



Balanced versus Unbalanced Psychological Contracts in Temporary and Permanent Employment: Associations with Employee Attitudes

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ABSTRACT This study concerns balance in exchange relationships as described in the psychological contract literature about employees' and employers' promises and fulfilment of these promises. Balance is investigated, firstly, in relation to temporary versus permanent employment and, secondly, in relation to employees' attitudes (fairness, job satisfaction, and intention to quit). Analyses were based on a Dutch sample of 290 temporary and 489 permanent workers. Regarding balance in mutual promises, we found that temporary workers were more likely to have psychological contracts with few mutual promises than permanent workers, while permanent workers were more likely to have psychological contracts with many mutual promises compared to temporary workers. Regarding balance in the fulfilment of promises, we found the opposite pattern, namely, that fulfilment was higher in temporary workers compared to permanent workers. Furthermore, only mutual high fulfilment of promises was associated with higher job satisfaction and fairness and with lower intentions to quit.

KEYWORDS employment relationship, psychological contracts, reciprocity, social exchange, temporary employment

INTRODUCTION

Over the past two decades, the use of temporary employment has increased in most Western countries, including the USA (Kalleberg, Reskin, & Hudson, 2000), the European Union (De Cuyper, Isaksson, & De Witte, 2005), and China (Yang & Zhou, 1999). This development has stimulated a vast number of studies concerning the consequences of temporary employment arrangements for the workers involved. Temporary employment refers to dependent employment of limited duration, as in the case of fixed-term contracts or temporary agency contracts (OECD, 2002). The short duration of temporary employment arrangements has an effect on some of the elements of the traditional open-ended employment

relationship (Ashford, George, & Blatt, 2007; De Cuyper, De Jong, De Witte, Isaksson, Rigotti, & Schalk, 2008a), such as feelings of job insecurity. Little is known, however, about the implications of temporary employment for one of the basic assumptions underlying employment relationships, namely, the norm of reciprocity. The norm of reciprocity defines a social norm through which efforts by one party are reciprocated by a second party to create balance (Wu et al., 2006). Gouldner (1960) suggests that the norm of reciprocity is the basic principle underlying exchanges at work. Theories on exchanges in the employee–organization relationship, such as social exchange theory (Blau, 1964) and psychological contract theory (Rousseau, 1995), for example, emphasize the importance of the norm of reciprocity in predicting employees' attitudes and behaviours.

In this study, we investigate the norm of reciprocity in the context of both temporary and permanent employment, adopting a psychological contract framework. The psychological contract entails perceptions of mutual promises (i.e., employers' promises in exchange for employees' promises or *promise-based exchange*) and the perceived fulfilment of these promises (i.e., employers' fulfilment of promises in exchange for employees' fulfilment of promises or *fulfilment-based exchange*). In particular, we explore temporary versus permanent workers' perceptions concerning both promise-based and fulfilment-based exchange as well as the relationship between these perceptions of exchange and employees' attitudes (in terms of fairness, job satisfaction, and intention to quit). This study contributes to the literature in three ways. First, we address the paucity in research on the exchange underlying the employment relations of temporary workers as compared to permanent workers. Second, we assess whether different types of exchange relate differently to employee attitudes. Third, we investigate both the exchange of promises and the exchange of fulfilment of promises.

THEORETICAL BACKGROUND AND HYPOTHESES

The Psychological Contract: Four Types of Exchanges

Reciprocity is a critical issue in psychological contract research (Rousseau & Tijoriwala, 1998; Tekleab & Taylor, 2003). The psychological contract literature distinguishes between balanced and unbalanced psychological contracts. Under a balanced psychological contract, the 'employee and the employer are perceived to be similarly obligated in the exchange' (Shore & Barksdale, 1998: 732); both parties may perceive having either few or many obligations. A quasi-spot psychological contract involves few obligations, and a mutual high obligation psychological contract involves many obligations by both parties. Conversely, under an unbalanced exchange, 'either the employee or the employer is substantially more obligated than the other actor in the exchange' (Shore & Barksdale, 1998: 732), which portrays a situation of employer under- or over-obligation. In addition to Shore

and Barksdale (1998), the distinction between quasi-spot, mutual high obligation, employer under-obligation, and employer over-obligation was also proposed earlier by Tsui, Pearce, Porter, and Tripoli (1997) and will be used in this study.

However, there are some shortcomings in current conceptualizations of exchanges in the psychological contract. First, most studies focus on employers' psychological contract promises as perceived by the employee (Conway & Briner, 2005; Lambert, Edwards, & Cable, 2003; Porter, Pearce, Tripoli, & Lewis, 1998; Turnley & Feldman, 1999). Few studies have added employees' psychological contract promises, which is a critical condition if the aim is to investigate exchange in psychological contracting.

Second, most studies, such as the study by Tsui et al. (1997) as well as others (Sels, Janssens, & Van den Brande, 2004; Shore & Barksdale, 1998), have focused on the exchange of promises rather than the exchange of fulfilled promises. Many studies, however, have highlighted the critical importance of fulfilment. For example, psychological contract research suggests that outcomes may be more strongly related to the fulfilment of psychological contract promises than to promises per se (Lambert et al., 2003). In particular, the exchange of fulfilled employee and employer promises from the perspective of the employee has mostly been ignored in empirical studies (Lambert, 2007), although some theoretical frameworks do exist, such as equity theory (Adams, 1965), inducement-contribution theory (March & Simon, 1958), and the effort-reward imbalance model (Siegrist, 1996). Furthermore, the relative effect of the exchange of fulfilled promises compared to the exchange of promises has received little attention.

Finally, most studies have focused upon associations between the psychological contract and outcomes. Less known are the antecedents of psychological contracting, especially a comparison of types of workers with respect to their exchange within the psychological contract. As Shore et al. (2004) note, the exchange in 'non-traditional' work relationships is missing in both empirical and theoretical research. The implication is that exchange should be investigated in these types of work relationships as well.

To address these shortcomings, we use employees' perceptions of both employer and employee promises within the psychological contract to define two categories of psychological contract exchanges. *Promise-based exchange* focuses on reciprocal employees' and employers' promises. *Fulfilment-based exchange* is based on the reciprocal fulfilment of these promises. For each exchange, we define the four types of exchanges mentioned above (in line with Shore & Barksdale, 1998; Tsui et al., 1997): (i) the *mutual high obligation psychological contract* concerns many promises or high fulfilment of promises on the part of both employees and employers; (ii) the *quasi-spot psychological contract* concerns few promises or low fulfilment of promises on the part of both employees and employers; (iii) the *employer over-obligation psychological contract* concerns few promises or limited fulfilment on the part of the employee and many promises or high fulfilment on the part of the employer; and (iv) the *employer*

under-obligation psychological contract concerns many promises or high fulfilment on the part of the employee and limited obligation or fulfilment on the part of the employer. These four types exist for both promise-based exchange and fulfilment-based exchange. We investigate these types in relation to temporary versus permanent employment and also in relation to employees' attitudes.

Perceptions of the Psychological Contract by Temporary and Permanent Workers

Promise-based exchange. Rousseau (1995) argues that temporary workers have a more transactional psychological contract, while permanent workers hold a more relational psychological contract. The critical distinction between transactional and relational psychological contracts is that the first focuses on economic exchange of promises and the second on both economic and socio-emotional exchange of promises. This implies that transactional psychological contracts are narrower than relational psychological contracts, i.e., comprising less psychological contract promises on the part of the employer or the employee (McLean-Parks, Kidder, & Gallagher, 1998). In other words, the psychological contracts of temporary workers include fewer promises than those of permanent workers. This assumption has received considerable support where employers' promises are concerned (Chambel & Castanheira, 2006; Coyle-Shapiro & Kessler, 2002a; Van Dyne & Ang, 1998). The economic motives for hiring temporary workers (e.g., reducing labour costs, coping with peaks in production), which translate to more economic or transactional psychological contracts, may be at the root of these findings.

However, little is known about promises made by temporary workers compared with permanent workers. The differences with respect to employee obligations may also be grounded in future employment prospects. On the one hand, temporary workers are likely to invest considerably in the employment relationship with a view toward increasing their chance to transition to permanent employment or in anticipation of a balanced exchange. Given few employer promises, this would indicate a situation of employer under-obligation towards temporary workers. On the other hand, temporary workers are likely to invest less in cases where they do not expect future employment and when the organization does not invest by providing opportunities for further development. This portrays a quasi-spot psychological contract. In contrast, permanent workers may be more likely to have a psychological contract based on mutual high obligation, that is, a psychological contract that reciprocates the organization's intentions to invest in the employee. But the exchange of promises between permanent workers and the organization is not necessarily reciprocal. Permanent workers are frequently regarded as crucial for the functioning of the organization owing to their experience. Therefore, organizations might invest more than necessary to avoid the turnover of perma-

ment workers. Alternately, permanent workers might feel overly secure, which could lead them to make fewer contributions compared to employer investments. These arguments suggest a psychological contract based on employer over-obligation and are largely in line with the findings of De Cuyper, Rigotti, De Witte, and Mohr (2008b), who established that temporary workers compared with permanent workers were more likely to have psychological contracts with fewer promises made by the employer, such as the quasi-spot psychological contract or the employer under-obligation psychological contract. Accordingly, our first hypothesis is as follows:

Hypothesis 1a: Temporary workers will be more likely to perceive the promised psychological contract as quasi-spot or employer under-obligation, compared to permanent workers.

Hypothesis 1b: Permanent workers will be more likely to perceive the promised psychological contract as mutual high obligation or employer over-obligation, compared to temporary workers.

Fulfilment-based exchange. An interesting issue, which has been largely ignored in previous studies, concerns the relationship between temporary employment and types of psychological contract fulfilment. Some arguments suggest that permanent workers are more likely to perceive breach by the organization than temporary workers. This may be because, first, the psychological contracts of permanent workers likely include more employer promises that – due to relational content – are more open to interpretation (Guest & Clinton, 2005). Such psychological contracts with low tangibility are more susceptible to breach (McLean-Parks et al., 1998). Second, temporary employment may provide insufficient realization of exchange owing to the short duration of the relation (Connelly & Gallagher, 2004). Unlike permanent workers, temporary workers may not consider employers' failure to fulfil the psychological contract as a breach because they anticipate that the psychological contract will be discontinued in the future. This suggests that perceived fulfilment of employers' promises is more positive for temporary workers than for permanent workers.

Permanent workers may react to breach by reducing their commitment to promises as well (Coyle-Shapiro & Kessler, 2002b), which then implies a quasi-spot contract. Alternatively, they may be reluctant to report failure to commit to their promises; in this regard, Morrison and Robinson (1997) have suggested that employees are more likely to perceive lower fulfilment by the organization than by the employee, due to a self-serving bias. This would imply that permanent workers develop a psychological contract characterized by under-obligation. Fulfilment of the psychological contract in temporary workers may align with our description of mutual high obligation psychological contracts: temporary workers may reciprocate the organization's fulfilment of the contract. Psychological contracts based on

employer over-obligation may be rare, given employees' tendency to overestimate their contribution to the deal. This leads to our second hypothesis:

Hypothesis 2a: Temporary workers will be more likely to perceive the fulfilled psychological contract as mutual high obligation.

Hypothesis 2b: Permanent workers will be more likely to perceive the fulfilled psychological contract as quasi-spot or employer under-obligation.

The Psychological Contract: Associations with Employee Attitudes

Promise-based exchange. Most researchers agree that psychological contracts based on mutual high obligations are most desirable (Koh & Yer, 2000) and that they relate to favourable employees' attitudes (De Cuyper et al., 2008b). This assumption has also found support in studies by Shore and Barksdale (1998), Hom et al. (2009), and Tsui et al. (1997) with respect to affective organizational commitment, organizational support, trust, and fairness. Mutual high obligation psychological contracts are thought to promote a relationship based on trust, as both parties show a willingness to invest in the relationship in the future. Based on these expectations of investment, employees are committed and intend to stay with the organization. The three other psychological contract types in some way or another signal a lack of trust. The quasi-spot contract entails promises representing only few inducements that the other party may expect in the future. The employer over-obligation and employer under-obligation contracts signal a potential imbalance in the promised inducements the other party may receive in the future. Hence, these contracts are assumed to be associated with unfavourable outcomes in comparison to the mutual high obligation psychological contract, as employees are less inclined to commit to and remain in an unfavourable exchange.

Yet, there is considerable debate about which psychological contract type is most undesirable. Following the effort–reward imbalance model, one would expect failed reciprocity of employer under-obligation to relate to unfavourable outcomes. However, this was not supported in the study by Tsui et al. (1997), who found non-significant associations between psychological contracts based on employer under-obligation and employees' attitudes. Shore and Barksdale (1998) as well as De Cuyper et al. (2008b) established that employer over-obligation was related to poor attitudes; however, this was not replicated in the studies by Tsui et al. (1997) and Koh and Yer (2000), who instead found the quasi-spot contract to be problematic. We offer as a general conclusion that, following the norm of reciprocity, mutual high obligation psychological contracts compared with other types of psychological contracts are positively related to employees' attitudes.

Hypothesis 3: A promised mutual high obligation psychological contract will relate more strongly to employees' fairness perception, job satisfaction, and intention to quit, compared to quasi-spot, employer over-obligation, and employer under-obligation.

Fulfilment-based exchange. One explanation for the varied findings in earlier studies could be that these studies focused on promises by both parties rather than on fulfilment. Studies show fulfilment of a deal to relate more strongly and more consistently to employees' attitudes than promises constituting the deal (Conway & Briner, 2005; Lambert et al., 2003). Following social exchange theory, relationships depend on the reciprocation of valuable efforts and recourses (Blau, 1964). When promised efforts and recourses are fulfilled, the other party is likely to reciprocate by the fulfilment of promises, creating a fair relationship that both parties would like to maintain. When one or both parties fail to fulfil their promises, this results in lower intention to maintain this relationship.

Hypothesis 4: A fulfilled mutual high obligation psychological contract will relate more strongly to employees' fairness perception, job satisfaction, and intention to quit, compared to quasi-spot, employer over-obligation, and employer under-obligation.

METHOD

Sample and Procedures

Data were collected in the Netherlands. Temporary employment accounted for about 17 percent of the total national workforce in 2004 – a relatively large share in comparison to other European countries (De Cuyper et al., 2005). Most temporary workers in the Netherlands are employed on fixed-term or temporary agency contracts (De Jong & Schalk, 2005). The Dutch labour market has a fairly high level of regulation: collective labour agreements and labour laws provide a floor of minimum protection for all workers, temporary as well as permanent (De Jong, Schalk, & Goessling, 2007).

For this study, respondents were recruited in four sectors: retail ($n = 255$), manufacturing ($n = 222$), healthcare ($n = 40$), and education ($n = 262$). Our choice for these sectors was based on the following arguments. First, the sectors had a relatively large temporary workforce in 2004 and, thus, coincide with our specific research focus. Second, these sectors were likely to maximize variance in the types of temporary workers. In total, 48 organizations participated: 17 retail organizations, 16 manufacturing organizations, 13 educational organizations, and two healthcare organizations. For the retail sector, we contacted organizations such as shops and insurance companies. Organizations in the manufacturing sector were primarily foodstuff producers, but the sample also included bicycle manufacturers and producers of heavy machinery. The educational sample included high schools, professional education institutes, and universities. The healthcare sample consisted

of one hospital and one healthcare centre providing home care and care for the elderly.

We invited the human resource managers or, in the case of smaller retail organizations, the shop managers of the organizations to participate. Upon agreement to participate, we asked the human resource department to select a random sample of both permanent and temporary workers (including fixed-term contract, temporary agency, and seasonal workers), for example, by selecting employee administration numbers. After completing this selection process, the managers distributed the surveys. We sought to obtain equal numbers of temporary and permanent workers. However, this was not always possible owing to the low number of temporary workers in some organizations. In such cases, all temporary workers were sampled. The employees were given a questionnaire to fill out at home and were asked to return the questionnaire directly to the researchers by regular mail. Responses per organization varied between two and 60. Response rates also varied between organizations, ranging from 10 percent to as high as 87 percent. The average response rate was 35.5 percent, which is acceptable given that earlier studies in the realm of temporary employment achieved a similar response (e.g., Coyle-Shapiro & Kessler, 2002a).

The total sample included 380 female employees and 399 male employees. In total, 290 temporary workers and 489 permanent workers returned the questionnaire. The sample of temporary workers included several arrangement types, such as fixed-term contract workers (63 percent), temporary agency workers (26 percent), and trainees (6 percent). The average duration of the temporary jobs was about one year (11.97 months), and the average time left on these arrangements was about six months (6.13 months). The average age of the sample was 37 years. About 58 percent ($n = 448$) of the respondents completed a high school education. The average organizational tenure was six years and 11 months.

The groups of temporary and permanent workers in our sample differed with respect to age. Temporary workers ($M = 32.12$) were significantly younger than permanent workers ($M = 39.63$), $t = -9.35$, $p < 0.001$. We found no differences with respect to gender, $\chi^2(1, 777) = 0.14$, $p = \text{n.s.}$, or educational level, $\chi^2(7, 777) = 6.44$, $p = \text{n.s.}$

Measures

Psychological contract promises and fulfilment. The psychological contract items were developed in the context of the PSYCONES project (Psychological contracting across employment situations: <http://www.uv.es/psycon>) – an EU-funded research project in which the authors participated. The measure was based on factor analyses of earlier instruments (Isaksson et al., 2003). To construct the four types of employee–organization relationships needed to test our research hypotheses, we used four scales.

Employers' promises. Respondents had to rate whether or not (no = 0, yes = 1) the organization committed to a series of 15 promises. These promises included such aspects as job content (e.g., 'provide you with interesting work'), economic incentives (e.g., 'provide you with good pay for the work you do'), and the physical and social circumstances (e.g., 'provide you with a safe working environment'; 'provide you with a good work atmosphere'). One item, namely, 'ensure fair treatment by managers and supervisors', was excluded owing to potential overlap with fairness as an outcome variable. We added all 'yes' responses to form one scale that ranged from 0 to 14. Reliability was satisfactory (Cronbach's alpha = 0.89).

Employers' fulfilment of promises. When answering 'yes' to a specific item on the employers' promises scale, a question concerning fulfilment followed. In particular, the respondents had to rate the extent to which the organization fulfilled its promises (1 = promises not kept at all to 5 = promise fully kept). Reliability was 0.91. To calculate the employers' fulfilment score, we used the average score of the items.

Employees' promises. Similarly, for each of 17 possible items, respondents had to rate whether or not (no = 0, yes = 1) they themselves had made the specific promise. These promises concerned loyalty on the part of the employee (e.g., 'protect your company's image'), respect for the company's rules, regulations, and policies (e.g., 'turn up for work on time'), and organizational citizenship behaviours (e.g., 'volunteer to do tasks outside your job description'). All 'yes' responses were added. This yielded a scale ranging from 0 to 17, with a reliability of 0.92.

Employees' fulfilment of promises. When answering 'yes' to a specific content item on the employees' promises scale, respondents had to rate the extent to which they had actually fulfilled this promise (1 = promise not kept at all to 5 = promise fully kept). Reliability was 0.88. To calculate the employees' fulfilment score, we used the average score of the items.

These four scales served to create four types of psychological contracts for promise-based exchange and fulfilment-based exchange. Following Tsui et al. (1997) and Koh and Yer (2000), we performed a median-split on the four scales, resulting in few versus many employers' and employees' promises and in low versus high employers' and employees' fulfilment. Regarding promise-based exchange, the combination of few employees' and few employers' promises reflected a quasi-spot psychological contract promise (n = 407). Many employees' and many employers' promises signalled a high mutual obligation psychological contract promise (n = 97). Employer over-obligation promise resulted from the combination of many employers' promises and few employees' promises (n = 13), while employer under-obligation promise resulted from combining few employers' promises and many employees' promises (n = 262). Similarly, with respect to

fulfilment-based exchange, we defined quasi-spot psychological contract fulfilment as low fulfilment on the part of both employees and employers ($n = 327$). Mutual high obligation psychological contract fulfilment reflected high fulfilment on the part of both employees and employers ($n = 153$). Employer over-obligation fulfilment represented low fulfilment on the part of the employee and high fulfilment on the part of the employer ($n = 33$). Finally, employer under-obligation fulfilment signalled high fulfilment on the part of the employee but low fulfilment on the part of the employer ($n = 200$).

Fairness. We used a general measure of fairness developed by Guest and Conway (1998). This measure includes four items covering distributive, procedural, and interactional aspects, which are the three most prominent forms of fairness (Colquitt, Conlon, Wesson, Porter, & Ng, 2001). One of the four items used was 'Do you feel that you are paid fairly for the work you do?' The scale consisted of five response categories, ranging from 'not at all' to 'totally' (Cronbach's $\alpha = 0.70$).

Job satisfaction. We assessed job satisfaction using a scale based on Brayfield and Rothe's (1951) job satisfaction index. Four items were measured on a five-point scale, ranging from 'strongly agree' to 'strongly disagree'. An example item included 'I find enjoyment in my job'. Cronbach's α was 0.87.

Intention to quit. Intention to quit was measured using a four-item scale. The scale was adapted from Price (1997) and Sjöberg and Sverke (2000) to fit the perspective of temporary workers. The items included (i) 'These days, I often feel like quitting'; (ii) 'Despite the obligations I have made to this organization, I want to quit my job as soon as possible'; (iii) 'At this moment, I would like to stay with this organization as long as possible' (reverse scored); and (iv) 'If I could, I would quit today.' The five-point response scale ranged from 'strongly agree' to 'strongly disagree' (Cronbach's $\alpha = 0.79$).

We conducted confirmatory factor analyses (CFAs) to examine whether the data reflected the factor structure that would be expected considering the seven variables included (employer promises, employee promises, employer fulfilment, employee fulfilment, fairness, job satisfaction, and intention to quit). A CFA on the item level including all variables was not possible, however, because of missing values for employer and employee fulfilment of promises (it was only when a promise was made that the degree of fulfilment could be assessed, and since most employees did not consider that promises were made on all items, this resulted in a high number of missing values). To assess whether the scales we used were indeed independent measures, we did CFAs on the scale level. We compared the baseline model of seven factors against alternative models with fewer factors. Out of the range of models from one to six factors, the models with three

factors (psychological contract promises, psychological contract fulfilment, outcome variables) and with five factors (psychological contract promises, psychological contract fulfilment, fairness, job satisfaction, intention to quit) relatively had the best fit. Compared to both the three- and five-factor models, the seven-factor model had a significantly better fit, however. For the model with seven factors, $\chi^2 = 33.06$ ($df = 1$), goodness-of-fit index (GFI) = 0.99, root mean square residuals (RMR) = 0.03, comparative fit index (CFI) = 0.98, Tucker-Lewis index (TLI) = 0.52, and root mean square error of approximation (RMSEA) = 0.21. For the five-factor model, $\chi^2 = 193.55$ ($df = 10$), $\Delta\chi^2 = 160.49$ ($p < 0.001$), GFI = 0.94, RMR = 0.12, CFI = 0.87, TLI = 0.72, and RMSEA = 0.16. For the three-factor model, $\chi^2 = 184.86$ ($df = 11$), $\Delta\chi^2 = 151.81$ ($p < 0.001$), GFI = 0.94, RMR = 0.09, CFI = 0.88, TLI = 0.76, and RMSEA = 0.15.

Control variables. Past research has shown a relationship between demographic variables such as gender, age, and educational level on the one hand and psychological contract perceptions (De Vos, 2002), fairness perceptions (Cohen-Charash & Spector, 2001), and other work-related attitudes on the other hand. Therefore, we controlled for three demographic variables: gender (0 = female; 1 = male), age (in years), and educational level. Educational level was assessed using International Standard Classification of Education (ISCED) levels (OECD, 1999), ranging from 0 (pre-primary education) to 6 (second-stage tertiary education). Table 1 shows the descriptive statistics and correlations of the main variables used in this study.

Analysis

To test Hypotheses 1 and 2 on the relationship between temporary or permanent employment and promise- and fulfilment-based psychological contract types, we used multinomial logistic regressions. Multinomial logistic regression can be used for the analysis of categorical response data with continuous or categorical explanatory variables. Parameter estimates are obtained through direct maximum likelihood estimation (Bull & Donner, 1987). We ran two multinomial logistic regressions with both promise-based and fulfilment-based psychological contracts as dependent variables. Type of contract was entered as a factor, and our control variables were entered as covariates. The mutual high obligation psychological contract was used as the reference category for both promise-based and fulfilment-based exchange.

Hypotheses 3 and 4 concerning the relationship between promise- and fulfilment-based psychological contracts and employees' attitudes were tested with ANOVA, including the control variables (ANCOVA). We also included the interaction term between type of employment and type of psychological contract to exclude the possibility that psychological contract types associate differently with the outcomes in temporary and permanent workers. Additionally, Bonferroni post-hoc pairwise comparisons were conducted to further investigate significant differences between psychological contract types.

Table 1. Means, standard deviations, and correlations

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Age	36.8	11.3														
2. Gender [†]	0.51	0.50	0.09													
3. Educational level	4.59	1.35	0.09	0.02												
4. Type of employment [‡]	0.63	0.48	0.32**	0.01	-0.08											
5. Fairness	3.47	0.76	-0.03	-0.06	0.01	-0.11*										
6. Job satisfaction	4.21	0.72	0.13**	-0.04	-0.02	0.02	0.33**									
7. Intention to quit	1.73	0.73	-0.12*	0.03	0.15**	-0.05	-0.29**	-0.72**								
8. Quasi-spot promise	0.52	0.50	-0.11*	-0.04	0.18**	-0.19**	-0.07	-0.06	0.10*							
9. Employer under-obligation promise	0.34	0.47	0.10*	0.00	-0.14**	0.10*	0.01	0.02	-0.06	-0.75**						
10. Employer over-obligation promise	0.02	0.13	-0.03	0.01	-0.01	-0.00	0.03	0.00	-0.05	-0.14**	-0.09					
11. Mutual high obligation promise	0.12	0.33	0.05	0.06	-0.06	0.15**	0.08	0.06	-0.06	-0.43**	-0.27**	-0.05				
12. Quasi-spot fulfilment	0.46	0.50	0.07	0.02	0.08	0.10*	-0.24**	-0.24**	0.21**	-0.05	-0.03	0.05	0.02			
13. Employer under-obligation fulfilment	0.28	0.45	0.01	0.10*	-0.08	-0.03	-0.12**	0.00	-0.03	0.01	-0.03	-0.01	0.02	-0.57**		
14. Employer over-obligation fulfilment	0.05	0.21	-0.01	-0.03	0.01	-0.04	0.07	0.04	-0.04	0.03	0.02	0.00	-0.06	-0.20**	-0.14**	
15. Mutual high obligation fulfilment	0.21	0.41	-0.09	-0.12*	-0.02	-0.07	0.38**	0.26**	-0.20**	0.3	-0.05	0.06	-0.00	-0.48**	-0.33**	-0.12*

Notes:

N = 779

* p < 0.01, ** p < 0.001.

[†] 0 = female, 1 = male; [‡] 0 = temporary, 1 = permanent.

Mean values for the dummy variables 8 through 15 can be interpreted as the percentage of cases out of the total number of cases in that group.

RESULTS

Table 2 shows the results of the multinomial logistic regressions performed to test Hypothesis 1 on promise-based exchange. Hypothesis 1a concerned associations between temporary employment and quasi-spot and employer under-obligation promised psychological contracts. The results showed that temporary employment was positively associated with the quasi-spot ($\beta = -1.23$, $p < 0.001$) and employer under-obligation ($\beta = -0.73$, $p < 0.05$) promised psychological contracts, as expected. Thus, Hypothesis 1a was supported. Hypothesis 1b concerned associations between permanent employment and mutual high obligation or employer over-obligation promised psychological contracts. Contrary to expectations, we found that temporary employment rather than permanent employment was associated with over-obligation promised psychological contracts, although the association was not significant. The results also imply that permanent employment was positively associated with mutual high obligation promised psychological contracts, as expected. An additional multinomial logistic regression with the quasi-spot relationship as the reference group confirmed these results. Thus, we found partial support for Hypothesis 1b.

Table 2 also presents the results regarding Hypothesis 2 on fulfillment-based exchange. Hypothesis 2a related temporary employment to mutual high obligation psychological contract fulfilment, which was supported in our results. Hypothesis 2b related permanent employment to quasi-spot and employer under-obligation psychological contract fulfilment. This hypothesis was found to be partially supported. Permanent workers were more likely to perceive fulfilled quasi-spot contract than were temporary workers ($\beta = 0.45$, $p < 0.05$). However, no such significant associations were found for employer under-obligation.

Our third hypothesis concerned the relationship between the promise-based psychological contract types and employees' attitudes. The results in Table 3 (panel a) show that the promise-based psychological contract types were not significantly related to job satisfaction or intention to quit. Promise-based psychological contracts were weakly related to fairness ($F = 4.11$, $p < 0.01$). Table 3 (panel a) also presents the results of the post-hoc Bonferroni tests. The last column shows the statistically significant differences between promised psychological contract types, if present. Respondents in the high mutual obligation psychological contract do not report higher levels of job satisfaction nor lower levels of intention to quit compared with respondents in the other promise-based psychological contracts. The mutual high obligation and quasi-spot types differed with respect to fairness; respondents in the mutual high obligation category reported higher levels of fairness than those in the quasi-spot category. Overall, only weak evidence was found for Hypothesis 3.

Hypothesis 4 concerned the relationship between fulfillment-based psychological contract types and employees' attitudes. The types of fulfillment-based

Table 2. Results of multinomial logistic regressions

	Promise-based psychological contracts			Fulfillment-based psychological contracts		
	Quasi-spot	Employer under-obligation†	Employer over-obligation†	Quasi-spot	Employer under-obligation†	Employer over-obligation†
Age	-0.01	0.01	-0.02	0.01	0.01	0.01
Gender	-0.44	-0.37	-0.22	0.50*	0.79	0.21
Educational level	0.26**	-0.05	0.07	-0.10	-0.08	0.03
Type of employment (1 = permanent)	-1.23***	-0.73*	-0.86	0.45*	0.10	-0.13
Nagelkerke pseudo R-square	10%			5%		
-2 Log likelihood restricted	1154.03			1275.76		
Significance	0.000			0.001		

Notes:

* p < 0.05, ** p < 0.01, *** p < 0.001.

† With mutual high obligation as the reference group.

Table 3. Employee attitudes under four psychological contract types[†]

(a)	<i>Promise-based psychological contract types</i>				<i>F</i>	<i>Significant differences</i>
	<i>Quasi-spot</i>	<i>Employer under-obligation</i>	<i>Employer over-obligation</i>	<i>Mutual high obligation</i>		
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>		
Fairness						
Mean	3.40	3.51	3.67	3.69	4.11**	4 > 1
SD	(0.72)	(0.82)	(0.83)	(0.71)		
Job satisfaction						
Mean	4.18	4.23	4.25	4.36	1.37	
SD	(0.75)	(0.67)	(0.93)	(0.64)		
Intention to quit						
Mean	1.77	1.71	1.44	1.60	1.95	
SD	(0.74)	(0.74)	(0.49)	(0.66)		
(b)	<i>Fulfilment-based psychological contract types</i>				<i>F</i>	<i>Significant differences</i>
	<i>Quasi-spot</i>	<i>Employer under-obligation</i>	<i>Employer over-obligation</i>	<i>Mutual high obligation</i>		
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>		
Fairness						
Mean	3.30	3.35	3.73	4.05	43.20***	4 > 1,2; 3 > 1,2
SD	(0.68)	(0.74)	(0.66)	(0.69)		
Job satisfaction						
Mean	4.04	4.23	4.36	4.59	23.69***	4 > 1,2
SD	(0.69)	(0.69)	(0.68)	(0.60)		
Intention to quit						
Mean	1.89	1.70	1.61	1.43	14.77***	4 > 1,2; 2 > 1
SD	(0.79)	(0.68)	(0.78)	(0.53)		

*Notes:** $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.[†] Age, gender, and educational level were entered as covariates.

psychological contracts were significantly associated with all outcomes (Table 3, panel b). In particular, respondents with a fulfilled mutual high obligation psychological contract reported higher levels of fairness and job satisfaction and are less inclined to quit the organization compared to respondents with quasi-spot or employer under-obligation psychological contract fulfilment. Furthermore, respondents with employer over-obligation psychological contract fulfilment

reported higher levels of fairness in comparison to respondents who perceived fulfilment in quasi-spot and employer under-obligation psychological contracts. Respondents who perceived employer under-obligation psychological contract fulfilment are less inclined to quit the organization than respondents with a fulfilled quasi-spot psychological contract. No significant differences were found between respondents who perceived fulfilment in mutual high obligation and employer over-obligation psychological contracts. This largely supported Hypothesis 4.

DISCUSSION

The present study's aims were twofold. First, we investigated the differences between temporary and permanent workers' perceptions concerning reciprocal exchange. Second, we assessed the relationship between these perceptions and a number of employees' attitudes (fairness, job satisfaction, and intention to quit). To address these aims, we elaborated on past research in the realm of psychological contract balance and exchange. This study expands upon previous research (e.g., Shore & Barksdale, 1998; Tsui et al., 1997) by not only examining the effects of promise-based exchange, but also including fulfillment-based exchange. Assessing the effects of both exchanges allows for the evaluation of different types of exchanges, such as quasi-spot contracts and mutual high obligation psychological contracts, from a perspective of promises as well as of fulfilled promises.

The findings from this study have implications for psychological contract research. First, the results highlighted the importance of exchange in terms of perceived balance, as previously demonstrated by Tsui et al. (1997), Koh and Yer (2000), Shore and Barksdale (1998), and De Cuyper et al. (2008b). Whereas earlier studies focused on promise-based exchange, the present study goes one step further in underlining the importance of fulfillment-based exchange. In this respect, fulfillment-based exchange related more strongly to employee attitudes than promise-based exchange. It appears that employee-employer exchanges in terms of perceived promise fulfilment are of particular importance and are probably more important than promise-based exchange if the aim is to understand employee attitudes.

Second, our findings indicated differences between temporary and permanent workers regarding the type of promise-based exchange as well as fulfillment-based exchange. Exchange in temporary workers can be characterized in general as narrower (i.e., fewer promises) but more easily fulfilled. Conversely, exchange in permanent workers is broader (i.e., more promises) but more difficult to fulfil. Previous research on psychological contracts in temporary employment found the same dynamics but mostly focused on the promises of the organization (Chambel & Castanheira, 2006; Guest & Clinton, 2005). Our findings show that these

dynamics also apply to employee promises, creating reciprocity in employment exchanges which feature mutually narrow contracts that are more easily fulfilled and mutually broad contracts that are more difficult to fulfil.

These findings have important implications for research in the realm of temporary employment too. First, we established that temporary workers report a fairly narrow exchange of promises. One explanation could be that some temporary workers seek out a psychological contract with few but specific promises; for example, temporary workers may prefer a relationship with few responsibilities or with little commitment. Alternatively, they may want to combine work with responsibilities at home, or they may enjoy the variety of working in many different employment settings (see Tan & Tan, 2002).

Second, we observed that temporary workers perceive fairly good exchange where fulfilment is concerned compared with permanent workers. Temporary workers report that both parties commit to their promises. This is not the case for permanent workers, who see fewer promises fulfilled. This corresponds with our expectations: we argued that permanent workers' psychological contracts are more susceptible to breach, owing to the fairly intangible and vague content of psychological contract promises (McLean-Parks et al., 1998). Conversely, temporary workers' psychological contracts are less likely to be breached as they are based on specific agreements, implying that fulfilment is more observable. Moreover, temporary workers may anticipate the fulfilment of employer promises in the future.

Third, we did not find significant associations between permanent employment and employer under-obligation psychological contracts in the case of fulfilment-based exchange. We hypothesized that permanent workers would be more likely to overestimate their contributions in comparison to temporary workers. Temporary workers, however, may stress the fulfilment of their promises to improve their chances of permanent employment. By focusing on their own achievements rather than on the investments of the organization, temporary workers may want to promote their nomination for a permanent job, which can be one of the primary motivators of temporary workers (Tan & Tan, 2002).

Fourth, the finding that mutual high fulfilment of promises compared with quasi-spot fulfilment is associated with overall favourable attitudes may explain earlier findings concerning the relationship between temporary employment and employees' attitudes. Review studies report that results are inconclusive, while a significant number of studies have actually shown favourable results for temporary workers compared to permanent workers (Connelly & Gallagher, 2004; De Cuyper et al., 2008a). This has spurred researchers' interest in the mechanisms and processes underlying the fairly favourable responses of temporary workers. One such process could be exchange fulfilment as temporary workers have narrower promise-based psychological contracts that are more easily fulfilled, leading to more favourable employee attitudes.

Limitations and Implications for Future Research

A number of issues may limit the implications of our research and require additional research. First, our findings were based on cross-sectional and self-reported data that clearly present some threat with respect to causal inferences and common method variance. However, a single-method-factor analysis as proposed by Podsakoff, MacKenzie, Lee, and Podsakoff (2003) as well as the CFAs reported earlier revealed no problems of common method variance with respect to the independent and dependent variables. Second, the non-representativeness of our data may limit the external validity of our findings. A third limitation concerns our measure of the psychological contract types. Our measure did not address excess obligations, preferences for certain promises, and reasons for few promises. These omissions may provide a rather limited view of the psychological contract types (Lambert et al., 2003), even though they align with measures used in earlier studies (e.g., De Cuyper et al., 2008b). Nevertheless, they should be addressed in future research. Fourth, we used a median-split procedure to obtain the four types of psychological contracts. The variable-splitting procedure has been criticized for loss of power, increasing Type I error, and bias when dichotomizing dependent and independent variables (e.g., Irwin & McClelland, 2003). Although we followed the same procedure as Tsui et al. (1997) and Koh and Yer (2000), the limitations of the median-split approach should be considered when interpreting our results. Fifth, few respondents reported having an employer over-obligation psychological contract, be it based on promise-based exchange or fulfillment-based exchange. This resembles other studies using the same framework (De Cuyper et al., 2008b; Shore & Barksdale, 1998; Tsui et al., 1997) and can be explained by the tendency to be critical towards the promises and fulfilment by the employer while overestimating one's own contributions. However, the low number of respondents in the employer over-obligation category limited our possibilities of comparing this type of psychological contract to the other psychological contract types.

Moreover, this study made fairly general statements with respect to temporary workers. However, research has shown that the temporary workforce is quite diverse (De Cuyper et al., 2008a). Whether this heterogeneity of the temporary workforce has implications for the results of this study requires further exploration. One type of temporary employment that is of particular relevance is temporary agency work: temporary agency workers are involved in a triangular employment relationship (Liden, Wayne, Kraimer, & Sparrowe, 2003). This dual commitment possibly affects the content of the psychological contract (Claes, 2005). Another aspect of temporary workforce heterogeneity that could be relevant concerns expectations of future employment. These expectations have been found to have an immediate impact on temporary employee attitudes and behaviour, and they may influence how temporary workers evaluate the psychological contract (Goudswaard, Kraan, & Dhondt, 2000).

Furthermore, this study was applied in a specific context of labour relations and institutional conditions, which limits the external validity of this study. In the Netherlands, there is an extensive framework of labour laws and regulations specifically developed to protect employees, both temporary and permanent. For example, Dutch temporary employees can rely on a safety net including mutually agreed minimum wages and minimum demands with respect to safe working environments (Heerma van Voss, 1999). Having these safeguards can positively affect their acceptance of employment relationships with low employer obligations since they are assured of a minimum payback for their efforts. A worthwhile avenue to pursue in future research would be to study exchange and balance in contexts with fewer safeguards, such as the USA.

Last but not least, results from a Dutch sample may not generalize across borders, especially to countries like China, which differs from the Netherlands on a number of cultural values. Farh, Hackett, and Liang (2007), for example, showed that results of social exchange studies on employee attitudes in the United States did not replicate well in a sample of Chinese workers. They suggest that 'social exchange-based explanations for worker attitudes and performance may apply less well to Chinese employees in the PRC than they do to American workers in the United States' (2007: 724). The Farh et al. (2007) study shows that, in the Chinese context, differences in power distance and traditionality influence the relationship between perceived organizational support on the one hand and work outcomes on the other hand. These results suggest that it is important to take cultural context factors into account when considering the implications of the results of our study for China.

CONCLUSION

The current study has some non-intuitive findings, especially in terms of balance in psychological contract fulfilment. Permanent workers are more likely to report quasi-spot contract fulfilment, while temporary workers are more likely to report mutual high obligation psychological contract fulfilment. Further, it is fulfilment-based psychological contracts rather than promise-based psychological contracts that relate to employee attitudes. These results do not necessarily imply that it is best to have a mutually narrow psychological contract that is more easily fulfilled by both parties. Rather, our findings imply that the content of the psychological contract should be communicated clearly by both employer and employee. By creating and maintaining a common understanding about the mutual intentions to invest in the employment relationship, obligations are more likely to be fulfilled. We encourage further attention to the dynamics between psychological contract promises and fulfilment. An important route for future research concerns the performance implications of psychological contract promises and fulfilment as well as investigation of these ideas in other cultural contexts, including China, to search for a universal theory of psychological contracts.

NOTE

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