

**Changes to newcomers' psychological contract over time: the interactive effects of the  
fulfilment of employer and employee obligations**

**Cambios en el contrato psicológico de los recién llegados a lo largo del tiempo: los efectos  
interactivos del cumplimiento de las obligaciones del empleador y de los empleados**

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## Abstract

The goal of this study was to examine changes in newcomers' psychological contract over time. Based on schema theory and the post-violation model of the psychological contract, we theorized that psychological contract fulfilment is strengthening the psychological contract over time, while changes in the psychological contract are most likely to occur in a situation of low employer and employee fulfilment. In a sample of newcomers in a Brazilian public organization, we tested how the fulfilment of both employer and employee obligations explaining change in the psychological contract. The results support the hypotheses, and we found that the highest level of change in psychological contracts occurred when the fulfilments of the obligations of both parties were low. We discuss the implications for theory on change in psychological contracts.

Keywords: psychological contracts; psychological contract change; longitudinal study

## Resumen

El objetivo de este estudio fue examinar los cambios en el contrato psicológico de los recién llegados a lo largo del tiempo. Con base en la teoría de esquemas y el modelo post-violación del contrato psicológico, teorizamos que el cumplimiento del contrato psicológico fortalece el contrato psicológico en el tiempo, mientras que los cambios en el contrato psicológico son más probables en una situación de bajo cumplimiento del contrato psicológico. En una muestra de recién llegados en una organización pública brasileña, probamos cómo el cumplimiento de las obligaciones tanto del empleador como de los empleados explica el cambio en el contrato psicológico. Los resultados respaldan las hipótesis, y encontramos que el nivel más alto de cambio en los contratos psicológicos ocurrió cuando el cumplimiento de las obligaciones de ambas partes era bajo. Discutimos las implicaciones para la teoría sobre el cambio en los contratos psicológicos.

Palabras clave: contratos psicológicos; cambio de contrato psicológico; estudio longitudinal

## **Introduction**

Understanding psychological contracts is relevant to comprehend current employee-employer relationships, as these are changing continuously in the contemporary globalized world (Maguire, 2003). Psychological contracts are constantly renewed and adjusted over time (Rousseau, 1995). It is therefore not surprising that the formation of newcomers' psychological contracts and the changes over time have received a lot of attention from scholars in the field of psychological contract (see e.g., Bankins, 2015; De Vos, Buyens, & Schalk, 2003; Robinson, Kraatz, & Rousseau, 1994; Tekleab, Orvis, & Taylor, 2013). From moments of deception or pleasant surprises in relation to the contract, individuals will adjust their beliefs in light of the perceived reality (Louis, 1980). However, despite a growing body of research on the topic, it is still unclear how these changes in the psychological contract come about. It has been proposed that psychological contracts consist of both employer and employee obligations, and changes in psychological contracts have been primarily framed as resulting from employer under- or over-fulfilment. On the one hand, employer fulfilment of obligations affects how employees perceive their own obligations (Coyle-Shapiro & Kessler, 2002; De Vos et al., 2003; Robinson et al., 1994). On the other hand, employee fulfilment of obligations is likely to lead to higher expectations about the employer's obligations towards the employee (Shore & Barksdale, 1998). More specifically, these previous studies have focused on how employee perceptions of mutual obligations decrease or increase over time (e.g., De Vos et al., 2003; Tekleab et al., 2013). While many attempts at explaining changes in psychological contracts have argued that obligations increase or decrease as a result of fulfillments (e.g., Bankins, 2015; Tomprou et al., 2015), actually very few studies have treated change as a deviation from stability in the contract. Hence, change as a deviation from a stable position is the focus of our current study, and theoretically, we aim to investigate how the complex interactions between employee and employer behaviors (i.e., contract fulfillments) predict whether a contract is stabilized or changes. This approach puts change as the central outcome, rather than gradual or relative decreases or

increases in perceptions of obligations. This way, we offer an empirical contribution to recent theoretical debates, most notably by Tomprou, Rousseau, and Hansen (2015) and Persson and Wasieleski (2015), who theorized that radical change of the psychological contract should be contrasted to the minor, silent transformations that take place within the stability of the contract.

In the current paper, we argue that changes in the psychological contract do not merely result from what the employer does for the employee, but from the interaction between employer and employee fulfilment of obligations in the psychological contract. Using schema theory (Sherman and Morley, 2015) to explain how employee perceptions of mutual obligations increase as a result of fulfilments in the past, while we use the post-violation model (Tomprou et al., 2015, and Psychological Contract Theory 2.0 (Rousseau, Montes, & Tomprou, 2014) to explain that change in contrast to stability occurs in a situation of mutual withdrawal by employee and organization. We therefore hypothesize that the perceptions that employees have of the mutual obligations arise not only from what the employer does for them, but also in comparison with what they did for their employer. We aim to contribute to psychological contract research by investigating how change in psychological contract manifest over time, and our primary contribution is to show that psychological contracts change not only because of the lack of organizational fulfilment of obligations to the employee, but also the lack of employees' fulfilment of their part of the deal.

### **Psychological Contract Theory**

A central aspect in the definition of the psychological contract is the idea of exchange between employee and employer (Conway & Briner, 2005; Rousseau, 1995). The psychological contracts involve exchanges; they are about 'deals' (Conway & Briner, 2005). The employees perceive their own obligations toward the employer as well the obligations of the employer towards themselves. These perceptions indicate how the content of the psychological contract develops over time, and also the state of the psychological contract (Guest, 2004), whether it has been fulfilled or not.

Therefore, the psychological contract refers to the perceived employer and employee obligations, and it is affected by the perception of the fulfilment of these obligations. To provide conceptual clarity in this paper, we follow the conceptualization of Rousseau (1995), which was further developed by Conway and Briner (2005) of psychological contract as consisting of employees' beliefs regarding mutual obligations between employer and employee.

We expected the psychological contract to change depending on its fulfilment over time (De Vos et al., 2003; Guest & Conway, 2002; Lester, Kickul, & Bergmann, 2007). Hence, we study four aspects of the psychological contract: employees' perceptions of their own obligations and of the employer obligations, and the employees' perceptions of fulfilment of these two types of obligations. Perceptions of mutual obligations are likely to unfold over time (De Vos et al., 2003), especially among newcomers. On the one hand, employees make sense of their psychological contracts over time, by acquiring more specific knowledge about what they can expect from their employer and what they should do for the organization (De Vos, Buyens & Schalk, 2005). On the other hand, the individuals experience fulfilment and breaches of their psychological contract over time, and adapt to these changes (Tekleab et al., 2013). Therefore, it is important to understand the dynamics through which the psychological contract obligations develop during these first years of employment within an organization.

While previous studies have unquestionably yielded a wealth of knowledge regarding the psychological contract and its breaches, violations, and attendant antecedents and consequences (e.g., Gardody, 2016; Nisar, Liaqat, Nasir & Ikram, 2017; Tran Huy & Takahashi, 2017), the fact is that a basic, yet fundamental premise underlying this cumulative knowledge has remained relatively unexamined, i.e., the change in the psychological contract. In this paper, we examine the psychological contract as a dynamic process. The studies that treat the construct as a process suggest that changes in the psychological contract occur in accordance with several factors (Dabos & Rousseau, 2004; Syrek & Antoni, 2017; Thomas, Au & Ravlin, 2003). The few existing longitudinal studies support the idea that newcomers change their perceptions of the psychological

contract according to the reality they experience after their entry in the organization. Nevertheless, there is no consensus on the way it changes. Debode, Mossholder and Walker (2017) examined the mediating role of psychological contract fulfilment in the relationship between socialization tactics and attachment-related outcomes. Tekleab et al. (2013) examined the change in the employer-based psychological contract obligations and its relationship to employee attitudes during the employee's first year of employment and found that newcomers' perceptions of employer obligations decreased over time. These findings are contradictory to the prior work of De Vos et al. (2003), Thomas and Anderson (1998), and Robinson et al. (1994). De Vos et al. (2003) found a stronger tendency to increase obligations over time. Thomas and Anderson (1998) found that employees with at least six years of service had higher expectations than the newcomers, while Robinson et al. (1994) found that newcomers expected more from their employers over the first two years of employment. Robinson et al. (1994) and De Vos et al. (2003) examined the employees' obligations. Robinson et al. (1994) found that perceived employees' obligations declined, and De Vos et al. (2003) found that in general they increased. However, the general trend captured by most studies is that the perceived obligations change over time, due to sensemaking, information seeking, and changes due to breach and fulfilment (De Vos et al., 2003, 2005; Thomas & Anderson, 1998; Tekleab et al., 2013; Robinson et al., 1994).

The psychological contract develops by means of recurring cycles with each party keeping or breaching their promises to the other. When people are faced with the choice of how to respond to these experiences of breach or fulfilment, they try to make sense of it in a meaningful way. Responding to contract breach and fulfilment is essentially a sense-making process (Louis, 1980; Weick, 1995). If promises are broken, an uncomfortable psychological dissonance leads the individual to wonder whether their perceptions need to be adjusted. Our primary interest is in the extent to which employees perceived their psychological contracts to be fulfilled and how that changed their psychological contract perceptions over time.

This study was realized with newcomers to an organization in the Brazilian public sector. Brazil was considered an appropriate context for our study because this country represents one of the emerging economies in the world, and besides its importance in the economic scenario, we have very few studies in the Brazilian context, most of them applying explorative and qualitative approaches (Rios & Gondim, 2010). The findings of this research could be useful to other countries with some cultural similarities, such as high power distance and collectivist values. Moreover, the public sector was appropriate because this sector has many similarities across the world, and therefore, our results are likely to hold in different contexts. Most of the studies have focused on employees of private companies (see for exceptions Cassar, 2001; Topa & Caeiro, 2013), however, it is important to note that the situation of employees of public organizations offers a series of peculiar characteristics for psychological contract research, such as job security afforded. The Brazilian Constitution guarantee stability to public employees nominated for a position through means of the public entrance exam. As suggested by Vesga (2011), it is important to note that the types of employment contracts have implications in the psychological contract. Some studies compared the perceived obligations between permanent and temporary employees, and they found that permanent employees perceived the highest level of obligations in their psychological contracts (e.g. De Sousa Loreto, 2005; Silla, Gracia & Peiró, 2005). The position these newcomers have succeeded to obtain is considered one of the best careers in the Brazilian government. Since the organizational characteristics may affect the way the psychological contract evolves (García-Rubiano & Forero-Aponte, 2015), it is noteworthy that this public organization, in the job market, offers comparatively high salaries, low attrition and high job security, as long-term employment is guaranteed. Some candidates may have had the goal of just passing the selection process and enter the organization without more reflections about what would come next, because they could be mainly attracted to the job security and the comparatively high earnings, not particularly charmed by the organization. Moreover, newcomers into this Brazilian agency would only be informed of their duties after entry into the organization. Only then, they would be informed of which

department they would work in and what their activities would be. Considering this context, we expect people to be faced with experiences of breaches of the psychological contract, from both sides, themselves as employees not fulfilling their own obligations and from the perceived obligations of the employer not being fulfilled.

During the process of psychological contract adjustment, the incompatibility between a person's beliefs and the knowledge of what actually has been delivered motivates the person to adjust his/her beliefs and changes the perceived mutual obligations. On the other hand, if the obligations are fulfilled, there is consonance in having similar expectations for the future, which means less change to the psychological contract. The fulfilment of the employer obligations leads to a greater sense of obligation by the employee, because the employee and employer are engaged in an exchange relationship. When an employee perceives that the employee and employer obligations within the psychological contract are at the same level, that is, the contracting parties are similarly obligated to fulfil the contract terms, we have a balanced relationship (Shore & Barksdale, 1998).

Accordingly, we expect change in a psychological contract to be determined by its state of fulfilment over time (Guest & Conway, 2002). More specifically, we employ schema theory (Sherman & Morley, 2015) to explain that early experiences of employees with their organizations are used to form perceptions of future exchanges and obligations. When employers are willing to fulfill the psychological contract and offer employees many inducements in the early stages of one's employment with a company, employees are likely to capture those inducements within their schema forming their employment relationship perceptions. Accordingly, these early experiences form the employees' expectations about future exchanges, and hence, when employers fulfill their obligations, employees are more likely to integrate that with their beliefs. These experiences lead to a positive association between fulfillment of obligations in the past and expectations for current and future obligations. However, this not only applies to employers' obligations, but to employees' obligations as well; when employees fulfill their obligations to the organization, it becomes part of their schema, of what they should contribute to their organization, and thus forms the frame of

reference (Sherman & Morley, 2015) for what they believe they should contribute to their organization.

The key contribution of this paper is to establish how psychological contracts *change* over time. We argue that change is likely to result from an interaction between employer fulfilment and employee fulfilment. Dabos and Rousseau (2004) investigated reciprocity, incorporating the employer's perspective and comparing the beliefs of employees and employer representatives. They found that the consistency between the two perspectives was positively related to productivity, career advancement and intention to continue working with the employer. The employees responded to more balanced psychological contracts with work attitudes and behaviours. De Vos et al. (2003) examined the changes by the comparing promises and inducements/contributions of one part in relation to the other. Coyle-Shapiro and Kessler's (2002) findings also provide empirical support for the following hypothesis by the means of positive associations between the perceived obligations of one part and the fulfilment of obligations of the other part of the psychological contract.

More specifically, we use the post-violation model (Tomprou et al., 2015), and in particular the Psychological Contract Theory 2.0 (Rousseau et al., 2014), to explain that psychological contracts are stabilizing after the early socialization experiences of employees in their firms. After a period of stabilization, silent transformations may gradually shape psychological contracts (Persson & Wasieleski, 2015), and hence, *change* in the psychological contracts functions as a deviation of a stable state. Thus, change includes the more radical deviations in employer and employee obligations over time, and is expected to result from more drastic, critical events (Bankins, 2015). These critical events leading to change of the contract are not merely employer failures to deliver upon employees' expectations, but a more radical breakdown of the mutual exchange relationship between employee and organization (Tomprou et al., 2015). In line with their theorizing, change of the contract is most likely to occur when both organization and employee are unfulfilling their contract, while contracts are more likely to stabilize when both parties are fulfilling their obligations

towards each other. Given our theory and the chosen context in which the employees have high expectations about the employers' obligations and not know well about their own obligations as employees, we expect to find significant results with both organization and employee unfulfilling their contract, resulting in change of the psychological contracts. We hence, expect that employer and employee fulfillment interact in predicting change, and change is more likely when fulfillment of both is low.

*Hypothesis 1. The fulfilment of employer obligations will interact with the fulfilment of employee obligations to determine the change in the perceived obligations of the employer.*

*Hypothesis 2. The fulfilment of employer obligations will interact with the fulfilment of employee obligations to determine the change in the perceived obligations of the employee.*

## **Method**

The population for this study consists of newcomers who passed in the competitive selection process that took place in 2010 to select civil servants for a Brazilian public sector agency. The agency has units in ten Brazilian cities and about 4,000 employees. The population is made up of 361 newcomers who share about the same date of entry to the organization. Participants were informed about this research during the orientation training. They received an invitation to participate by e-mail during the orientation training before entry (t1= Time 1), approximately one year after entry (t2), and approximately three years after entry (t3). These time lags were chosen to cover the probationary period, which is three years, and which is also the mandatory term for Brazilian public civil servants to gain a permanent contract. In the invitation e-mail, a text presented the study along with an external link to the questionnaire. Participation in this study was voluntary and the guarantee of confidentiality was declared in the invitation e-mail to the participants. The respondent did not have access to the answers of previous collections.

The first survey was filled out by 335 newcomers, 251 filled out the first and second and 202 newcomers participated in all three surveys (56 per cent response rating). Twenty four

employees left the organization (8 per cent) during the length of this study, three were temporarily transferred to another public agency and one had deceased. Analyses concerning change were conducted using the data from those who responded to all surveys. The mean age of respondents who participated in all surveys was 36 years, 26.7 per cent were female, 34.2 per cent were single and 68.1 per cent had no children. It is a highly-educated population, considering that all respondents had at least a University degree and 66% some kind of postgraduate degree. To investigate the possibility of bias produced by attrition, analyses were conducted. Comparison of the participants of the full study and those who stopped did not show any significant differences on the demographic characteristics.

The psychological contract was calibrated with the measure of Maia and Bastos (2014). The Psychological Contract Instrument consists of two Scales, the Employee obligations and the Employer obligations. We assessed the perceived employer and employee obligations at t1, t2 and t3. The respondents were asked to indicate for each statement to which extent they agreed, on a Likert scale ranging from 1= strongly disagree to 5= strongly agree. We assessed the fulfilment of employer and employee obligations at t2 and t3. The respondents were asked to rate how much they believed that their employer had fulfilled the obligations towards them and how much they believed they had fulfilled their obligations towards their employer, on a Likert scale ranging from 1= not at all to 5= totally fulfilled. All measures showed acceptable reliabilities through the times, the Cronbach's alphas for scales ranged from 0.78 to 0.87. In order to confirm the construct validity, we carried out a confirmatory factor analyses on data. The model indicated a satisfactory fit for both Employer and Employee Obligations Scales over time. The data screening for unengaged responses and outliers lead to deletion of five cases.

As analytic strategy, we conducted regression analyses for the calculated variable of change, indirectly assessed by the comparison of the obligations among times. Because it is a five-point scale, the differences scores ranged from -4 to 4, in which negative values mean a decrease in perceived obligations and positive, an increase. The scale ranging from -4 to 4 was first tested, but

the results were not as significant as those obtained with the absolute value of gap later tested, presumably due to the significant excess of kurtosis that the resultant distribution ranging from -4 to 4 shown. By choosing the absolute value gap, we obtained more robust results. Besides this, it was possible to keep the same scale for all variables, with similar meanings, just by doing the linear transformation adding 1 to all. The result was the variable of Change, ranging from 1= no change to 5= intensive change. In our analyses, we controlled for age, as this may influence the relationships under study (Bal, Lange, Jansen, & Van der Velde, 2008). As employees become older, they may become more benevolent, and thus perceiving higher obligations on their part, which has been supported in previous research (Vantilborgh, Dries, De Vos, & Bal, 2015). Finally, we analysed the interactions between employer and employee fulfilment in predicting change to the psychological contract. Scores were centered before interactions were calculated (Aiken & West, 1991).

## **Results**

Table 1 reports descriptive statistics, correlations, and Cronbach's alphas for all scales. Hypotheses were tested using hierarchical multiple regression analyses. For employer and employee obligations, controlling for the value of the same obligations in the earlier time, the relationship between the fulfilment and content of psychological contract was assessed. A significant increase in variance explained ( $R^2$ ) at the second step indicates that the fulfilment is related to a change in the psychological contract content. The interactive effects of Fulfilment of Employer and Employee Obligations in predicting changes to psychological contract over time (hypotheses 1 and 2) are reported in Table 2. Hypotheses 1 and 2 were fully supported.

Table 1. Means, standard deviations (SD), correlations, and Cronbach's alphas for the study variables

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Age (t1)	36.35	7.5														
2. ER (t1)	4.39	.46	-.04	(.83)												
3. ER (t2)	4.27	.53	.04	.31**	(.85)											
4. ER (t3)	4.03	.58	.10	.30**	.41**	(.87)										
5. EE (t1)	4.72	.29	.10	.55**	.32**	.26**	(.80)									
6. EE (t2)	4.65	.37	.12	.22**	.55**	.32**	.31**	(.80)								
7. EE (t3)	4.40	.47	.12	.28**	.27**	.64**	.29**	.45**	(.84)							
8. ERF (t2)	3.25	.54	.03	.13+	.21**	.16*	.08	.25**	.29**	(.83)						
9. ERF (t3)	3.32	.58	.05	.14*	.20**	.18**	.11+	.19**	.26**	.63**	(.87)					
10. EEF (t2)	3.83	.39	.12	.10	.34**	.13+	.10	.40**	.20**	.32**	.25**	(.78)				
11. EEF (t3)	3.86	.46	.10	.14*	.30**	.22**	.25**	.38**	.36**	.31**	.41**	.60**	(.85)			
12. ERC (t2)	1.63	.40	-.13*	-.41**	-.64**	-.16*	-.22**	-.34**	-.15*	-.12+	-.18**	-.22**	-.25**			
13. ERC (t3)	1.68	.43	-.08	-.12+	-.47**	-.41**	-.07	-.31**	-.24**	-.18**	-.18**	-.28**	-.32**	.49**		
14. EEC (t2)	1.37	.33	-.15*	-.34**	-.47**	-.26**	-.47**	-.81**	-.37**	-.13*	-.16*	-.24**	-.36**	.40**	.35**	
15. EEC (t3)	1.49	.35	-.13	-.16*	-.32**	-.46**	-.09	-.44**	-.73**	-.28**	-.20**	-.28**	-.39**	.33**	.48**	.45**

Notes. ER= Employer Obligations; EE= Employee Obligations; ERF= Employer Obligations Fulfilment; EEF= Employee Obligations Fulfilment; ERC= Employer Obligations Change; EEC= Employee Obligations Change. 't' before a number indicates 'Time' (e.g., t1 = Time1). N=240, for Time 1 x Time 2. N=197, for Time 2 x Time 3. All the variables are expressed on a 5-point scale, except Age, Cronbach's alphas for scales appear on the diagonal parentheses. +p<.10, \*p<.05, \*\*p<.01.

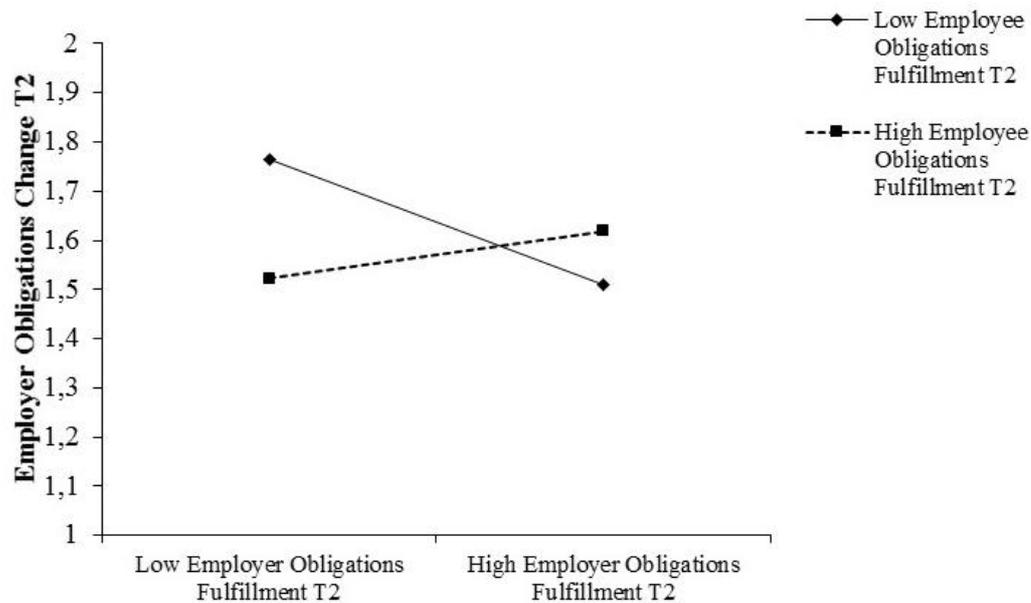
Table 2. Interaction of Fulfilment Employer and Employee Obligations predicting Psychological Contract Change

Independent variables	Dependent variables			
	Step 1	Step 2	Step 3	Step 4
	Employer Obligations Change Time 2 – Time 1			
Age (control variable)	-.127*	-.122+	-.100	-.095
Employer Obligations Fulfilment (ERF) <i>t2</i>		-.160*	-.087	-.132*
Employee Obligations Fulfilment (EEF) <i>t2</i>			-.214**	-.068
ERF ( <i>t2</i> ) x EEF ( <i>t2</i> )				.306***
$\Delta R^2$	.016	.026	.040	.74
Adjusted $R^2$	.012	.034	.070	.142
F	3.931*	5.186**	7.010***	10.885***
$\Delta F$	3.931*	6.352*	10.254**	20.750***
	Employer Obligations Change Time 3 – Time 2			
Age (control variable)	-.075	-.066	-.037	-.033
Employer Obligations Fulfilment (ERF) <i>t3</i>		-.188**	-.066	-.155*
Employee Obligations Fulfilment (ERF) <i>t3</i>			-.344***	-.199**
ERF ( <i>t3</i> ) x EEF ( <i>t3</i> )				.335***
$\Delta R^2$	.006	.035	.102	.092
Adjusted $R^2$	.000	.031	.130	.219
F	1.094	4.114*	10.745***	14.772***
$\Delta F$	1.094	7.100**	23.072***	23.153***
	Employee Obligations Change Time 2 – Time 1			
Age (control variable)	-.148*	-.117+	-.118+	-.113+
Employee Obligations Fulfilment (ERF) <i>t2</i>		-.269***	-.246***	-.130+
Employer Obligations Fulfilment (ERF) <i>t2</i>			-.068	-.104
EEF ( <i>t2</i> ) x ERF ( <i>t2</i> )				.241***
$\Delta R^2$	.022	.071	.004	.046
Adjusted $R^2$	.018	.086	.086	.129
F	5.317*	12.191***	8.485***	9.835***
$\Delta F$	5.317*	18.670***	1.065	12.633***
	Employee Obligations Change Time 3 – Time 2			
Age (control variable)	-.131+	-.091	-.090	-.088
Employee Obligations Fulfilment (ERF) <i>t3</i>		-.393***	-.359***	-.280***
Employer Obligations Fulfilment (ERF) <i>t3</i>			-.095	-.144*
EEF ( <i>t3</i> ) x ERF ( <i>t3</i> )				.183*
$\Delta R^2$	.017	.153	.008	.028
Adjusted $R^2$	.012	.162	.166	.189
F	3.407+	19.914***	13.957***	12.444***
$\Delta F$	3.407+	35.813***	1.866	6.674*

Notes. Psychological contract scales were centered. Standardized regression coefficients are reported ( $\beta$ ). + $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ . N=240, for Time 1 x Time 2. N=197, for Time 2 x Time 3.

The interactive effects are illustrated in Figure 1, showing that the highest level of change in Employer Obligations at Time 2 was obtained when both fulfilment of employer obligations and fulfilment of employee obligations were low.

Figure 1. Employer Obligations Change Time 2



## Discussion

This study investigated change in psychological contracts during the expanded length of time of three years. The results showed that the perceived obligations decreased during the first three years of employment. These results support the findings of Tekleab et al. (2013), and the theoretical basis presented by them that point out the tendency of employees to exaggerate expectations in an unrealistic way and to perceive the most favourable side of the organization that is hiring them (Boswell, Shipp, Payne, & Culbertson, 2009). The results also support the findings of Robinson et al. (1994), which pointed to a decrease in employee's obligations over the first two years of employment.

The direction of change in the perceptions of obligations is an interesting point of the findings of this research, conducted in the public sector, which offers stability, security, and well established rules, because it is an evidence that the psychological contract and the perceived obligations go beyond and above the call of duty and the general terms of the formal job contracts. There is a great awareness of the legal contract, i.e., the terms of working hours, benefits, payments and job stability, however, there is a series of intangibles, of things that cannot be touched or counted, and that the new employees can hardly imagine. The frame time of three years and the methodological rigor applied allow us to affirm with security that the obligations perceived by the employees became less over the years. What made them change their perceptions? In this paper, we found that the fulfilment of psychological contract is one of the reasons to change it. Moreover, that it is not only about the employer obligations, but also about the employee obligations. This is the main point of this research, that a contract has at least two sides and both sides together affect how the psychological contract changes.

This research advances theory by adding back the employee side of the psychological contract, and therefore is able to investigate how the perceptions of fulfilment of the employee obligations interact with the perceptions of fulfilment of the employer obligations to predict change. This is the main implication of our findings for the theoretical models on psychological contract. As discussed previously, the literature so far lacks more longitudinal studies to investigate both types of obligations, those on the part of the employer and those on the part of the employee during the process of the development of psychological contract. Our results suggest that for both employer and employee there is a fit process derived from the comparison between a person's beliefs of what had been promised and the knowledge of what had been done for real.

Nevertheless, the propensity for balancing the employer-employee exchange relationship also exerted an influence on how the perception of obligations changes. Our results showed that employees react according to what they receive, and that their actions depend on whether the employer fulfils its obligations. Our findings strengthen the argument of De Vos et al. (2003), and Coyle-Shapiro and Kessler (2002).

In the analyses of the hypotheses, we found that lower levels of fulfilment of both sides in the psychological contract, employer and employee, predicted the greatest changes. The importance of the balance for the psychological contracts is pointed out by the lines in the plots that represent the high fulfilment of the obligations of the other part in the psychological contract. Although the perceived employer obligations are influenced by the fulfilment of these obligations, they are more strongly influenced by the belief of the employee if he/she is or is not complying with his/her own obligations to the employer. Likewise, although the employees perceive their own obligations depending on if they had fulfilled them, the perception of their own obligations depends more on if the employer had fulfilled its obligations to them.

The issue of psychological contract development and change remained relatively unexamined, while we have significantly advanced research on psychological contract breaches, violations and consequences. By examining the perceived employee obligations, our findings suggest that change in the psychological contract can be a critical index which reveals how the individual alters his or her actions within or toward the organization. More specifically, we have added to better understanding of how change occurs in psychological contracts, and thereby advancing recent work on psychological contracts, such as the post-violation model (Tomprou et al., 2015). Change in psychological contracts is most likely to occur when the employer *and* the employee withhold their contributions to the relationship. While low levels of employer

fulfillment may arouse negative emotions (Bankins, 2015), it does not necessarily destabilize the contract, and it is only when employees respond by lowering their efforts that change will occur in the psychological contract, potentially creating a negative spiral which is difficult to repair (Solinger, Hofmans, Bal, & Jansen, 2015).

This is among the first studies to show the interaction between fulfilment of employer and employee obligations to explain change in the psychological contract over time. This article adds to previous studies (Coyle-Shapiro & Kessler, 2002; Dabos & Rousseau, 2004; De Vos et al., 2003; Lester et. al., 2007; Robinson et al., 1994; Tekleab et al., 2013; Thomas & Anderson, 1998) by the study of the interactive effects of employer and employee fulfilment obligations for the explanation of change. The perceptions that the employees have of the mutual obligations arise not only from what the employer does for them, but also in comparison with what they did for their employer together. Our results show that the strongest changes in the psychological contract were more likely to occur when not only the employer fails to fulfil its obligations, but also when the employee does not deliver his/her part of the deal.

Taking into account that pre-employment experiences can be considered antecedents of the psychological contract and can collaborate to its formation, and that this study was conducted with newcomers, these findings suggest useful implications for organizational practice. They provide an interesting way to better understand how employees form their psychological contracts and the potential consequences that may result from the failure in communicating what can be expected from the employer. The manager can expect the newcomer to change his/her perception of what obligations he/she has in relation to the organization depending on the level at which the organization fulfils its part of the deal, as expected by him/her. Reminding that these newcomers may have had high expectations about the employer, being this organization

one of the best careers in the Brazilian government we can easily understand why the perception about the fulfilment of the employer obligations was not high, moreover, the perceived employer obligations decreased over time. Recovering the information that the newcomers would only be informed of their duties after entry into the organization, we can easily understand as well why the perception about the fulfilment of the own obligations was not high either and the perceived employer obligations also decreased over time. Both obligations were adjusted face the reality after entering the organization, and the perceived obligations decreased in general. In those situations that the fulfilment of the obligations of both sides in psychological contract was low, the psychological contract changed most, as consequence.

The changing psychological contract is neither good nor bad in itself, but it reflects a process of adaptation. This change may have negative consequences for the organization if it induces breach or violation in the psychological contract as a vast amount of research demonstrates (Robinson & Morrison, 2000; Turnley & Feldman, 1999). Therefore, it is important to pay attention to the first contacts with the organization, from the initial experience, such as recruiting, selection processes and the first socialization periods, in an attempt to avoid potential breaches resulting in misunderstandings. Above all, the main practical implication of our findings is that managers should be advised not to expect employees to perceive their own obligations at a higher level if the obligations of the organization are not being fulfilled at an equivalent level as well.

The results of the current study suggest that as important as letting the employees understand what is expected from them in order to achieve the organizational goals, is to listen and understand what the employees expect from the organization in return. It is important to listen to their expectations and try to balance

the psychological contract. The organizations may increase the level of employee obligations through investing specific inducements, which are offered to the employees in order to enhance their contributions. However, it is also important for organizations to realize that employee obligations are not merely the result of what the organization does for the employee, but also the extent to which employees have had the chance to contribute to the organization.

### ***Limitations and suggestions for future research***

Despite the suitability of a longitudinal research design to investigate a dynamic construct, there are some limitations related to this design, such as common method biases. The ideal situation to reduce these biases would be obtaining measures of the employer and employee obligations from different sources. The employees' side could have been evaluated by someone representing the organization. However, when it is not possible to obtain data from different sources, one potential remedy is to separate the measurement of variables by introducing a time lag between them. The variable of Change, indirectly assessed by the comparison of the obligations among times, represents an unbiased estimate of change, since the respondents did not have access to the answers of previous collections. Self-reported measures might also cause socially desirable responses, when measuring employees' evaluations of their own promises and fulfilment. Future research should address these issues. The characteristics of the research sample, from only one public organization in Brazil limits the possibility of generalizing the findings. Therefore, it is yet unclear whether the results of the current study can be generalized to other culture contexts. Further research is needed for validation of the reported findings within a broader population and in other cultural contexts.

## Conclusion

This study supports the conceptualization of the psychological contract as a process. It points out that the changes in the psychological contract depend on its fulfilment. The main contribution of this article is to address the issue of changes in psychological contracts over time. Overall, this research suggests that the psychological contract goes through an adjustment period, undergoing changes as a function of adaptation and balance in the experiences encountered after entry. Especially when there is low fulfilment by both parties, change is most likely to occur. These findings provide an insight into the process of the formation of the psychological contract and suggest useful implications for organizational practice.

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