rousseau, 1989; 1990). It is made up of the individual employee's beliefs, which can be distinct from the organization's beliefs: « *Psychological contracts exist in the eye of the beholder*» (Rousseau, 1989, p. 123). Each individual employee can have a unique perception of his or her exchange relationship with the organization (Morrison & Robinson, 1997; Porter *et al.*, 1998; Rousseau, 1989). For this reason, the individual is considered to be the primary source of information in research about the psychological contract. Organizational representatives, as well as organizational systems and procedures influence these perceptions but they cannot be considered apart from the individual (Herriot & Pemberton, 1997; Rousseau & Tijoriwala, 1998). Given the emphasis on the subjective nature of the psychological contract, it is remarkable that the influence of individual characteristics on the psychological contract has received only very little attention in prior research. Coyle-Shapiro & Kessler (1998) have addressed this neglect of individual differences in examining the nature of employer-employee relationships. Their study provides an initial examination of individual factors that influence employees' psychological contract, namely their exchange ideology and the importance they attach to different contract terms. Further theory building and research is needed to obtain a better understanding of the individual antecedents of the psychological contract.

Careerism. Careerism is defined as the extent to which an individual expects to change employers frequently during his or her career (Rousseau, 1990). Employees can have a range of different preferences. While some prefer a traditional career within the organization, others prefer to change organizations regularly (Sparrow, 1996). Rousseau's study (1990) about the perceptions of graduate MBA-students regarding their psychological contract revealed that careerism is positively correlated with a preference for a transactional contract, and negatively related to the preference for a relational psychological contract. The beliefs of individuals scoring high on the careerism scale (meaning that they expect to change employer frequently) contained more transactional employer and employee obligations, and less relational obligations. Careerism is considered as an individual characteristic influencing employees' beliefs in the terms of their employment relationship. We expect that it can also be a meaningful variable to examine the prior beliefs of graduating students regarding the terms of their forthcoming employment relationship.

Hypothesis 2: Careerism will have an effect on graduates' prior beliefs regarding the terms of their forthcoming employment relationship.

Hypothesis 2A: The prior beliefs of subjects who score high on careerism will be more transactional in nature.

Hypothesis 2B: The prior beliefs of subjects who score low on careerism will be more relational in nature.

Career orientation. Career orientation refers to the values and preferences individuals have for developing a specific type of career (e.g. managerial versus technical). It can be considered as an individual disposition having an impact on employees' perceptions of their employment relationship (Ebadan & Winstanley, 1997; Herriot et al., 1996). For example, Herriot et al. (1996) found that those managers in their sample who were ambitious for more status and responsibility, were more likely to accept a variety of career offers. Their results revealed a positive correlation of ambition for responsibility with the expectation of promotion in the future and a negative correlation with job security. Schein's career anchors (1985) can be used to measure career orientation. Schein defines nine fundamental career anchors, representing different aspects of individuals' motivations and orientations regarding their career development: technical/functional competence, managerial competence, autonomy, organizational security, geographical security, service delivery, variation, identification with the organization and entrepreneurial orientation. Individuals will differ in the extent to which each career anchor is salient for them. Herriot (1992) proposes that individuals with different career anchors will have different preferences regarding the kind of psychological contract they want to develop with their organization. However, to date, no empirical research exists in which this relationship between career orientation variables and the nature of the psychological contract is investigated. We propose that this relationship will also exist at the level of prior beliefs regarding the terms of the employment relationship. Career orientation is an individual characteristic, which will influence subjects' beliefs regarding their employment relationship, also if this employment relationship only takes a formal start in the nearby future. Within the scope of our explorative research, we will focus on two aspects of career orientation, namely management orientation and the orientation towards the development of professional expertise. Based on the findings of Herriot *et al.* (1996), we expect that the extent to which subjects have a management ambition will have an impact on the nature of the employer obligations they believe to be part of their employment relationship. The higher this managerial ambition, the more they will expect the organization to provide them with internal career ladders or possibilities for career development and training. We do not make any predictions regarding the relationship between management orientation and the transactional – relational dimensions of prior beliefs since this career orientation will be examined without reference to the particular organization in which subjects expect to realize their career ambitions. Also, given the explorative nature of this study, we do not make predictions about the extent to which career orientation variables will relate to particular patterns of perceived employer and employee obligations.

- Hypothesis 3:** Management orientation will have an effect on the nature of graduate subjects' prior beliefs regarding the terms of their forthcoming employment relationship.
- Hypothesis 3A:** Subjects scoring higher on management orientation will perceive more employer obligations relating to the provision of career development opportunities and the provision of a managerial career ladder.
- Hypothesis 3B:** Subjects scoring higher on management orientation will perceive more employee obligations relating to high personal investment in one's career.

We also expected the orientation towards professional expertise to have an impact on the nature of subjects' prior beliefs. Given the lack of prior research regarding this career orientation variable in relationship with perceptions of the employment relationship, we have no particular predictions regarding the nature of this relationship.

Within the scope of this research, it was not possible to further investigate other career orientation variables. But the focus on two of the career orientation variables forms a starting point for further research if the results obtained in this study are promising.

IMPACT OF PROMISES AND EXPECTATIONS CONVEYED DURING THE RECRUITMENT PROCESS

A person's experience in an organization and the nature of his relationship with the organization is shaped by HRM-practices such as recruitment, performance appraisal and training (Anderson & Thomas, 1998; Herriot *et al.*, 1997; Rousseau & Greller, 1994; Rousseau & Wade-Benzoni, 1994; Stiles *et al.*, 1997). Each represents a choice by the organization as to how it will treat people, who is hired, who is promoted, who receives a raise or accesses benefits. As such, each of these HRM-practices has a powerful impact on what goes on within individuals, particularly in terms of the choices they make regarding the organization (Rousseau & Greller, 1994, p. 385). One important decision is the decision of new recruits whether to join the organization. This decision will be influenced by the information exchanged during the recruitment process. Research on Realistic Job Previews has demonstrated that the extent to which this information is realistic, will affect new recruits' satisfaction with their job and with their organization (Wanous *et al.*, 1992). Empirical evidence for the impact of information exchanged during the recruitment process and new recruits' psychological contracts is less documented. Rousseau (1990) provided some preliminary evidence for the impact of stipulations made during the recruitment process on new recruits' perceived employer and employee obligations. She found a negative correlation between the expected commitment to stay with the organization for a minimum period of time and the requirement to give prior notice when leaving, and transactional employer obligations.

Within the scope of our own study among graduate recruits, we decided to investigate the impact of promises and expectations conveyed by the recruitment officer among those graduates who had already signed an employment contract at the moment of the survey. We expected that we would find correlations between the nature of these promises (made by the organization towards the new recruit) and expectations (conveyed by the recruitment officer towards the new recruit) and the terms of their employment relationship. Given the explorative nature of this research question, we did not formulate any specific hypotheses regarding these relationships.

METHODS

Sample and Procedures

A cross-sectional survey design was used. The sample consisted of 135 graduate full-time students enrolled in five master programs in one management school and two universities located in Belgium. In conformance with the Belgian system all students already had obtained their university degree after 4 or 5 years study. They were finishing an extra year to obtain a Master degree. A questionnaire was administered to a sample of 185 students. About half of the respondents followed an MBA program (51.9%), 10% studied a Master of Science in Business Communication and 37.8% studied a Master of Science in Human Resource Management. At the time of the survey, students were finishing their master program and most of them were actively involved in job search activities. Forty four per cent of them already signed an employment contract at the time of the survey. Among the respondents, the mean age was 23.3 years (s.d. = 1.59). The majority of respondents were female (58%). Only 13% had prior work experience.

The questionnaire was designed to gather self-report information on the respondents' beliefs about their employment relationship and on their career orientations. Questionnaires were distributed to subjects by the first author, at the end of the academic year. In four out of five master programs, this was done personally at the end of a course. In the fifth program, questionnaires were sent by mail. A pre-stamped postal envelope was included in order to stimulate subjects to send back their filled-in questionnaire. A total of 185 questionnaires were distributed, of which 138 were collected, showing a 75% response rate. Among them, three questionnaires were declared invalid and have been excluded from the analysis, meaning that the analyses are based on responses obtained from 135 subjects.

Measures

One single questionnaire was administered, the first part comprising questions about subjects' beliefs regarding their own and their forthcoming employers' obligations within the context of their employment relationship. The second part consisted of questions regarding their career orientation and their expectation to change employers frequently during their career. If subjects indicated that they had already

signed an employment contract at the moment of the survey, they were asked to fill in a third part containing questions about the expectations and promises conveyed during the recruitment process. Finally, some demographic measures were included in the questionnaire.

Beliefs. This variable was measured using information provided by previous studies about the content of the psychological contract. Based on prior work on the content of the psychological contract, 40 items were selected which had been found to be part of employees' perceptions regarding the terms of the employment relationship (Guest & Conway, 1998; Herriot, Manning & Kidd, 1997; Kotter, 1973; Robinson, 1996; Robinson, Kraatz & Rousseau, 1994; Robinson & Morrison, 1995; Rousseau, 1990; Sparrow, 1996; Turnley & Feldman, 1998). Subjects had to indicate the extent to which they agreed with each of 40 employee and employer obligations using a 1 to 7 point Likert-type scale ranging from (1) « I strongly disagree » to (7) « I strongly agree ». Employer obligations included questions about the extent to which they believed that their employer owed them promotion, compensation based on performance, supervisor support, career development, job security, training opportunities, etc. Questions were formulated as follows « I believe my employer is obligated to ... ». Employee obligations included questions about the extent to which they felt obligated to work extra hours, to change tasks, to be flexible in terms of work hours, to be responsible for following additional training, etc. Questions were formulated as follows: « It is my obligation to ... ». The discrete obligations measured by our study form a representative sample of items used in previous studies. They capture a wide range of both employee and employer obligations. However, it might be possible that they do not capture the full range of obligations that are salient for our specific research population (graduate students entering the labor market). This is a possible weakness that has to be taken into account when analyzing and interpreting the results.

Career variables. Eight items were selected to measure respondents' careerism and career orientation. The first 5 items were based on Rousseau's measure of « careerism » (Rousseau, 1990). These items assessed the extent to which subjects had the intention to change employers during their careers. Examples are « I expect to work for a variety of different organizations during my career » and « There are many career opportunities I want to explore after I leave my first employer ». A sixth item was added, asking for the extent to which subjects wanted to take up new challenges during their career. The next two items measured career orientation. One question assessed the extent to which subjects had the ambition to develop a managerial career (Managerial Orientation), another question asked for the extent to which they wanted to become an expert in their functional domain (Professional Expertise). Respondents had to indicate the degree to which they agreed with each of the eight items using a seven-point scale ranging from (1) « I strongly disagree » to (7) « I strongly agree ». Within the scope of the research, it was not possible to include more measures of career orientation. The fact that we only used single-item measures of both orientations, has to be taken into account when analyzing and interpreting the results.

Promises and expectations conveyed during recruitment. Respondents had to indicate whether each of five promises were made by the organization during the recruitment process: development towards a management function, pay will be adapted to results, possibility to follow extra training if I want, regular performance feedback and promotion if I take personal initiative to follow extra training. They had to indicate whether each of these promises: 1) were explicitly *not* made by the recruitment officer; 2) had not been discussed; 3) were made orally; 4) were written down in the employment contract. Secondly, subjects were asked if they had received any information on their organization's career development system, compensation and benefits policies, appraisal system and training policies (by answering yes or no). Finally, subjects had to indicate whether each of five expectations were conveyed by the organization towards them during the recruitment process: working extra hours, personal initiatives to follow extra training, stay with the organization for a minimum time period, openness to accept other jobs, performance above a given standard. Again, they had to indicate whether each of these aspects: 1) were not expected; 2) had not been discussed; 3) were conveyed orally; 4) were written down in the employment contract.

Control variables. Five variables were statistically controlled in regression analysis: gender (0 = man / 1 = woman), age (expressed in years), prior work experience (0 = no / 1 = yes), selection phase (1 = already signed an employment contract / 2 = job offer accepted but not signed employment contract / 3 = final selection phase / 4 = involved in job seeking but not in a final selection phase / 5 = not actively involved in job seeking), and masters degree (1, 2 & 3 = three classes of MBA-students / 4 = Master of Science in Human Resource Management / 5 = Master of Science in Business Communication).

Analyses

Complete data were available and were analyzed for 135 graduate students. To investigate the underlying pattern of subjects' prior beliefs in the terms of their forthcoming employment relationship, a factor analysis (principal components analysis with orthogonal varimax rotation) was performed on the 40 items assessing those perceptions. A second factor analysis was performed on the eight career items, to determine whether the items measuring careerism could be represented by one single factor or whether there were other solutions that explained more of the variance in the data. To test the hypotheses regarding the influence of careerism and career orientation on prior beliefs regarding the terms of the employment relationship, four sets of hierarchical regression analyses were conducted, one for each of the four prior belief factors that came out of the factor analysis. In the first step of the regression analyses, demographic variables (gender, age, master degree, selection phase and prior work experience) were first entered as control variables. In the second step, the career variables were entered as independent variables.

The effects of promises and expectations conveyed during the recruitment process were investigated through analysis of correlations between these questions and the prior beliefs factors. Given the small number of respondents ($n = 53$) who had signed an employment contract at the moment of the survey, it was not possible to use multivariate statistics such as multiple regression to assess the relationships.

RESULTS

Factor Analyses

Prior Beliefs regarding the Terms of the Employment Relationship. As indicated earlier in this paper, previous studies have classified employees' psychological contracts along a transactional – relational continuum. In view of the ongoing discussion about the plausibility of this classification (Rousseau & Tijoriwala, 1998) and the mixed findings in some previous studies (Freese, Heinen & Schalk, 1999; Freese & Schalk, 1999; Ho, 1999), we first analyzed the prior beliefs items for their underlying factor structure. A principal component analysis with varimax rotation initially resulted in 11 factors with eigenvalues greater than 1. Since the first 4 factors contained the majority of item loadings greater than 0.4, these four factors were retained for the rest of the analyses. Together, they accounted for 44 percent of the variance in the data. The items loading on each of the four factors are presented in table 1.

Insert Table 1 about here

Factor analysis did not reveal the transactional and relational dimensions found in previous studies. Factors were more complex, reflecting a different emphasis on employer versus employee obligation. The first factor, called Organizational Support, consists of 9 items describing employer obligations directed at providing emotional, social and job-related support to the new employee. The primary focus is on employer obligations, the only employee obligation being « to take initiative to socialize with more senior colleagues ». The variance explained by this factor is 18.90 %, with an eigenvalue of 9.24. Alpha-reliability was .82. This factor has a strong relational emphasis, stressing employer obligations aimed at integrating and supporting the employee within the organization. This reflects a long-term perspective towards the employment relationship.

The second factor consists of 9 items all relating to employer obligations. Items refer to the organization's HR practices like promotion system, training opportunities and compensation policies. This factor is called HR Practices and it explained 11.78 % of variance, with an eigenvalue of 5.76. Alpha-reliability of this factor is .81. The items included in this factor are both transactional and relational in nature. While the provision of career opportunities, training possibilities and promotion ladders are relational elements, permission to go on leave and pay for results are transactional in nature.

The third factor contained a majority of items relating to employee obligations such as high personal investment in the job and working extra hours and is hence called Employee Commitment. The only employer obligation loading on this factor (permission to go on leave) has a negative loading. Variance

explained by this factor is 7.12 %, with an eigenvalue of 3.48. Alpha-reliability was .69. This factor includes transactional employee obligations reflecting high investment and involvement in the job.

Finally, the fourth factor most strongly reflects an exchange relationship between employee and employer. It consists of four employer obligations, referring to the provision of economic advantages, the absence of a stable work environment and the possibility to build up an informal relationship with one's direct chef. The two employee obligations loading on this factor relate to employee flexibility in terms of work hours and to the willingness to work extra hours. This factor is called Exchange. It contains a majority of transactional elements, and it is the factor containing the most balance between employer and employee obligations, compared with the other factors. This factor explains the least variance (5.68 %) and has an eigenvalue of 2.78. Alpha-reliability is below the norm of 70% (.63.), which makes this the least reliable factor. Further results regarding this factor have to be interpreted taking into account its fairly low reliability. Further research is needed to investigate whether this factor can be considered to be a stable and reliable factor representing prior beliefs regarding the terms of the employment relationship.

Although the distinction between transactional and relational elements is somewhat reflected in our factor solution, the pure transactional - relational categorization of both employer and employee obligations found in previous research (Robinson, 1996; Robinson et al., 1994; Robinson & Morrison, 1995; Robinson & Rousseau, 1994; Rousseau 1990) could not be replicated. This means that hypothesis 1 was not fully confirmed. Our factors contain psychological contract elements used in these studies, but when analyzed they reveal a distinct pattern. Like in other recent studies, it seems more feasible to search for a different classification of psychological contract scales (Freese et al., 1999; Freese & Schalk, 1997; Guest & Conway, 1997; 1998; Thomas & Anderson, 1998). Both the Employee Commitment and the Exchange component were mainly transactional in nature, while HR Practices contained both transactional and relational items. This indicates that a major number of the prior beliefs items were transactional, although we did not test this formally given the lack of a pure classification into transactional and relational beliefs.

Career variables. As explained earlier, 8 items were used to measure subjects' careerism and career orientations. The first 5 items were based on Rousseau's measure of careerism. A factor analysis with varimax rotation was conducted in order to evaluate the extent to which Rousseau's careerism factor could be found in our data. All items were included in the analysis, also those measuring managerial orientation and orientation towards professional expertise. The analysis revealed one major factor, consistent with the Careerism factor found by Rousseau (1990). This factor contained the 5 items representing Rousseau's assessment of careerism, plus one item measuring the extent to which subjects saw their career as a sequence of new challenges they wanted to take up with different employers. This factor explained 25.60% of variance, with an eigenvalue of 2.56. Alpha reliability was .71. Two other factors came out of the factor analysis but they only explained small proportions of variance and were difficult to interpret. For this reason, it was decided to continue with one factor representing Careerism (consisting of 6 items), described as subjects' expectation to change employers many times during their

career, and two single-item measures of career orientation: Managerial Orientation and Professional Expertise.

Descriptive statistics for prior belief factors, Careerism, career orientation items and the demographic variables are presented in Table 2.

Insert Table 2 about here

Influence of career orientation on prior beliefs

Hypothesis 2 and 3 predicted that subjects' degree of careerism and their career orientation would influence their prior beliefs regarding the terms of their employment relationship. As shown in Table 2, there are several significant correlations between career variables and the prior beliefs factors. Careerism correlates positively with the Employee Commitment factor ($r = .26, p < .01$) and with Exchange ($r = .19, p < .05$). There is a positive correlation between the item measuring managerial career orientation and three of the prior beliefs factors, namely HR Practices ($r = .29, p < .01$), Employee Commitment ($r = .49, p < .01$), and Exchange ($r = .44, p < .01$). The ambition to build up professional expertise correlates positively with Organizational Support ($r = .31, p < .01$), with HR Practices ($r = .21, p < .01$), with Employee Commitment ($r = .18, p < .05$).

There were also significant correlations between control variables and our dependent and independent variables. Age was positively related to Managerial Orientation ($r = .25, p < .01$), indicating that older subjects scored higher on the ambition to develop a managerial career than did younger subjects. There was also a positive correlation between age and two of the prior beliefs factors, namely HR Practices ($r = .21, p < .01$) and Exchange ($r = .20, p < .05$). Gender showed a significant negative correlation with the prior beliefs factors Employee Commitment ($r = -.24, p < .01$) and Exchange ($r = -.44, p < .01$), and with Managerial Ambition ($r = -.38, p < .01$). Subsequent t -tests showed that female subjects scored significantly lower on the Employee Commitment factor (mean = 5.31) than male subjects did (mean = 4.97) ($t = 2.80, p < .01$). Female subjects also scored significantly lower on the Exchange Factor (mean = 4.19) than male subjects (mean = 4.88) ($t = 5.65, p < .001$) and female subjects were significantly less oriented towards a managerial career (mean = 5.08) than male subjects were (mean = 6.07) ($t = 4.55, p < .001$). Subjects' master degree correlated negatively with Exchange ($r = -.43, p < .01$) and with Managerial Ambition ($r = -.46, p < .001$). Subsequent ANOVA showed that there were significant differences between subjects' scores on Exchange, depending on the master program they were currently studying ($F = 9.37, p < .001$). Post hoc tests using Tukey HSD revealed a significant difference between each the three classes of MBA students and the Master of Science in Business Communication (each difference was significant at $p < .001$), indicating that MBA students scored higher on the Exchange factor. Regarding Managerial Ambition, ANOVA also showed a significant effect of Master degree ($F = 13.56, p < .001$). Post hoc tests

revealed that subjects following an MBA program scored significantly higher on managerial ambition than did both students studying a Master of Science in Business Communication and in Human Resource Management. All differences were significant at $p < .001$ level. Selection phase correlated negatively with Exchange ($r = -.38, p < .01$) and with Managerial Orientation ($r = -.39, p < .01$). For both variables, subsequent ANOVA showed significant differences between subjects, depending on the selection phase they were currently in ($F = 6.41, p < .001$ for Exchange and $F = 6.18, p < .001$ for Managerial Orientation). Post hoc tests using Tukey HSD revealed that subjects who had already signed an employment contract, scored significantly higher on Exchange than subjects who were only at the beginning of their job search activities ($t = .78, p < .001$) and subjects who had not started their job search activities at the moment of the survey ($t = .61, p < .78$). Subjects who had already signed an employment contract also scored significantly higher on Managerial Orientation than subjects who had not started their job search activities at the moment of the survey ($t = 1.09, p < .001$). Finally, work experience was significantly and negatively related to Careerism ($r = -.30, p < .01$). Subsequent t -test revealed that subjects with prior work experience scored significantly lower on Careerism (mean = 3.88) than subjects without prior work experience (mean = 4.78) ($t = 3.59, p < .001$).

To test the hypotheses that career variables would influence subjects' prior beliefs regarding their employment relationship, four sets of hierarchical regression analyses were conducted, one for each of the four prior beliefs components. Since there were significant correlations between demographic variables and both dependent and independent variables, these variables were included as control variables in the regression analyses.

Insert Table 3 about here

For the Organizational Support factor, there were no significant effects of control variables. Professional Expertise showed a significant effect ($b = 0.30, p < .01$), making the total regression equation significant ($F = 2.23, p < .05$). For the HR Practices factor, the total regression equation was not significant, although there was a significant effect of Managerial Ambition ($b = .22, p < .05$). Again, there were no significant effects of control variables.

The regression equation for Employee Commitment was significant ($F = 7.90, p < .001$). There was a significant effect of one control variable, namely Work Experience ($b = .28, p < .01$) and all three independent variables had a significant effect (Careerism: $b = .29, p < .01$; Managerial Ambition: $b = .36, p < .001$; Professional Expertise: $b = .25, p < .01$). Finally, also the regression equation for the Exchange factor was significant ($F = 10.29, p < .001$). Exchange was significantly influenced by two control variables,

namely Gender ($b = -.23, p < .01$) and Master degree ($b = -.28, p < .05$), and by one independent variable ; Managerial Ambition ($b = .19, p < .05$).

These results provide preliminary support for hypothesis 2 and 3, specifically for the notion that career variables influence graduates' prior beliefs regarding the terms of their employment relationship with their forthcoming employer. In particular, the extent to which subjects believe that their forthcoming employer owes them strong organizational support is influenced by their ambition to develop professional expertise during their career. On the other hand, the extent to which subjects believe their employer has the obligation to provide a bundle of HR practices like possibilities for career development, promotion ladders, training and pay for results, is influenced by their ambition to develop a managerial career. Both career orientation variables, as well as Careerism, have an effect on the Employee Commitment component of prior beliefs, while the Exchange component is influenced by subjects' ambition for a managerial career

Promises and expectations conveyed during the recruitment process

Only correlational analysis were employed to assess the relationship between the information conveyed during the recruitment process and subjects' prior beliefs regarding the terms of the employment relationship. These correlations were examined at the item-level since prior factor analyses of promises and expectations conveyed did not result in any meaningful factor. We did calculate a mean score for the 5 promises made and for the 5 expectations conveyed. This mean score can be interpreted as an indication of the extent to which promises or expectations have been discussed during the recruitment process. Given the explorative nature of this research question and the small sample size ($n = 53$), the results reported here require further elaboration and validation in future research. The correlations between each of the promises, information about HR-practices and expectations and the four prior beliefs factors are represented in table 4.

Insert table 4 about here

There are only a few correlations that are significant. Information about the performance appraisal system correlates positively with HR-Practices ($r = .32, p < .05$). Subsequent t -test shows that subjects who received information about the appraisal system score significantly higher on HR Practices (mean = 5.90) than subjects who did not receive this information (mean = 5.45) ($t = 2.44, p < .05$). There were no other significant correlations between promises made and information provided by the employer and subjects' prior beliefs.

The employer expectation to work extra hours correlated positively with three of four prior beliefs factors: Organizational Support ($r = .29, p < .05$), Employee Commitment ($r = .33, p < .05$), and Exchange ($r = .46, p < .01$). The expectation that the employee is responsible to follow extra training to keep their

competencies up-to-date, correlates positively with Organizational Support ($r = .29, p < .05$), and with Exchange ($r = .37, p < .01$).

DISCUSSION

Many researchers argue that psychological contracts are playing an increasingly important role in helping to define and understand the contemporary employment relationship and that the study of psychological contracts may be most critical for management. (e.g. Anderson & Schalk, 1998; Cooper, 1999; Millward & Brewerton, 2000; Rousseau, 1995; Schalk & Freese, 1997; Turnley & Feldman, 1998). More specifically, understanding newcomers' beliefs about the terms of their employment relationship is important from a managerial viewpoint since this will allow organizations and especially human resource professionals responsible for recruitment and selection to take into account and to actively manage the factors affecting employees' perceptions of the terms of their psychological contract. It was the objective of this study to contribute to the understanding of graduate students' prior beliefs regarding these terms and to relate these to their career ambitions. More specifically, we examined whether graduate students, entering the labor market, had beliefs regarding the terms of their employment relationship that were comparable with the psychological contract terms perceived by more experienced employees, as these have been found in many studies on employees' psychological contracts. We proposed that graduates would already have a perception of their own and their forthcoming employers' obligations as part of the employment relationship. We also proposed that these perceived obligations would reveal a similar pattern of transactional and relational terms, as it has been found in previous studies on psychological contracts (e.g. Robinson & Rousseau, 1994; Robinson et al., 1994; Rousseau, 1990), but that there would be more emphasis on transactional terms since these are more characteristic for starting relationships in which trust plays a minor role. Secondly, we expected that the pattern of subjects' beliefs would be influenced by their career orientation and by their ambition to change employers frequently during their career.

Analyses of the results revealed some interesting findings regarding graduates' prior beliefs and their relationship with career variables. In this section, we will explicate these results in more detail.

Composition of Prior Beliefs

The items used to measure subjects' prior beliefs regarding the terms of their employment relationship, were based on items used in previous empirical studies on psychological contracts (Guest & Conway, 1998; Herriot et al., 1997; Kotter, 1973; Robinson, 1996; Robinson et al., 1994; Robinson & Morrison, 1995; Rousseau, 1990; Sparrow, 1996; Turnley & Feldman, 1998). Our results show that items used to measure employees' psychological contracts, are also useful when examining graduates' prior beliefs regarding the employment relationship. Terms which were central in previous studies (e.g. employer obligations like the provision of career opportunities, training and pay for results and employee obligations like high personal investment in the job, flexibility and working extra hours) were also at the heart of graduate students' beliefs regarding their forthcoming employment relationship. On the whole, this

indicates that the terms of the psychological contract are already part of subjects' mental model about the exchange relationship they will develop with their employer, even before they have entered a formal employment relationship. These results are in line with Porter et al.'s argument that perceived obligations develop over time and that they result both from the employment contract and from newcomers' pre-entry ideas of what the organization can be relied on to provide and what it will value in return (1998, p. 748). Our findings suggest that other factors (individual characteristics or situational variables) might influence subjects' prior beliefs and that they might have an influence upon the psychological contract as it develops during the employment relationship. We did not succeed in replicating the transactional – relational dimensions of psychological contract found in previous research (e.g. Robinson, 1996; Rousseau, 1990). As such, our results are another confirmation of the lack of empirical agreement about the dimensions constituting the psychological contract (Porter et al., 1998; Rousseau & Tijoriwala, 1998).

Influence of Career Variables

Our results provide evidence for the existence of a mental model containing prior beliefs regarding the terms of the employment exchange relationship before the start of the formal employment relationship. These findings call for further examination of factors influencing these prior beliefs. In our study, we focused on Careerism and Career Orientation as possible individual difference variables influencing prior beliefs. Previous empirical studies found that Careerism was positively related with perceived transactional employer and employee obligations and negatively related with perceived relational employer and employee obligations (Rousseau, 1990; Robinson & Rousseau, 1994). This study was done among a sample of graduating students who had recently accepted job offers, but who had several years of earlier work experience. Given the lack of a pure categorization into transactional and relational obligations, the results of our study cannot be directly compared with those of Rousseau (1990). However, our study did provide evidence for the impact of Careerism on one component of prior beliefs, namely Employee Commitment. Subjects scoring high on careerism scored higher on the Employee Commitment component of prior beliefs. This means that Careerism predicted the extent to which subjects believed they were obligated to a high personal investment in their job, by working extra hours, working during their free time, reading professional literature, etc. Since the items loading on Employee Commitment are mainly transactional in nature (when comparing them with previous studies), our findings confirm the positive relationship between Careerism and transactional psychological contract terms found by Rousseau (1990). There was also a significant correlation between Careerism and the Exchange component of prior beliefs. This component also contained mainly transactional obligations (both employer and employee obligations), supporting the proposition of a positive relationship between Careerism and transactional psychological contracts. However, this significant relationship disappeared when measuring the effects of career variables on prior beliefs components via regression analyses. Our measurement of prior beliefs did not reveal a relational employee obligations component. The Organizational Support component, however, mainly contains relational employer obligations. Inconsistent with Rousseau's findings, we did not find a negative influence of Careerism on this relational component of prior beliefs.

Career Orientation. Several scholars have argued that career orientation might influence subjects' beliefs regarding the terms of their employment relationship (Herriot et al., 1996; Ebadan & Winstanley, 1997). In this exploratory study, we included two items measuring two different career orientations: Managerial Orientation and Professional Expertise. Although some criticism can be made against the use of two single-item measures, the results of our study are promising and ask for further elaboration. While Professional Expertise predicts the Organizational Support and Employee Commitment component of prior beliefs, Managerial Orientation was found to predict the HR Practices, Employee Commitment and Exchange components. These findings indicate that graduates having the ambition to become an expert in their professional domain will have prior beliefs regarding employer organizational support for their professional development and functioning within the organization. A high score on Professional Expertise also predicts prior beliefs loading on the Employee Commitment component. Managerial Orientation, on the other hand, predicts subjects' prior beliefs about items loading on the HR Practices component and on the Exchange component. This means that subjects with the ambition to build up a managerial career, score high on beliefs about employer obligations to provide HR systems that make it possible to develop this such a managerial career (e.g. career development opportunities, training, promotion ladders). Moreover, they also score high on beliefs regarding employee commitment (working extra hours, working during free time, high personal investment) and on the exchange of employee investment for economic advantages and an informal relationship with one's direct chef. The Employee Commitment component of prior beliefs is predicted by Careerism as well as by the two career orientation measures. This suggests that subjects having a more outspoken career orientation (managerial or as a professional expert) as well as a clear picture of their ambition to develop their careers over many organizations, also have clear beliefs regarding the personal investments they will make in their job in order to realize their career ambitions.

Although our conclusions are only preliminary, given the single-item measures of Managerial Orientation and Professional Expertise, our results are promising and ask for further examination by using more extensive measures of career orientation. As Freese & Schalk (1996) point out, employees work for different reasons and they value certain aspects of their job accordingly, leading them to develop different psychological contracts. Our results suggest that this already plays a role at the level of prior beliefs of inexperienced graduates regarding their forthcoming employment relationship. In addition to our measure of career orientation (which was more in terms of a global career perspective), more content-oriented career measures (e.g. the ambition to develop one's career in a specific functional domain like finance, human resource management or operations) could also be valuable as predictors of prior beliefs and, consequently, of psychological contracts. The influence of some of the control variables on prior beliefs components also suggests an impact of personal characteristics. The negative influence of Master degree on the Exchange component suggests that students in different master programs differ in their prior beliefs regarding this Exchange component. The negative correlation between master degree and Managerial

Orientation also suggests that subjects' choice for following a particular master program reflects their managerial ambition. This correlation seems very plausible in view of the fact that it were those subjects following a Master of Business Administration, who scored the highest on managerial ambition, compared with students following a Master of Science. This managerial career orientation probably already played a role in students' decision about the master program they wanted to study.

Together, an important contribution of this study is the insight it provides about the origins of the psychological contract. It confirms the general conceptualization of the psychological contract as a mental model representing employees' beliefs regarding the terms of the employment relationship. This mental model already exists to some extent before the employment relationship formally starts. As such, it cannot be conceived of as a « tabula rasa », which will be filled in as the formal employment relationship evolves.

Influence of information conveyed during the recruitment process

Given the small sample size and the single-item measures used, the results on the relationship between information conveyed during the recruitment process and subjects' scores on prior beliefs factors have to be interpreted carefully. However, they provide preliminary evidence for the impact of this information on new recruits' perceptions regarding the terms of their exchange relationship. Within the scope of this research, we could not examine the relative impact of both individual characteristics (career variables) and information conveyed. But our results suggest that the latter does have an impact on how subjects perceive their forthcoming employment relationship. The multiple regression analysis for the Exchange factor also showed an influence of the selection phase on subjects' scores. Subjects who had signed an employment contract at the moment of the survey, scored significantly higher on Exchange than other subjects, meaning that they saw the employment relationship more as an exchange of employer and employee obligations. Together, these findings suggest that the information provided by the organization to the employee must be considered carefully since it affects subjects' beliefs regarding their employment relationship. The results confirm earlier findings by Rousseau (1990) about the relationship between stipulations made during recruitment and new hires' psychological contracts and they are in line with theories and research on unmet expectations and realistic job preview. We conclude that it is an important challenge for HRM to be aware of the – often subtle – influence of messages conveyed during recruitment on new hires' subsequent beliefs and expectations, since those will have an impact on their job satisfaction. They influence the mental model new hires' develop about what they expect to give and receive within their new employment relationship, as explained by social information processing theory (Salancik & Pfeffer, 1978). This mental model will serve as a guideline and frame of reference for their behavior within the organization. They will evaluate the HRM-practices they subsequently experience against this frame of reference. As prior research has shown, the result of these evaluations will determine whether they believe the organization keeps its promises or not, meaning that their psychological contract is being fulfilled or breached. And this will have an impact on their satisfaction and their intent to stay with the organization. Given the organizational needs for competent people, and the high costs of the

recruitment and socialization process, it is a strategic role for HRM to ensure that people enter the organization with realistic prior beliefs that can be fulfilled by fostering a positive psychological contract.

The contributions of this research must be evaluated in light of a few limitations. Firstly, this study was exploratory in nature and it asks for more rigorous measurements of career variables. Since the study was cross-sectional, the investigated relationships can not be considered causal. Cross-validation of our findings using another sample would allow us to further assess the nature of graduates' prior beliefs and the causality of the relationship with career variables. In order to draw any conclusions about the difference between the nature of subjects' prior beliefs and their beliefs after they have entered the employment relationship for a certain period, a follow-up study is necessary and will be carried out during the coming months. Finally, because all data were collected using self-report measures, there is a potential for common method bias in our results.

In summary, this study makes several contributions to theory building on the development of psychological contracts. Our study is one of the scarce attempts to investigate the origins of the psychological contract, in contrast with the major body of research examining the causes and consequences of contract breach. We have attempted to investigate the premise that graduating students already have prior beliefs regarding the employer and employee obligations they expect to be part of their employment relationship with their forthcoming employer and that the nature of these beliefs is related with employees' beliefs regarding the psychological contract. By measuring not mere expectations, but instead beliefs about *obligations*, our measurement of prior beliefs strongly relates to psychological contract measurements. Moreover, this study provides a foundation from which to further develop theory about the development of the psychological contract and the role career variables play in this respect.

Our findings also have practical implications for human resource management. They suggest that organizations sufficiently pay attention to the prior beliefs of graduate newcomers and that they try to make those prior beliefs more explicit through open communication during the recruitment phase. Understanding new employees' perceptions of mutual obligations may be crucial if the organization wants to foster a positive psychological contract with its newly hired employees. Substantial evidence for the detrimental effects of perceived contract breach on employee attitudes and behavior calls employers to care for their employees' expectations and beliefs from the moment that they start their employment relationship. Moreover, assessments of new recruits' career ambitions can help the organization to discuss their career perspectives in light of the possibilities the organization can offer and to develop a mutually understood psychological contract based on this exchange of information and expectations. As we have outlined in the introduction, fostering a positive and mutually understood psychological contract with its employees is a major challenge for organizations considering employees as a critical resource. The costs inherent in recruiting new employees are substantial and in this respect attracting and retaining qualified employees is a major challenge for HRM. In previous research we found that "putting the right

person on the right place” is one of the major domains in which top managers believe that HRM can deliver value to the organization. This not only implies rigorous testing of job candidates’ competencies and personality, but also an exchange of information about what employees can expect to give to and receive from the organization (Guzzo & Noonan, 1994, Makin *et al*, 1996). Clarifying the terms of the exchange relationship is a major step in the development of a mutually understood psychological contract. The results of our study demonstrate that newcomers already have clear beliefs regarding these terms and that these are related to their career ambitions. This means that if human resource professionals want to select the right people, they have to focus on these beliefs during the recruitment process. It also implies that it is relevant to pay attention to job candidates’ career ambitions and to relate these to the opportunities the organization can offer in this respect. Again, by doing this, HR professionals can bring newcomers’ beliefs in line with the organization’s expectations and with the opportunities for career development offered by the organization. Other studies have demonstrated that career development is a major content area of the psychological contract (e.g. Herriot & Pemberton, 1996; Martin, Staines & Pate, 1998). Our study confirms this by showing how newcomers’ career ambitions are related to their beliefs regarding the terms of their psychological contract.

The results of this study have to be viewed in light of the current socio-economic context. Our contemporary labor market is characterized by a shortage of qualified employees and this is even more the case for high-educated graduates like those in our sample (graduating students with a university degree and a Master degree). A majority of these graduates has already signed an employment contract before having formally finished the Master program (i.e. during the final quarter of the year). Organizations are highly active in trying to attract these students and are willing to preserve substantial budgets for ‘marketing’ their company to them. This implies the graduate recruits in our sample are confronted with a tight labor market in which the demand for labor exceeds the supply. This has to be taken into account when interpreting our results since these characteristics of the contemporary labor market may have influenced their expectations and beliefs regarding their forthcoming employment relationship. For instance, it could explain why their beliefs in employer obligations exceeded their beliefs in employee obligations. In economies characterized by a different labor market (where supply of labor exceeds the demand for labor for our subject population), graduate students may have different beliefs regarding the terms of the employment relationship as well as different career ambitions (e.g. a stronger tendency to develop a career within one organization). However, apart from these socio-economic influences, our finding that graduate students already have clear beliefs regarding the terms of their forthcoming employment relationship stays relevant for organizations and it calls organizations to pay attention to these beliefs during the recruitment process.

REFERENCES

- Anderson, N., & Schalk, R. (1998). The psychological contract in retrospect and prospect. Journal of Organizational Behavior, 19, 637-647.
- Anderson, N., & Thomas, H. D. C. (1996). Work group socialization. In M. A. West (Ed.), Handbook of Work Groups (423-450). Chichester : John Wiley & Sons.
- Argyris, C. (1960). Understanding Organisational Behaviour. Homewood : Dorsey Press.
- Blau, P. M. (1964). Exchange and Power in Social Life. New York : John Wiley & Sons.
- Butler, T., & Waldroop, J. (1999). Job sculpting. The art of retaining your best people. Harvard Business Review, September-October.
- Cappelli, P. (Ed.) (1997). Change at Work. Oxford : Oxford University Press.
- Cooper, C. L. (1999). The changing psychological contract at work. European Business Journal, 11(3), 115-118.
- Coyle-Shapiro, J., & Kessler, I. (1998). The psychological contract in the UK public sector : Employer and employee obligations and contract fulfillment. Academy of Management Proceedings, August, San Diego.
- Coyle-Shapiro, J., & Kessler, I. (2000). Exploring employee reciprocity through the lens of the psychological contract. Paper presented at the 15th annual conference of the Society of Industrial and Organizational Psychology, April, New Orleans.
- Denolf, L., Denys, J., De Vos, A., & Buyens, D. (1999). Collectief outplacement gewikt en gewogen. Onderzoek naar de omvang en impact van groepsoutplacement [Collective outplacement evaluated : A study about the use and impact of group outplacement]. Leuven : HIVA.
- Buyens, D. & De Vos, A. (1999), The added value of the HR-department. In C. Brewster & H. Harris (Eds.) International HRM: Contemporary Issues in Europe, pp. 31-47. London : Routledge.
- Dopson, S., & Neumann, J. E. (1998). Uncertainty, contrariness and the double-bind : Middle managers' reactions to changing contracts. British Journal of Management, 9, S53-S70.
- Ebadan, G., & Winstanley, D. (1997). Downsizing, delayering and careers – the survivors' perspective. Human Resource Management Journal, 7(1), 79-91.
- Freese, C., Heinen, J., & Schalk, R. (1999). Organisatieverandering en het psychologisch contract, betrokkenheid en intentie tot verloop bij werknemers in de thuiszorg. Tijdschrift voor Arbeidsvraagstukken, 15(3), 208-218.
- 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. (1997). Closing a new deal : Big deal ! Paper presented at the Eight European Congress on Work and Organizational Psychology. EAWOP, April 1997, Verona-Bussolengo, Italy.

Freese, C., & Schalk, R. (1999). Organisational change and the dynamics of the psychological contract. Paper presented at the Ninth European Congress on Work and Organizational Psychology, EAWOP, May 1999, Espoo, Finland.

Freese, C., Heinen, J., & Schalk, R. (1999). Organisatieverandering en het psychologisch contract, betrokkenheid en intentie tot verloop bij werknemers in de thuiszorg. Tijdschrift voor Arbeidsvraagstukken, 15(3), 208-218.

Guest, D., & Conway, N. (1997). Employee motivation and the psychological contract (Issues in People Management No. 21). London : Institute of Personnel and Development.

Guest, D., & Conway, N. (1998). Fairness at work and the psychological contract (Issues in People Management). London : Institute of Personnel and Development.

Herriot, P. (1992). The Career Management Challenge. London : Sage.

Herriot, P., Hirsch, W., & Reilly, P. (1998). Trust and Transitions : Managing Today's Employment Relationship. Chichester : John Wiley & Sons.

Herriot, P., Manning, W. E. G., & Kidd, J. M. (1997). The content of the psychological contract. British Journal of Management, 8, 151-162.

Herriot, P., & Pemberton, C. (1996). Contracting careers. Human Relations, 49(6), 757-790.

Herriot, P., & Pemberton, C. (1997). Facilitating new deals. Human Resource Management Journal, 7(1), 45-56.

Herriot, P., Pemberton, C., & Hawtin, E. (1996). The career attitudes and intentions of managers in the finance sector. British Journal of Management, 7(2), 181-190.

Ho, V. T. (1999). Psychological contract breach : A study of multiple bases of comparison. Paper presented at the Academy of Management Meeting, August, Chicago.

Johns, T. (1997). Global market leads to new working deal. People Management, 12June, 63.

Kallenberg, A. L., & Reve, T. (1996). Contracts and Commitment : Economic and sociological perspectives on employment relations. Human Relations, 46(9), 1103-1132.

Kotter, J. P. (1973). The psychological contract : Managing the joining-up process. California Management Review, 15(3), 91-99.

Levinson, H., Price, C. R., Munden, K. J., Mandl, H. J., & Solley, C. M. (1962). Men, Management and Mental Health. Cambridge : Harvard University Press.

Lewis-McLear, K., & Taylor, M. S. (1998). Psychological contract breach and the employment exchange : Perceptions from employees and employers. Paper presented at the Academy of Management Meeting, August 1998, San Diego, CA.

Louis, M. R. (1980). Surprise and sense-making : What newcomers experience and how they cope in unfamiliar organisational settings. Administrative Science Quarterly, 25, 226)251.

MacNeil, T. R. (1985). Relational contract : What we do and do not know. Wisconsin Law Review, 483-525.

Makin, P., Cooper, C., & Cox, C. (1996). Organizations and the Psychological Contract. Westport, CT : Praeger.

March, J. G., & Simon, H. A. (1958). Organizations. New York : Wiley.

Martin, G., Staines, H., & Pate, J. (1998). Linking job security and career development in a new psychological contract. Human Resource Management Journal, 8(3), 20-40.

Millward, L. J., & Brewerton, P. M. (2000). Psychological contracts : Employee relations for the twenty-first century ? In C. L. Cooper & I. T. Robertson (Eds.), International review of industrial and organizational psychology (Vol. 15, pp. 1-62). Chichester : John Wiley & Sons.

Mirvis, P. H., & Hall, D. (1994). Psychological success and the boundaryless career. Journal of Organizational Behavior, 15, 365-380.

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.

Porter, L. W., Pearce, J. L., Tripoli, A. M., & Lewis, K. M. (1998). Differential perceptions of employers' inducements : Implications for psychological contracts. Journal of Organizational Behavior, 19, 769-782.

Porter, L. W., & Steers, R. M. (1973). Organizational, work and personal factors in employee turnover and absenteeism. Psychological Bulletin, 80, 151-176.

Premack, S. L., & Wanous, J. P. (1985). A meta-analysis of realistic job preview experiments. Journal of Applied Psychology, 70, 706-719.

Rajan, A. (1997). Employability in the finance sector : Rhetoric vs reality. Human Resource Management Journal, 7(1), 67-78.

Robinson, S. L. (1996). Trust and breach of the psychological contract. Administrative Science Quarterly, 41, 574-599.

Robinson, S. L., Kraatz, M. S., & Rousseau, D. M. (1994). Changing obligations and the psychological contract : A longitudinal study. Academy of Management Journal, 37(1), 137-152.

Robinson, S. L., & Morrison, E. W. (1995). Psychological contracts and OCB : The effect of unfulfilled obligations on civic virtue behavior. Journal of Organizational Behavior, 16, 289-298.

Robinson, S. L., & Rousseau, D. M. (1994). Violating the psychological contract : Not the exception but the norm. Journal of Organizational Behavior, 15, 245-259.

Rousseau, D. M. (1989). Psychological and implied contracts in organizations. Employee Responsibilities and Rights Journal, 2(2), 121-139.

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.

Rousseau, D. M. (1995). Psychological Contracts in Organizations. Understanding Written and Unwritten Agreements. Thousand Oaks, CA : Sage.

Rousseau, D. M., & Tijoriwala, S. A. (1998). Assessing psychological contracts : Issues, alternatives and measures. Journal of Organizational Behavior, 19, 679-695.

Schalk, R., & Freese, L. (1997). New facets of commitment in response to organizational change : Research trends and the Dutch experience. In C. L. Cooper & D. M. Rousseau (Eds.), Trends in Organizational Behavior (Vol. 4, pp. 107-123). New York : John Wiley & Sons.

Schein, E. H. (1978). Career Dynamics : Matching Individual and Organisational Needs. Reading, MA : Addison-Wesley.

Schein, E. H. (1980). Organisational Psychology (3rd ed.). Englewood Cliffs, NJ : Prentice-Hall.

Schein, E. H. (1985). Career Anchors : Discovering Your Real Values. California : University Associates.

Shore, L. M., & Tetrick, L. E. (1994). The psychological contract as an explanatory framework in the employment relationship. In C. L. Cooper & D. M. Rousseau (Eds.), Trends in Organizational Behavior (Vol. 1, pp. 91-109). New York : John Wiley & Sons.

Sparrow, P. R. (1996). Transitions in the psychological contract : Some evidence from the banking sector. Human Resource Management Journal, 6(4), 75-92.

Sparrow, P. (1998). Reappraising psychological contracting : lessons for the field of human resource development from cross-cultural and occupational psychology research. International Studies of Management & Organisation, 28(1), 30-63.

Sparrow, P. R., & Cooper, C. L. (1998). New organizational forms : The strategic relevance of future psychological contract scenarios. Canadian Journal of Administrative Sciences, 15(4), 356-371.

Storey, J., Mabey, C., & Thomson, A. (1997). What a difference a decade makes. People Management, 12 June, 28-30.

Taylor, M., Audia, G., & Gupta, A. (1996). The effect of lengthening job tenure on managers' organizational commitment and turnover. Organization Science, 7(6), 632-648.

Thomas, H. D. C., & Anderson, N. (1998). Changes in newcomers' psychological contracts during organizational socialization : A study of British recruits entering the British Army. Journal of Organizational Behavior, 19, 745-767.

Turnley, W. H., & Feldman, D. C. (1998). Psychological contract violation during corporate restructuring. Human Resource Management, 37(1), 71-83.

Turnley, W. H., & Feldman, D. C. (1999). The impact of psychological contract violations on exit, voice, loyalty, and neglect. Human Relations, 52(7), 895-922.

Turnley, W. H., & Feldman, D. C. (2000). Re-examining the effects of psychological contract violations : unmet expectations and job dissatisfaction as mediators. Journal of Organizational Behavior, 21, 25-42.

Vandenbrande, I. (1999). Het psychologisch contract. Een kritische discussie van het concept en haar operationalisatie. Tijdschrift voor Arbeidsvraagstukken, 15(1), 65-78.

Van Dyne, L., Graham, J. W., & Dienesch, R. M. (1994). Organizational citizenship behavior : Construct redefinition, measurement and validation. Academy of Management Journal, 37(4), 765-802.

Wanous, J. P., Poland, T. D., Premack, S. L., & Davis, K. S. (1992). The effects of met expectations on newcomer attitudes and behaviors : A review and meta-analysis. Journal of Applied Psychology, 77, 288-297.

Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader-membership exchange : A social exchange perspective. Academy of Management Journal, 40(1), 82-111.

TABLE 1
Factor Loadings for the Prior Beliefs Items

Factors	Items	Factor Loading
1. Organizational Support	Employer obligations	
	1. Support and understanding private	.47
	2. Follow up and feedback	.55
	3. Collegiality	.62
	4. Regular performance feedback	.47
	5. Newcomers support	.65
	6. Mentor	.63
	7. Attention by chef	.64
	8. Openness for ideas & initiatives	.60
	Employee obligations	
9. Initiative to meet colleagues	.51	
2. HR Practices	Employer obligations	
	1. Involvement in decisions	.54
	2. Permission to go on leave	.56
	3. Pay for results	.62
	4. Career opportunities	.62
	5. Promotion opportunities	.64
	6. Rapid advancement	
	7. Training opportunities	.41
	8. Management level	.55
	9. Interesting tasks	.56
Employee obligations		
3. Employee commitment	Employer obligations	
	1. Permission to go on leave	.42
	Employee obligations	
	1. Work extra hours	.45
	2. Working during free time	.80
	3. Working at home	.78
4. Follow up professional literature	.47	
5. Build up credibility	.45	

	6. High investment	.40
<hr/>		
4. Exchange	Employer obligations	
	1. Permission to go on leave	.44
	2. Informal relationship	.74
	3. Economic advantages	.40
	4. Stable work environment	.61
	Employee obligations	
	5. Work extra hours	.62
	6. Flexible work hours	.48
<hr/>		

TABLE 2
Descriptive Statistics and Correlations of Prior Belief Scales, Career Variables, and Demographic Variables

Scale / Variable	Means	S.D.	α	1	2	3	4	5	6
1. Organiz. Support	5.44	0.69	.86						
2. HR practices	5.67	0.66	.84	.63**					
3. Employee commitm.	5.11	0.72	.69	.23**	.28**				
4. Exchange	4.47	0.78	.65	.19	.15	.52**			
5. Careerism	4.68	0.96	.71	.18	.03	.26**	.19*		
6. Management orient.	5.49	1.31		.03	.29**	.49**	.44**	.01	
7. Professional orient.	5.09	1.39		.31**	.21**	.29**	.18*	-.06	.17
8. Gender	0.59	0.49		.04	-.02	-.24**	-.44**	-.05	-.38**
9. Age	23.31	1.59		.02	.21**	.10	.20*	-.18	.25**
10. Master degree	3.08	1.76		.09	-.10	-.20	-.43**	.02	-.46**
11. Selection phase	2.06	1.53		-.01	-.07	.14	-.38**	.15	-.39**
12. Work experience	0.13	0.34		-.12	.13	-.02	-.17	-.30**	-.03

	7	8	9	10	11	12
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.	-.03					
9.	.00	-.14				
10.	.11	.45**	-.34**			
11.	-.04	.35**	-.34**	.65**		
12.	.08	.02	.56**	-.03	-.01	

* $p < .05$

** $p < .01$

TABLE 3
Results of Regression Analyses

Organizational Support Component of Prior Beliefs

Predictors	Step 1	Step 2
Control variables		
Gender	-.012	.042
Age	.168	.200
Degree	.239	.185
Selection Phase	-.108	-.111
Work experience	-.192	-.197
Independent variables		
Careerism		.184
Management orientation		-.036
Professional expertise		.301**
Adjusted R^2	-.008	.081
F ratio	.833	2.227*
ΔR^2		.110
F for ΔR^2		4.416**

HR Practices Component of Prior Beliefs

Predictors	Step 1	Step 2
Control variables		
Gender	.039	.098
Age	.168	.160
Degree	-.114	-.098
Selection Phase	.067	.121
Work experience	.051	.045
Independent variables		
Careerism		.052
Management orientation		.220*
Professional expertise		.166
Adjusted R^2	.002	.058
F ratio	1.036	1.858
ΔR^2		.080
F for ΔR^2		3.125*

Employee Commitment Component of Prior Beliefs

Predictors	Step 1	Step 2
Control variables		
Gender	-.150	-.034
Age	-.172	-.179
Degree	-.102	-.028
Selection Phase	-.150	-.131
Work experience	.246*	.278**
Independent variables		
Careerism		.291**
Management orientation		.357***
Professional expertise		.246**
Adjusted R^2	.072	.332
F ratio	2.720*	7.904***
ΔR^2		.267
F for ΔR^2		14.777***

Exchange Component of Prior Beliefs

Predictors	Step 1	Step 2
Control variables		
Gender	-.294**	-.234**
Age	.059	.054
Degree	-.317*	-.275*
Selection Phase	-.079	-.070
Work experience	-.098	-.080
Independent variables		
Careerism		.149
Management orientation		.191*
Professional expertise		.117
Adjusted R^2	.344	.401
F ratio	12.661***	10.285***
ΔR^2		.070
F for ΔR^2		4.333**

* $p < .05$

** $p < .01$

*** $p < .0001$

TABLE 4

Correlations between Promises and Expectations Conveyed during Recruitment and Prior
Belief Factors

	Organizational Support	HR Practices	Employee Commitment	Exchange
Promises				
Management function	-.197	.165	-.027	-.055
Pay for results	.145	.196	.252	.232
Training possibilities	-.158	-.138	-.093	-.023
Performance feedback	.254	.266	.041	-.019
Promotion	-.024	.078	-.050	.108
Mean	-.122	-.024	-.047	0.13
Information on:				
Career development system	-.087	.037	-.091	-.160
Compensation & benefits	.085	.133	.185	.163
Appraisal system	.124	.323*	.083	.070
Training policies	.027	.158	.016	.028
Expectations				
Work extra hours	.287*	.089	.332*	.455**
Personal training initiatives	.293*	.105	.134	.368**
Stay	-.038	-.130	-.081	-.159
Accept other jobs	-.158	.119	-.069	-.183
Performance above norm	.023	-.154	-.027	-.013
Mean	.132	.021	.097	.143

** Correlation is significant at the .01 level (2-tailed)

* Correlation is significant at the .05 level (2-tailed)



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