



FACULTEIT ECONOMIE
EN BEDRIJFSKUNDE

HOVENIERSBERG 24
B-9000 GENT

Tel. : 32 - (0)9 - 264.34.61
Fax. : 32 - (0)9 - 264.35.92

WORKING PAPER

Information seeking about the psychological contract: The impact on newcomers' evaluations of their employment relationship

Ans De Vos¹

Dirk Buyens²

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¹ HRM Centre, Vlerick Leuven Gent Management School

² Faculty of Economics and Business Administration, Ghent University, & Vlerick Leuven Gent Management School

The research reported in this paper was part of the doctoral dissertation of the first author, who was at that time a doctoral student at the Faculty of Economics and Business Administration of Ghent University. This paper is currently under review for publication in an international journal. Please address all correspondence to Ans De Vos, Vlerick Leuven Gent Management School, Reep 1, , B-9000 Gent, Belgium. Phone: ++32 9 210 97 38, fax: ++32 9 210 97 57. E-mail ans.devos@vlerick.be.

Abstract

Both socialization and psychological contract literature demonstrate that the first months of employment are critical for the development of a positive psychological contract with organizational newcomers (e.g. Bauer et al., 1994; Robinson et al., 1994; Thomas & Anderson, 1998). For this reason, it is the objective of this study to explicate newcomers' psychological contract perceptions and evaluations during the socialization process, using information seeking as the central antecedent variable. Based upon socialization and psychological contract literature, hypotheses are formulated that address the relationship between newcomer information seeking and (1) changes in newcomers' perceptions of promises exchanged with their employer, and (2) newcomers' evaluations of their employment relationship one year after entry. To test our hypotheses, a four-wave longitudinal survey among 333 newcomers has been conducted, covering the first year of their new employment relationship. These newcomers, all white-collar level, belonged to six large organizations located in Belgium. Data collections took place at four moments: (T1) at entry, (T2) three months after entry, (T3) six months after entry, and (T4) one year after entry.

Results suggest that during the socialization process newcomers change their perceptions of promises but that, contrary to our expectations, these changes are not related to their information-seeking behaviors. On the other hand, and in line with our hypotheses, the frequency of contract-related information seeking during the socialization process significantly affects newcomers' evaluations of their employment relationship one year after entry. Newcomers who engage more frequently in information seeking make up a more positive evaluation of psychological contract fulfillment and they are also more satisfied with their employment relationship in general. Our findings are discussed in view of the available literature on newcomer socialization and psychological contract development and implications for theories on psychological contract development are drawn.

Introduction

Both socialization and psychological contract literature demonstrate that the first months of employment are critical for the development of a positive psychological contract between employer and employee (e.g. Bauer et al., 1994; Robinson, Kraatz & Rousseau, 1994; Thomas & Anderson, 1998). Psychological contracts are defined as the beliefs employees hold about the terms and conditions of the exchange agreement between themselves and their organizations (Rousseau, 1989). Most prior research has focused on employees' perceptions of and responses to psychological contract breach (e.g. Conway & Briner, 2002; Lester *et al.*, 2002; Robinson & Morrison, 1995; 2000; Turnley *et al.*, 2003). The results show that employees' evaluations of their psychological contracts affect important employee attitudes and behaviors like commitment, turnover and organizational citizenship behaviors (e.g. Conway & Briner, 2002; Lester, Turnley, Bloodgood & Bolino, 2002; Robinson & Morrison, 1995; Turnley & Feldman, 1999, 2000). These findings, which relate to the consequences of the psychological contract, call for research into its formation (Rousseau, 2001).

Socialization research has shown that managing the psychological contract is especially important when introducing new employees in the organization (Thomas & Anderson, 1998). 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; Robinson, Kraatz & Rousseau, 1994). For this reason, understanding newcomers' expectations and beliefs about the terms of their employment relationship can provide important information for the development and implementation of effective HR-policies for new employees. In view of the economic and human costs associated with the premature departure of new hires, obtaining more insight in the issue of psychological contract formation is not only interesting from a scientific point of view, but also highly relevant from a practical standpoint.

For this reason, it is the objective of this study to explicate newcomers' psychological contract perceptions and evaluations during the socialization process, using information seeking as the central antecedent variable. Based upon socialization and psychological contract literature, hypotheses are formulated that address the relationship between newcomer information seeking and (1) changes in newcomers' perceptions of promises exchanged with their employer, and (2) newcomers' evaluations of their employment relationship one year after entry.

Psychological Contract Development during the Socialization Process

The psychological contract as a cognitive schema of the employment relationship

The conceptualization of the psychological contract is embedded in theories on social schemas (Morrison & Robinson, 1997; Rousseau, 1995; 2001; Shore & Tetrick, 1994). A schema is defined as a cognitive structure that represents organized knowledge about a given stimulus – a person or situation – as well as rules that direct information processing (Fiske & Taylor, 1984). Schemas typically affect the perception of incoming information, the retrieval of stored information, and inferences based on that information (Fiske & Taylor, 1984). In this respect, the psychological contract is conceived as a type of schema that individuals hold regarding their employment relationship. It is an individual's belief structure of what is expected to occur in the organization and what is expected of him/her in return (Rousseau, 1995; 2001; Shore & Tetrick, 1994). This schema helps an individual to define what the employment relationship entails, and it guides the interpretation and recollection of promises exchanged during the employment relationship. It means that these promises have no objective meaning but that they are perceptions of what was conveyed and what was meant (Rousseau, 1995). It also means that information obtained within the work environment will affect employees' psychological contract schemas.

Changes in newcomers' psychological contracts

Although researchers agree about the conceptualization of the psychological contract as a mental schema of the employment relationship, little is known about how employees develop this schema as from the beginning of their employment relationship. Within the psychological contract literature, only two studies have been published that have empirically addressed psychological contract formation (Robinson *et al.*, 1994; Thomas & Anderson, 1998). First, Robinson *et al.* (1994) found that during the first two years after entry, newcomers increased their perceptions of promises about employer inducements while they decreased their perceptions of promises about their own contributions. Second, Thomas & Anderson (1998) have explained changes in newcomers' psychological contracts from a socialization perspective, i.e. by relating these changes to information acquisition. These authors found significant effects of information acquired about social and role knowledge on changes in newcomers' expectations about employer inducements during the first eight weeks after entry. More specifically, social knowledge significantly affected changes in expectations about job security and family effects while role knowledge significantly affected changes in expectations about social/leisure aspects. These results suggest that information obtained by

newcomers during the socialization process, i.e. information about their work environment and their role within it, increases newcomers' expectations about employer inducements. These findings suggest that knowledge plays a role in psychological contract development. This relates psychological contract research to the socialization literature. It implies that information seeking (as a process leading to increased knowledge) is not only relevant to study socialization outcomes, but that it is also a relevant variable to study psychological contract formation (Rousseau, 1995, 2001; Shore & Tetrick, 1994). In this way, theories on schema development and socialization theories are integrated in the conceptualization of psychological contract formation.

The role of information seeking in newcomer adjustment

Within the socialization literature the newcomer is conceived as an active agent, seeking and processing relevant socialization information (Bauer, Morrison & Callister, 1998; Miller & Jablin, 1991; Morrison, 1993a; 1993b; Ostroff & Kozlowski, 1992). Information seeking enables newcomers to reduce uncertainty and thereby to understand and master their new environment (Morrison, 1993a). Newcomers use information-seeking strategies in order to obtain previously unknown information on a range of issues regarding their new job role and the organizational setting (Louis, Posner & Powell, 1983; Morrison, 1993a; 1993b; Ostroff & Kozlowski, 1992). Research has shown that newcomer information seeking facilitates adjustment to the organization. For example, Ashford (1986) and Ashford & Cummings (1985) both found a positive correlation between frequency of feedback seeking and role clarity. Empirical evidence also exists for a positive relationship between frequency of newcomer information seeking and satisfaction (Morrison, 1993a; Ostroff & Koslowski, 1992; Saks & Ashforth, 1997), performance (Morrison, 1993b; Saks & Ashforth, 1997), and commitment (Ostroff & Koslowski, 1992; Saks & Ashforth, 1997). A negative relationship has been observed between frequency of information seeking and intentions to leave the organization (Morrison, 1993a; Ostroff & Koslowski, 1992; Saks & Ashforth, 1997). Finally, Saks & Ashforth (1997) found a negative relationship of information seeking with anxiety and with actual turnover. In addition to these more distal outcomes, information seeking has been found to affect task mastery (Morrison, 1993a ; Saks & Ashforth, 1997) and role clarity (Morrison, 1993a).

At the theoretical level, psychological contract researchers have proposed that newcomers also seek information allowing them to understand the terms of their psychological contract (Rousseau, 1995; Shore & Tetrick, 1994). The study conducted by

Thomas & Anderson (1998) is a first empirical confirmation of this thesis. Exchange of information about the psychological contract should contribute to a more realistic understanding of the terms of the employment relationship, thereby reducing the likelihood of perceived contract breach over time (Herriot & Pemberton, 1996; Herriot *et al.*, 1998; Shore & Tetrick, 1994).

Hypotheses

Relationship between information seeking and changes in psychological contract perceptions

According to Rousseau (1995), information seeking enhances the development of a realistic psychological contract because newcomers who actively search for information about what they can expect of their organization, bring their expectations better in line with reality based on this information. This implies that information seeking about the psychological contract should be related to changes in perceived promises over time.

Hypothesis 1: There will be a significant relationship between newcomer information seeking and changes in perceived promises over time.

Relationship between information seeking and evaluations of the employment relationship

Research on newcomer information seeking has shown that information seeking positively affects newcomer adaptation (e.g. Morrison, 1993b; Saks & Ashforth, 1997). Based upon this information we expect that newcomer information seeking will be positively related to newcomers' evaluations of their employment relationship. We propose that newcomers who spend more time seeking information about what they can expect of their employer will be less likely to discover after some time that their expectations do not match with reality and thus there is less risk for disappointments. More specifically, we focus on the following outcome variables: (1) newcomers' evaluations of psychological contract fulfillment, (2) their feelings of met expectations, and (3) general satisfaction with their employment relationship. We make no predictions of causality within or across single time periods but we expect that over time, contract-related information seeking will influence newcomers' psychological contract evaluations and their general evaluations of the employment relationship.

Hypothesis 2: The frequency of information seeking about the psychological contract will be related to newcomers' evaluations of their employment relationship.

Hypothesis 2A: There will be a positive relationship between the frequency of newcomer information seeking and evaluations of psychological contract fulfillment after one year.

Hypothesis 2B: There will be a positive relationship between the frequency of newcomer information seeking and feelings of met expectations after one year.

Hypothesis 2C: There will be a positive relationship between the frequency of newcomer information seeking and general satisfaction after one year.

Method

Sample and procedure

The respondent population for this study consisted of 975 newcomers from six large private firms in Belgium. These firms represent four industries (telecommunication, electronics, consulting and financial services). In each of these organizations, all newcomers who had been hired with a permanent employment contract were contacted and invited to participate in the study. Participation was voluntary and complete anonymity was formally guaranteed by the researchers and by the organization. Employees were informed about the study during the orientation training day in four of the firms, whilst in the other two firms (who had no formal orientation training for newcomers) they were informed by the recruitment specialist when signing their contract. Written surveys were used to collect data at four measurement occasions, covering the first year of the employment relationship. The timing of the four surveys was as follows: during the first 2 weeks after entry (T1), three months after entry (T2), six months after entry (T3), and twelve months after entry (T4). These causal lags were selected based upon socialization literature suggesting that three months, six months and twelve months after entry are meaningful intervals in the socialization period (Bauer *et al.*, 1998).

All questionnaires were sent by mail to potential respondents, together with a letter providing clarifications about the research and a pre-stamped return envelope addressed to the researchers. 720 newcomers filled out the first questionnaire, representing a 74 percent response rate. The final sample consisted of 333 participants. These represent 34 percent of the originally contacted sample and 46 percent of the respondents at T1. Mean age of respondents was 26.96 years (S.D. = 5.77) and 35 percent were female. For 40.2 percent of the respondents, this was their first job. Comparison of newcomers who participated in the full study with those who stopped their participation on demographic characteristics and study variables did not show significant differences as a function of subject dropout.

Measures

Information seeking was assessed at T1, T2, T3 and T4. Psychological contract perceptions were assessed at T1, T3 and T4. Outcome variables (psychological contract evaluations, met expectations and satisfaction) were assessed at T4. Commensurate measures were used for assessing information seeking, perceived promises and evaluations of promise fulfillment. These measures focused on five content dimensions of employer inducements (career development, job content, social atmosphere, financial rewards, work-life balance). The content dimensions and the items retained to assess them were selected based upon previous work by Coyle-Shapiro & Kessler (1998; 2000), Freese & Schalk (1996), Herriot *et al.* (1997), and Rousseau (1990; 1998).

Information seeking. The assessment of information seeking about the psychological contract is based upon existing scales developed within the socialization literature (Ashford, 1986; Morrison, 1993a; 1993b; Ostroff & Koslowski, 1992). We rephrased the subject of information seeking referred to within existing scales to the five types of employer inducements. Subjects received a short description of these types of inducements and they were asked to indicate the frequency with which they had engaged in 9 information-seeking activities in order to obtain more information about what they could expect of their employer with respect to each inducement during the previous four-week period. All responses were on five-point scales (1 = *never*; 2 = *once or twice a month*; 3 = *once a week*; 4 = *a few times a week*; 5 = *almost daily*). The nine information-seeking strategies were selected based upon prior work of Ashford (1986) and Morrison (1993a; 1993b): (1) talk with your supervisor; (2) talk with your mentor; (3) talk with more senior colleagues; (4) talk with other new hires; (5) talk with senior managers; (6) talk with people from the HR-department; (7) observation of what others receive; (8) paying attention to what colleagues expect; (9) consultation of written material. For each type of employer inducements, the responses for the 9 information-seeking activities were aggregated.

Perceived employer promises. At T1 respondents were asked to indicate the extent to which their employer has made promises to them – implicitly or explicitly – about each of the 19 inducements listed. At T3 and T4 the instruction was slightly changed in order to assess respondents' perceptions of employer promises at that point in time: "Now that you have several months of experience in your new job, please indicate to which extent, based upon the knowledge you have now, you currently believe that the items listed are promises your employer has made to you". Answers were given on a five-point scale ranging from 'not promised at all' to 'promised to a very great extent'.

Perceived fulfillment of employer promises was measured at T4 by asking participants to indicate the extent to which they believe their organization fulfills its initial promises using a 5-point Likert scale ranging from ‘promise not at all fulfilled’ to ‘promise exceeded. In addition to this, respondents could also circle the alternatives ‘promise never made’ (0) or ‘too soon to evaluate’ (9). These were regarded as non-response in later analyses.

Met expectations. Our measure of met expectations (T4) consisted of two items and was based on Buckely *et al.* (1998). The items are: “To which extent does this job correspond with what you expected?” and “To which extent does working for this organization correspond with that you had expected?” The five-point rating scale ranged from (1) = “not at all” to (5) = “to a very great extent”.

Satisfaction. The items used to measure satisfaction (T4) are the following: “Overall, how satisfied are you with your job?”, “Overall, how satisfied are you with your organization?”, and “To which extent is this your dream job?”. The five-point rating scale ranged from (1) = “Not at all” to (5) = “To a very great extent”.

Analytical Choices

We used latent growth modeling (LGM) to test our hypotheses. LGM has gained widespread acceptance as a potentially powerful approach to the description, measurement, and analysis of longitudinal data, also in the area of industrial and organizational psychology (Chan, 1998; Chan & Schmitt, 2000; Lance, Vandenberg & Self, 2000). The task in latent growth analysis involves identifying an appropriate growth curve form that accurately and parsimoniously describes intraindividual change over time (at the aggregate level of analysis) and allows the examination of interindividual differences in the parameters (intercept and shape) that control the pattern of intraindividual change over time (at the individual level of analysis) (Chan & Schmitt, 2000).

The two important attributes of an individual’s change trajectory or growth curve are the intercept factor and the shape factor. The intercept factor mean corresponds to the initial status of the variable, that is, the value of the variable at the point when it was measured a first time. It estimates the outcome variable when the change trend is equal to zero. The variance of the intercept factor represents interindividual differences in initial status. The shape factor corresponds to the rate of change in the focal variable, that is the rate of increase or decrease over time. The mean of the shape factor represents the mean rate of change in the focal variable while the variance of the shape factor represents interindividual differences in this rate of change.

All latent growth models were fitted through structural equation modeling conducted with the AMOS 4.1 program (Arbuckle, 1999). Based on the recommendations formulated by Vandenberg & Lance (2000) we used three indices in addition to the χ^2 and χ^2/df statistics to assess model fit: (a) root mean square error of approximation (RMSEA); (b) Bentler's (1990) comparative fit index (CFI); (c) Tucker-Lewis index (TLI). RMSEA values above 0.08 were taken to indicate poor fit. For CFI and TLI values of .90 were viewed as a lower bound of good fit with values above .95 as an indication of good fit (Vandenberg & Lance, 2000).

Before testing our hypotheses we assessed whether information seeking and perceived promises changed significantly over time. This was done by fitting univariate growth models for each of the information seeking variables and each of the perceived promises variables (Chan, 1998). In a second step we assessed cross-domain associations between information seeking and perceived promises. This was done by fitting a multivariate latent growth model for each of the five types of employer inducements (Chan, 1998; Chan & Schmitt, 2000). In a third step we modeled outcomes of the fitted growth models for information seeking. These models are called conditional growth models (Chan, 1998).

Results

The descriptive statistics for information seeking and perceived promises at each date collection are presented in Table 1. Table 2 contains the mean scores for outcome variables measured at T4. In the interest of space, the correlation matrix for all study variables is not reported here but can be obtained from the first author on request. All study variables had sufficient to high reliabilities. For information seeking, reliabilities ranged from .65 to .79. For perceived promises, they ranged from .63 to .91. The reliability of the evaluation of promises was between .80 and .91. The reliability coefficients of the met-expectations and satisfaction scales were .80 and .78 respectively.

- Insert Table 1 and Table 2 about here -

Univariate growth curves for information seeking and perceived promises

We always estimated and compared three models: (1) an optimal growth model, (2) a linear growth model, and (3) a no growth model. In the optimal growth model the loading from the shape factor to the focal variable at the third measurement occasion was freely estimated while in the linear model this loading was fixed to specify a straight line growth over the three or four time points. The no growth model specifies that no growth occurred at all over time (i.e., a horizontal trajectory), by constraining all shape parameters to zero. This

model is the most restricted model. Both the linear and no growth model are nested under the optimal growth model. We used the $\chi^2_{\text{difference}}$ test to assess whether these more restricted models lead to a significant decrease in model fit. The growth model that most parsimoniously described changes over time was retained if the estimated parameters reflected the observed means and variances sufficiently. If a model is a good representation of the data then the intercept factor mean should correspond approximately to the observed mean at initial status, while the sum of the intercept factor mean and the product of the shape factor mean with its loading on the last time point should approximately correspond to the observed mean at the last time point (Chan, 1998). All models were estimated using the composite scales, whereby error variances were constrained to be equal over time.

Information seeking. Univariate latent growth models were fitted separately to each of the five information seeking variables. In Table 3 the model fit indices for the alternative growth models are summarized. As can be seen from this table, the no-growth model always leads to a significant decrease in model fit compared to the optimal growth model. This suggests that there are changes in the frequency of information seeking about each of the five types of employer inducements. The $\chi^2_{\text{difference}}$ test also indicates that the optimal growth model fits the data significantly better than the linear growth model. The only exception are changes in information seeking about financial rewards. Based on the statistical information the linear model should be retained. However, the observed means at the four time points (cf. Table 1) suggest that a linear change model does not correspond well with the observed data. Because the shape factor mean for financial rewards turned out to be non-significant for each of the fitted growth models, indicating that no changes take place over time, the no-growth model was retained.

The growth parameters for the retained models are represented in Table 4. As can be seen from Table 4 the shape factor mean is significant and negative for information seeking about career development, job content, social atmosphere and work-life balance. This means that over time there is a decrease in the frequency with which newcomers search for information about these types of inducements. The shape factor variances are also significant, except for work-life balance, suggesting that interindividual differences exist with respect to the rate of decrease in newcomer information seeking over time.

Perceived promises. The model fit indices for the three fitted growth models are presented in Table 5. With the exception of career development, the restrictions implied by the no-growth model always lead to a significant decrease in model fit compared to the

optimal growth model. Based on the $\chi^2_{\text{difference}}$ test the no-growth model was retained for career development. This means that during the first year of employment newcomers' perceptions of employer promises relating to career development did not change to a significant extent. For promises relating to job content, social atmosphere and work-life balance the optimal growth model was retained. For financial rewards the no-growth model was retained. In Table 6 the growth parameters for the retained growth models are summarized. Inspection of growth parameters shows that the shape factor mean is significant and positive for employer promises relating to job content, social atmosphere and work-life balance. This indicates that, over time, the extent to which newcomers believe the organization has made promises about these inducements increases. The shape factor variance is also significant for these inducements, indicating that newcomers differ in their rate of increase in perceived employer promises.

Associations between changes in information seeking and changes in perceived promises.

To test Hypothesis 1, cross-domain associations between the latent growth models for information seeking and perceived promises were fitted. For each of the five types of inducements we simultaneously fitted the change trajectory of information seeking and the change trajectory of perceived promises and we assessed the relationship between both variables' intercept and shape factors. The global fit indices for these models are represented in Table 7. The multivariate models continued to show good model fit. Table 8 contains the latent correlations among growth parameters of information seeking and perceived promises for each type of employer inducements. As can be seen from Table 8, there is always a significant and positive association between the intercept factor for information seeking and the intercept factor for perceived promises. This suggests that at entry, newcomers who believe more promises have been made by their employer, also engage more frequently in information seeking about these promises. The association between the change factors of information seeking and perceived promises is never significant. The latter implies that Hypothesis 1, in which we stated that rates of changes in information seeking would be associated with rates of changes in perceived promises, is not confirmed by our data.

Relationship between information seeking and evaluations of the employment relationship

In a third step we assessed the relationship between information seeking and newcomers' evaluations of their employment relationship one year after entry (Hypothesis 2).

Influence of Information Seeking on Evaluations of Employer Inducements. First, we examined associations between information seeking and newcomers' evaluations of employer promise fulfillment relating to each of the five types of employer inducements. Conditional growth models were fitted, departing from the univariate growth models for each of the five information seeking variables. Following the procedure prescribed by Chan (1998) the univariate growth model that best described the change trajectory in information seeking was respecified to include the evaluation of promise fulfillment as an outcome variable. For career development, job content, social atmosphere and work-life balance we departed from the optimal growth model. Because there were no significant interindividual differences in rate of change for information seeking about work-life balance the structural effects from the shape factor to both outcome variables were fixed at zero (Chan & Schmitt, 2000). For financial rewards, we departed from the no-growth model and we only assessed the relationship between the initial status factor (intercept) and outcome variables; all parameters relating to the shape factor were fixed at zero. All five respecified growth models continued to provide a good fit, as can be seen from Table 9. Table 10 presents, for each type of employer inducements, the standardized structural parameter estimates of the direct effects from the growth factors of information seeking to the outcome variable (evaluation of promise fulfillment). The structural effects from the intercept factor of information seeking about career development, job content and social atmosphere on the evaluation of promise fulfillment were significant. This indicates that for these inducements, individuals who showed more information-seeking behaviors at entry were more positive about what they received from their organization after one year. For financial rewards and work-life balance the intercept factors had no significant impact. The effects of the shape factors (if not fixed at zero) were non-significant for all types of inducements. Thus, the rates of changes in information seeking during the first year after entry had no significant impact on the evaluation of promise fulfillment one year after entry.

Impact of Information Seeking on General Evaluations and Satisfaction. To assess the impact of information seeking on newcomers' global evaluations of their employment relationship the fitted univariate growth models for the five information seeking variables were respecified to include the following outcome variables: general evaluation of promise fulfillment, satisfaction, and met expectations. Table 11 presents, for each information seeking variable, the standardized structural parameter estimates of the direct effects from the growth factors to the three outcome variables. There are significant effects from the intercept factor of information seeking about job content and social atmosphere on each outcome

variable. Again the effects of the shape factors (if not fixed at zero) were non-significant for all types of inducements. Thus, Hypothesis 2 was partially confirmed.

Discussion

As to date, numerous studies have shown the importance of the psychological contract in explaining work-related attitudes and behaviors. However, our knowledge about the factors contributing to psychological contract formation is still in a preliminary phase. With this study it was our aim to provide a contribution to improving our understanding of psychological contract formation. More specifically, we addressed the role of information seeking in psychological contract development. Based on a four-wave longitudinal study among a sample of organizational newcomers we assessed the relationship between information seeking about the psychological contract and (1) changes in newcomers' psychological contract perceptions over time (2) newcomers' evaluations of their employment relationship one year after entry.

We evaluated our hypotheses using latent growth modeling. Existing longitudinal studies on psychological contracts (Robinson *et al.*, 1994; Thomas & Anderson, 1998), as well as most longitudinal studies on newcomer socialization (e.g. Morrison, 1993a; 1993b; Ostroff & Koslowski, 1992; Saks & Ashforth, 1997) have examined change at the aggregate level. This type of analysis provides information on the amount of change for a group of newcomers but it does not provide an adequate conceptualization and analysis of intraindividual changes over time. In other words, it cannot answer questions concerning the form of the intraindividual change trajectory or about interindividual differences at initial status and in the rate of intraindividual change (Chan & Schmitt, 2000).

Building on Chan & Schmitt's (2000) attempt to model newcomer information seeking and adaptation during organizational socialization, we first investigated univariate changes in newcomers' perceived promises and contract-related information seeking during the first year of employment. The univariate growth models indicate that during the first year of the employment relationship, newcomers increase their perceptions of what their employer owes them. This observation corresponds to the results obtained by Thomas & Anderson (1998) and Robinson *et al.* (1994). With respect to information seeking, the results show a decrease in the frequency of contract-related information seeking. This finding is a first empirical confirmation of one aspect of the theories on psychological contract development proposed by Rousseau (1995) and Shore & Tetrick (1994). These authors argue that information seeking is most frequent during the initial months after entry. They also

correspond to previous findings on changes in the mean level of information seeking reported in the socialization literature (Morrison, 1993a; Ostroff & Koslowski, 1992). This suggests that contract-related information could be added to the categories of information sought by newcomers during socialization. According to Morrison (1993b) over time newcomers become more integrated within the organization and thus decrease their search for information about cultural or normative information; on the other hand they become more concerned with performance evaluations and thus increase their search for feedback. Our results suggest that information about psychological contract terms could be situated within the first category of information types, i.e. information related to the integration of the newcomer in the organization. In summary, our findings support the notion of the psychological contract as a dynamic construct that develops over time as the employment relationships evolves. The fact that we observed changes in psychological contract perceptions supports the assumption that the psychological contract should be differentiated from more stable dispositional characteristics.

Building on existing research within the socialization literature we investigated the relationship between changes in information seeking and changes in psychological contract perceptions over time. According to Rousseau (1995) newcomers will change their perceptions of promises exchanged with the organization as a function of the information they obtain. Multivariate latent growth analyses were performed to explore the possible cross-domain associations between initial status and rate of change in information seeking about five types of employer inducements and initial status and rate of change in perceived promises about these inducements. We only found significant and positive associations between the initial status of both variables. Since these are situated at the same measurement occasion (T1) it is not possible to make a causal interpretation of this finding. Thus, our empirical data provide no evidence for the existence of a relationship between changes in information seeking and changes in promissory beliefs during the socialization process. It might be that the relationship between both variables cannot be conceptualized as a series of lock-step stages but rather as a continuous process that occurs gradually as the employment relationship continues, whereby the accumulation of information seeking over time could affect broad changes in employees' perceived promises.

In a second hypothesis we addressed the relationship between information seeking during the socialization process and newcomers' evaluations of their employment relationship one year after entry. A central assumption in socialization literature is that information seeking about different socialization aspects enhances newcomer adjustment (Bauer *et al.*,

1998; Morrison, 1993b). We proposed that information seeking about the psychological contract would have comparable effects. We therefore examined the relationship between contract-related information seeking about the five dimensions of inducements and newcomers' evaluations of employer promise fulfillment with respect to these inducements one year after entry. In addition, we also examined whether the general effects of information seeking on more distal measures of newcomer adjustment (met expectations, satisfaction) observed by socialization researchers also hold for contract-related information seeking.

Our hypothesis was confirmed for three dimensions of employer inducements, namely career development, job content and social atmosphere. For these dimensions we found that the more frequently newcomers engaged in seeking information, the more positive they were about the extent to which their employer had fulfilled his promises. These results suggest that newcomers socially construct their evaluations of inducements by relying on the information they obtain from organizational insiders or other newcomers. Since this is the first study to investigate the role of contract-related information seeking, we have no direct empirical information to compare our results with. Indirectly our findings are comparable to the results obtained by Morrison (1993a). She found that information seeking about different socialization content areas affected feelings of mastery within these content areas six months after entry. In the same sense, for career development, job content and social atmosphere, our findings suggest that information seeking about these types of inducements enhances newcomers evaluations of these inducements.

The absence of a significant impact of information seeking about financial rewards and work-life balance on the evaluation of these types of inducements could be explained by the fact that these inducements are more material. It is possible that the employment deal is more explicit about them, thereby reducing the explicative power of information seeking. For example, financial rewards tend to be contractually specified and it is the dimension that is included in most conceptions of transactional psychological contracts (e.g. Robinson *et al.*, 1994; Rousseau, 1990). The same reasoning could be made for specifications about working hours and other aspects of work-life balance like holidays. These are often specified within the employment contract. Moreover, at each of the four data collections the mean scores for information seeking about financial rewards and work-life balance were lower than for the other three types of inducements, suggesting that newcomers are less concerned about seeking information about these types of inducements during socialization. In contrast, for career development, job content and social atmosphere the written employment deal probably is more implicit or needs further elaboration and interpretation after organizational entry. This

would thus mean that information seeking is more explicative for those psychological contract dimensions that are more implicit and more subject to social constructions after organizational entry.

We can relate our results to the findings obtained by Thomas & Anderson (1998) on the role of socialization knowledge in psychological contract perceptions. These authors found that knowledge obtained during the socialization process affects changes occurring in newcomers' psychological contract perceptions. More specifically, expectations towards the organization with respect to job security, family effects and social/leisure aspects increased as a function of socialization knowledge. While Thomas & Anderson (1998) addressed more general results of information seeking, i.e. socialization knowledge, we focused on the process of information seeking about specific types of inducements (that is supposed to result in increased knowledge about the content areas about which information is obtained). Comparing their findings with the results of our study, it appears that socialization knowledge is more predictive of changes in perceived promises than the processes of information seeking through which this knowledge is obtained.

Building on socialization literature about the relationship between information seeking about socialization contents and more distal employee attitudes and behaviors (e.g. Morrison, 1993b; Ostroff & Koslowski, 1992; Saks & Ashforth, 1997), we expected that contract-related information seeking would also positively affect these more general measures of newcomer adjustment. More specifically we assessed the impact of information seeking on the general evaluation of promise fulfillment, met expectations and satisfaction one year after entry. Our findings show that only information seeking about job content and social atmosphere has a consistent impact on these more distal outcomes. Again, no significant impact of information seeking about career development, financial rewards and work-life balance was found. When we compare these results with empirical evidence within socialization research, we could explain these differential findings by relating the content areas of the psychological contract to socialization content areas. The content areas of information seeking typically studied within socialization research are technical information, referent information, normative information, performance feedback, and social feedback (Chan & Schmitt, 2000; Morrison, 1993b; Ostroff & Koslowski, 1992; Saks & Ashforth, 1997). Comparing our dimensions of employer inducements with these socialization content areas, although this is a post-hoc comparison, the items we have used to measure job content and social atmosphere are most closely related to these socialization content areas. Within socialization research, technical and social information are considered to be important to the

functioning of the newcomer within the organization. This might explain why these psychological contract dimensions show the strongest and most consistent impact on outcomes. It might be that those newcomers who pay more attention to the opportunities and challenges the organization offers them within their job (i.e. job content) become better informed about the possibilities they have and that this increases the likelihood of a generally positive evaluation of their employment relationship. A related reasoning could be made for social atmosphere: if a newcomer pays more attention to the social relationships at work he or she might be more likely to become integrated within the organizational culture because seeking this type of information could be an indication that the newcomer is concerned with the social aspects of the employment relationship and it could facilitate positive relationships with colleagues. This in turn will give him or her more opportunities to discover the positive aspects the employment relationship. Our findings about the differential relationships between psychological contract dimensions and general evaluations and attitudes could thus be explained by the fact that contract-related information seeking about job content and social atmosphere comes closest to information seeking about socialization knowledge. They show that contract-related information seeking not only affects newcomers' evaluations of promise fulfillment about these dimensions but also their global evaluations of their employment relationship. This brings the impact of contract-related information seeking one step closer to newcomer adjustment as studied within socialization research.

It is also relevant to note that we only found evidence for the intercept factor, i.e. for the frequency of information seeking at organizational entry. No effects for the rate of change in information seeking on outcomes were found. Although the results of the univariate latent growth analyses show that for career development, job content and social atmosphere there are significant interindividual differences in the rate of decrease in information seeking, these differences have no impact on our outcome variables. This suggests that early levels of information seeking rather than changes occurring over time are important in determining psychological contract evaluations, satisfaction and met expectations. This finding seems to confirm the proposition that the early months after entry are most important for newcomer sensemaking (Morrison, 1993a; 1993b; Thomas & Anderson, 1998). The fact that information seeking decreases during the socialization process appears to have no negative effects on psychological contract evaluations.

Limitations

When interpreting our results a number of limitations should be kept in mind, which need further attention in future research. First, despite its many advantages we are aware that a longitudinal research design is not without problems such as testing effects, selection and mortality of subjects (Cook & Campbell, 1979). For example, it is possible that over time subjects became weary of completing multiple surveys or that their responses became biased by communicating about the survey topics with other respondents. Our analyses are only based on those respondents who participated in the full study, and, by implication, those who stayed with the organization during the study period. This limits the generalizability of our findings.

Second, the results of our study should be considered in view of the characteristics of our research sample. This consisted of well-educated, relatively young and inexperienced newcomers from six large profit firms. Although exploratory analyses showed no significant impact of age, experience, hierarchical level, and organizational membership, cross-validation of our findings is important in order to assess whether the relationships we have found also hold within different research populations.

Third, in our study we only focused on newcomers, without considering the organizational viewpoint. In order to more fully understand changes in psychological contract perceptions it is necessary for future research to include the employer perspective. Related to this is the use of self-reports for assessing both dependent and independent variables. Since we were primarily interested in newcomers' perceptions and subjective evaluations of their employment relationship, the use of self-report data is justified. However, this justification does not eliminate the problems of common method variance due to single-source bias, which might have inflated the magnitude of the relationships found. Although the likelihood of common method bias was somewhat reduced by measuring independent and dependent variables at different points in time and by focusing only on the change portions of psychological contract perceptions, future research should supplement self-report measures with data from supervisors, peers or both. The use of self-report measures also might have caused social desirable responses, certainly when measuring employees' evaluations of their own contributions. Therefore our results ask for further validation from research using multiple sources.

Fourth, future research should complement the current findings by assessing more objective factors contributing to changes in newcomers' psychological contract perceptions.

Examples are a change of supervisor or the type of introduction activities put in place by the organization.

Implications

Despite its limitations, this study has a number of practical implications. First, we would recommend that employers attend to newcomers' information-seeking activities regarding their psychological contracts from the initial stage of the employment relationship onwards and that they complement newcomer proactivity with the provision of information. This should encourage the development of a realistic and desirable psychological contract (Thomas & Anderson, 1998). Frequent communication about both employees' and employer's wants and offers is therefore important and should receive permanent attention during the course of the employment relationship.

Conclusion

In conclusion, the findings of this study contribute substantially to the research on psychological contracts. To date the majority of research has focused exclusively on the consequences of the psychological contract. In contrast, this study focused on the important but neglected issue of psychological contract formation. The results show that it is important to view the psychological contract as a dynamic set of expectations in which information seeking plays an important role. These findings suggest interesting and useful implications for future research and for organizational practice.

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Table 1: Descriptives (mean scores and standard deviations) for information seeking and perceived promises variables at each data collection

	Information seeking				Perceived promises		
	T1	T2	T3	T4	T2	T3	T4
Career development	2.12 (.78)	1.99 (.77)	1.94 (.70)	1.91 (.73)	3.87 (.86)	3.83 (.79)	3.89 (.77)
Job content	3.48 (.81)	3.11 (.89)	2.77 (.83)	2.60 (.87)	3.71 (.71)	3.74 (.59)	3.81 (.59)
Social atmosphere	2.73 (.84)	2.47 (.87)	2.32 (.83)	2.20 (.87)	3.39 (.89)	3.50 (.84)	3.48 (.87)
Financial rewards	1.80 (.66)	1.77 (.65)	1.79 (.64)	1.71 (.69)	3.19 (.73)	3.09 (.77)	3.21 (.76)
Work-life balance	2.08 (.71)	1.96 (.71)	1.88 (.71)	1.84 (.76)	3.27 (.81)	3.33 (.83)	3.42 (.79)

Table 2: Descriptives (mean scores and standard deviations) for outcome variables measured at T4

Evaluation of promises	
Career development	2.78 (.88)
Job content	3.27 (.51)
Social atmosphere	3.47 (.84)
Financial rewards	2.77 (.83)
Work-life balance	3.44 (.81)
Global evaluation of promises	3.20 (.76)
Met expectations	3.44 (.75)
Satisfaction	3.65 (.78)

Table 3: Model Fit Indices for Latent Growth Models of Information Seeking about Employer Inducements

	χ^2	df	χ^2/df	Model Comparison	$\Delta\chi^2$	Δdf	TLI	CFI	RMSEA
CAREER DEVELOPMENT									
<i>M1: Optimal Growth</i>	10.767	6	1.794				.997	.998	.049
M2: Linear Growth	32.098*	8	4.012	2 vs. 1	21.331*	2	.990	.992	.095
M3: No Growth	62.780*	11	5.707	3 vs. 1	52.014*	5	.985	.983	.119
JOB CONTENT									
<i>M1: Optimal Growth</i>	11.406	6	1.901				.998	.999	.052
M2: Linear Growth	79.158*	8	9.895	2 vs. 1	67.752*	2	.976	.981	.164
M3: No Growth	347.684*	11	31.608	3 vs. 1	336.278*	5	.919	.911	.304
SOCIAL ATMOSPHERE									
<i>M1: Optimal Growth</i>	9.725	6	1.621				.998	.999	.043
M2: Linear Growth	34.890*	8	4.361	2 vs. 1	25.165*	2	.990	.992	.101
M3: No Growth	142.357*	11	12.942	3 vs. 1	132.632*	5	.963	.960	.190
FINANCIAL REWARDS									
M1: Optimal Growth	3.834	6	0.639				1.001	1.000	.000
M2: Linear Growth	6.164	8	0.770	2 vs. 1	2.330	2	1.001	1.000	.000
<i>M3: No Growth</i>	21.963*	11	1.997	3 vs. 1	18.128*	5	.997	.996	.055
WORK-LIFE BALANCE									
<i>M1: Optimal Growth</i>	5.395	6	0.899				1.000	1.000	.000
M2: Linear Growth	16.717*	8	2.090	2 vs. 1	11.322*	2	.996	.997	.057
M3: No Growth	61.372*	11	5.579	3 vs. 1	55.977*	5	.985	.984	.117

* $p < .05$

Table 4: Growth Parameters Information-Seeking Behaviors (Inquiry) about Employer Inducements

	Growth Model	Mean Intercept	Mean Shape	Variance Intercept	Variance Shape	Covariance I-S
Career Development	Optimal	2.126*	-.070*	.368*	.023*	-.051*
Job Content	Optimal	3.476*	-.180*	.375*	.011*	-.024*
Social Atmosphere	Optimal	2.734*	-.132*	.370*	.011*	-.132*
Financial Rewards	No Growth	1.767*	-	.197*	-	-
Work-Life Balance	Optimal	2.072*	-.051*	.265*	.010	-.019

* $p < .05$

Table 5: Model Fit Indices for Latent Growth Models of Perceived Promises about Employer Inducements

	χ^2	df	χ^2/df	$\Delta\chi^2$	Δdf	TLI	CFI	RMSEA
CAREER DEVELOPMENT								
M1: Optimal Growth	3.209	2	1.604			.999	1.000	.043
M2: Linear Growth	6.658	3	2.219	3.449	1	.998	.999	.061
M3: No Growth	12.501	6	2.084	9.292	4	.998	.998	.057
JOB CONTENT								
M1: Optimal Growth	5.540	2	2.770			.997	.999	.044
M2: Linear Growth	22.595*	3	7.532	17.055*	1	.990	.995	.116
M3: No Growth	41.702*	6	6.950	36.162*	4	.991	.991	.134
SOCIAL ATMOSPHERE								
M1: Optimal Growth	2.230	2	1.115			1.000	1.000	.019
M2: Linear Growth	10.146*	3	3.382	7.917*	1	.996	.998	.085
M3: No Growth	23.008*	6	3.853	20.779*	4	.993	.995	.107
FINANCIAL REWARDS								
M1: Optimal Growth	18.892*	2	9.446			.984	.995	.160
M2: Linear Growth	18.894*	3	6.298	0.002	1	.990	.995	.126
M3: No Growth	30.995*	6	5.159	12.062*	4	.992	.992	.112
WORK-LIFE BALANCE								
M1: Optimal Growth	6.074*	2	3.037			.996	.999	.078
M2: Linear Growth	11.992*	3	3.997	5.918*	1	.994	.997	.095
M3: No Growth	32.625*	6	5.438	26.551*	4	.992	.992	.116

* $p < .05$

Table 6: Growth Parameters for Perceived Promises about Employer Inducements

	Growth Model	Mean Intercept	Mean Shape	Variance Intercept	Variance Shape	Covariance I-S
Career Development	No Growth	3.863*	-	.375*	-	-
Job Content	Optimal	3.712*	.013*	.361*	.005*	-.639*
Social Atmosphere	Optimal	3.391*	.017*	.565*	.005*	-.020*
Financial Rewards	No Growth	3.161*	-	.305*	-	-
Work-Life Balance	Optimal	3.257*	.021*	.465*	.004*	-.014*

* $p < .05$

Table 7: Model Fit Indices for Respecified Univariate Growth Models for Perceived Promises

	χ^2	df	χ^2/df	TLI	CFI	RMSEA
Career Development	39.729*	22	1.806	.997	.997	.049
Job Content	23.791	17	1.399	.999	.999	.035
Social Atmosphere	34.892*	17	2.052	.995	.997	.056
Financial Rewards	70.009**	28	2.500	.993	.993	.067
Work-Life Balance	26.663	17	1.568	.997	.998	.041

* $p < .05$; ** $p < .01$

Table 8: Latent Intercorrelations among Growth Parameters of Information Seeking and Perceived Promises

		1	2	3	4
CAREER DEVELOPMENT	1. Initial Status – IS				
	2. Change – IS	-.556**			
	3. Initial Status – PP	.287**	-.062		
	4. Change – PP	-	-	-	
JOB CONTENT	1. Initial Status – IS				
	2. Change – IS	-.368**			
	3. Initial Status – PP	.169*	-.033		
	4. Change – PP	-.133	.027	-.638**	
SOCIAL ATMOSPHERE	1. Initial Status – IS				
	2. Change – IS	-.316			
	3. Initial Status – PP	.478**	-.315*		
	4. Change – PP	-.255	.259	-.379*	
FINANCIAL REWARDS	1. Initial Status – IS				
	2. Change – IS	-			
	3. Initial Status – PP	.274**	-		
	4. Change – PP	-	-	-	
WORK-LIFE BALANCE	1. Initial Status – IS				
	2. Change – IS	-.327			
	3. Initial Status – PP	.189*	-.043		
	4. Change – PP	-.050	.028	-.312*	

* $p < .05$; ** $p < .01$

Table 9: Model Fit Indices for Respecified Univariate Information Seeking Growth Models (impact of information seeking on evaluations of promise fulfillment)

	χ^2	df	χ^2/df	TLI	CFI	RMSEA
Career Development	11.601	10	1.160	.999	1.000	.022
Job Content	14.792	10	1.479	.998	.999	.038
Social Atmosphere	14.626	10	1.463	.998	.999	.037
Financial Rewards	34.735**	17	2.043	.996	.996	.056
Work-Life Balance	10.105	12	0.842	1.001	1.001	.000

** $p < .01$

Table 10: Standardized Structural Parameter Estimates of Direct Effects from Growth Factors to the Evaluation of Promise Fulfillment

	Evaluation of Promise Fulfillment
CAREER DEVELOPMENT	
Intercept	.183*
Shape	-.075
JOB CONTENT	
Intercept	.179**
Shape	.073
SOCIAL ATMOSPHERE	
Intercept	.226**
Shape	-.037
FINANCIAL REWARDS	
Intercept	-.052
Shape	-
WORK-LIFE BALANCE	
Intercept	.029
Shape	-

* $p < .05$; ** $p < .01$

Table 11: Model Fit Indices for Respecified Univariate Information Seeking Growth Models (impact of information seeking on global evaluations of the employment relationship)

	χ^2	df	χ^2/df	TLI	CFI	RMSEA
Career Development	20.036	14	1.431	.998	.993	.036
Job Content	22.683	14	1.620	.998	.999	.043
Social Atmosphere	27.723*	14	1.980	.996	.998	.054
Financial Rewards	32.115	23	1.396	.998	.999	.035
Work-Life Balance	31.506	20	1.575	.998	.999	.042

* $p < .05$

Table 12: Standardized Structural Parameter Estimates of Direct Effects from Growth Factors to Global Evaluations of Promise Fulfillment, Satisfaction and Met Expectations

	Evaluation of Promise Fulfillment	Satisfaction	Met Expectations
CAREER DEVELOPMENT			
Intercept	.051	.039	.054
Shape	.145	-.005	-.071
JOB CONTENT			
Intercept	.188**	.204**	.160*
Shape	.019	.040	.134
SOCIAL ATMOSPHERE			
Intercept	.199**	.225**	.171*
Shape	-.046	.052	.025
FINANCIAL REWARDS			
Intercept	.020	.068	.010
Shape	-	-	-
WORK-LIFE BALANCE			
Intercept	.020	.068	.010
Shape	-	-	-

* $p < .05$; ** $p < .01$



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