

Estreder, Y., Rigotti, T., Tomás, I., & Ramos, J. (2020). Psychological contract and organizational justice: The role of normative contract. *Employee Relations*, 42(1), 17-34. DOI 10.1108/ER-02-2018-0039

Abstract

Purpose – The purpose of this study is to examine perceptions of the psychological contract (PC) simultaneously at the individual level (fulfilment of obligations by the organization and psychological contract violation) and the organizational level (normative contract), and their relationship with employees' evaluations of organizational justice. Based on justice and information processing approaches, the hypothesis is that normative contract has an effect on employees' perceptions of organizational justice, and also moderates the relationship between PC violation and organizational justice.

Design/methodology/approach – Multilevel modeling was employed with a multinational sample of 5338 employees nested in 214 companies.

Findings – Findings showed that beyond the positive effect of fulfilment of obligations by the organization, PC violation has a strong negative effect on organizational justice. In addition, normative contract has a positive effect on organizational justice, showing that when shared perceptions of normative contract are higher, then the organizational justice perceptions of employees are also higher. Furthermore, the normative contract moderated the relationship between PC violation and organizational justice, showing that the negative relationship of PC violation with organizational justice was stronger when the normative contract was higher.

Practical implications – Findings suggest that normative contract has effects on organizational justice, and that psychological contract violation had more negative effects on employees' perceptions of organizational justice perceptions when colleagues' shared

perceptions of fulfilment were higher. This means that social context (shared perceptions in an organization about the psychological contract) has effects on individual perceptions of organizational justice. Companies need to pay attention to detrimental effects on employees who perceive a worse psychological contract than their colleagues do.

Originality/value – The study extends the current research by demonstrating that employee-employer exchanges are not limited to individual-level effects because shared perceptions of psychological contract fulfilment (normative contract) also have relevant effects on employees' perceptions of organizational justice.

Keywords Psychological contract, Organizational justice, Normative contract, Multilevel analysis

Paper type Research paper

Introduction

Psychological contracts, defined as “an individual’s beliefs about mutual obligations in the context of the relationship between employer and employee” (Rousseau, 1990, p. 391), have become a prominent framework in the study of employment relationships. Since the seminal re-conceptualization of psychological contracts as individual perceptions of the extent to which promises have been met, research on employee-employer relationships has flourished. However, despite calls in the literature to consider the organizational context, multilevel designs are still scarce in this field (Henderson *et al.*, 2008; Scheel *et al.*, 2013; Sonnenberg *et al.*, 2011; Uen *et al.*, 2009). In particular, the role of shared understanding of psychological contracts, the so-called normative contract (i.e., shared perceptions of PC among organizational members), has received little attention (Rousseau, 1995).

Albeit a multilevel perspective to psychological contract research was proposed early on (e.g. Morrison and Robinson, 1997), only few studies have followed this call. One exception is a study by Jiang *et al.* (2017) who used unit-level impact of organizational changes as a moderator for the relationship of pc-breach to a set of outcomes.

In our study, we will propose that the normative contract indicates a social climate within organizations that has an influence on the impact of individual perceptions of the psychological contract. We aim to contribute to the psychological contract literature in several ways. First, by integrating theories on organizational justice and social information processing theory, we argue that the shared organizational-level perceptions of the psychological contract (normative contract) is an important contextual variable that affects individual-level reactions. This assumption will be derived from theories concerning social comparisons, like Adams (1965) equity theory. Specifically, we propose that the normative contract has a direct cross-level effect on employees’ evaluation of organizational justice, beyond individual perceptions

of the psychological contract. Second, we propose that the normative contract at the organizational level is a resource that will diminish the negative relationship feelings of violations and organizational justice. We use organizational-level instead work-team or unit-level as social comparisons could take place among workers at different units in the same company. Third, our study provides evidence about the differential effects of fulfilment and violation of psychological contracts on work outcomes. Our research model is outlined in Figure 1.

This study contributes to PC theory by providing further evidence on the joint effects of breach and violation on justice perceptions. By additionally factoring in the normative contract and the interplay of the social context with individual perceptions, we extend our knowledge regarding boundary conditions within the PC-framework. As normative contracts are likely shaped by organizational politics, and HR-Management practices, this opens up new insights and practical implications for the management of psychological contracts within organizations.

‘Please insert Figure I about here ‘

Psychological contract and organizational justice

Psychological contracts are based on the reciprocal exchange of perceived promises and obligations between the employer (i.e., inducements such as participation in decision-making, working conditions, employment security) and the employee (i.e., contributions such as protecting the company’s image, accepting an internal transfer if necessary, working overtime or extra hours when required) that define the parameters of the employment relationship (Guest and Conway, 2002). The extent to which employees experience psychological contract fulfilment or breach is a key determinant in evaluating their employment relationship (Rousseau, 1995). Failure to fulfil the promises included in the

psychological contract leads to unfavorable work outcomes, such as reduced job satisfaction, organizational commitment, in-role performance, and organizational citizenship behaviors, as well as increased intention to quit or actual turnover (see Zhao *et al.*, 2007 for a meta-analysis). Guest (2004) proposed perceived (un)fairness as the primary mechanism for the link between the breach of the psychological contract and harmful effects on employees' attitudes and behaviors. Clinton and Guest (2014) provided evidence that organizational fairness explains (i.e. as a mediator) the link between psychological contract breach and voluntary turnover. This underpins the importance of fairness perceptions for subsequent negative attitudes, strain, or even deviant behavior in the workplace.

It is important to note, that Morrison and Robinson (1997) introduced a conceptual distinction between perceived contract breach, which refers to the cognitive evaluation of the status of the social exchange, and the experience of 'contract violation', which is an affective or emotional state that may or may not accompany breach. Violation relies on attributions about the causes of the breach and the perceptions of fulfilment of promises, and it is related to feelings of anger and perceptions of unfairness (Robinson and Morrison, 2000). Research studying the combined effects of psychological contract breach and violation is scarce, both regarding work outcomes and organizational justice (for a rare exception see de Jong *et al.* 2015), which show that psychological contract violation is strongly negative related to job satisfaction, and general health, and positively related to strain, even when breach of the psychological contract is taken into consideration. Hence it seems important to investigate the combined effects of breach and violation on organizational justice.

Fairness perceptions can result from a mismatch between anticipated goals and current results (e.g., referent cognition theory (Folger, 1987)) and/or an imbalance between one's own contributions and deliveries in a social-exchange process, evaluated in relation to relevant

others (equity theory, (Adams, 1965)), where the other party is made accountable for the perceived (un-)fairness (fairness theory (Folger and Cropanzano, 2001)). All these aspects play a role in the psychological contract. Thus, it is likely that the evaluation of the psychological contract is related to perceived organizational justice.

Organizational justice can be defined as an individual's perception of the allocation of resources (distributive justice), fairness of procedures (procedural justice), and the quality of social relationships in the workplace (interactional justice, further divided into interpersonal and informational justice; Folger and Cropanzano, 1998). In addition, some researchers have pointed out that individuals are also likely to formulate general (un)fairness evaluations about exchange obligations (Lind, 2001), and that an individual's justice appraisal is based on a "holistic judgment in which they respond to whatever information is both available and salient" (Greenberg, 2001, p. 211). Rodwell and Gulyas (2013) found a similar pattern of relationships between psychological contract fulfilment and the three justice dimensions. Hence it can be concluded that perceptions of psychological contract breach are likewise related to distributive, procedural and interactional justice. In addition, Ambrose and Schminke (2009) found that an overall justice measure had an additional and distinct effect on satisfaction, commitment, and turnover intentions, that goes beyond the effects produced by the three justice dimensions, in a sample of 330 employees. This means that overall justice is not completely explained by its dimensions, allowing for the use of overall justice measures in their own right. Based on this empirical evidence and Colquitt and Shaw's (2005) suggestions about organizational justice measurement, the justice measure used in the current study has been operationalized as a composite measure of overall fairness.

We study fulfilment and violation of the psychological contract as two distinct predictors of organizational justice. Breach of Psychological contract is understood as non-

fulfilment of promises, whereas violation are negative emotions resulting from PC breach. We propose that there will be an augmentation effect of violation on organizational justice, above and beyond psychological contract fulfilment, because employees attribute the responsibility for non-fulfilment to the company (Morrison and Robinson, 1997), as well as the negative emotions stemming from this attribution. Therefore, we hypothesize:

H1. Psychological contract violation will show a negative relationship with organizational justice, above and beyond the effect of psychological contract fulfilment.

The effects of the normative contract on organizational justice

The quality of an employment relationship, as experienced by individuals, is embedded within the organizational context to which they are exposed (Linde, 2015). Based on social information processing theory (Salancik and Pfeffer, 1978), normative contracts (i.e., a common or shared psychological contract that emerges when individuals in the organization hold common beliefs about promises made to them by their employers (Rousseau, 1995)) would offer employees information with which to interpret the context of organizations created through practices, procedures, and rewards. This organizational framework extends the psychological contract literature by providing a systemic (i.e. multilevel) perspective that has received little attention. Employees are members of work teams, organizations, occupational groups, sectors, and countries. Their psychological contracts are likely to be influenced by factors related to these different levels. In order to better understand the impact of and interactions between the levels of analyses, we are interested in the role the normative contract (i.e. shared perceptions of psychological contracts within organizations) plays as a boundary condition for individual level effects of psychological contracts.

We are aware of only one study that explicitly investigated normative contracts and whether they can be predicted by relation- vs. task-oriented leadership within teams while

performing a complex decision-making managerial task (Tabernero *et al.*, 2009). More recently, a theoretical multi-foci framework for understanding the changing nature of the psychological contract outlined the relevance of comparisons with cohesive others in the evaluation of fulfilment of promises and its potential association with job attitudes and behaviors (Alcover *et al.*, 2017). This proposal updates the interest in organizational-level perceptions in psychological contract theory, as workers in the same company are exposed to similar commitments by their employer.

In the present study, we use employees' perceptions of employers' fulfilment of promises to model normative contracts (i.e., organizational-level) because individuals usually perceive their environments similarly, so that the group-level variables will be reliably measured using the perceptions of organizational members (Bliese and Jex, 1999). Drawing on research on individuals' reactions to organizational practices (Colquitt *et al.*, 2005; van den Bos *et al.*, 2001), and considering that individuals are nested in organizational settings and influenced by contextual factors (Mathieu *et al.*, 2012), we expect (positive) normative contracts to be associated with a range of positive responses from employees. In this context, we focus on similar interpretations among coworkers about exchange agreements that are often determined by common work conditions. Normative contracts can be defined as "circumstances where members of a social group (e.g., a group of employees working in the same organization) hold a common set of beliefs regarding the obligations owed among themselves and to relevant third parties" (Shore *et al.*, 2004, p. 297).

Based on established individual-level relationships between psychological contract fulfilment and justice (Clinton and Guest, 2004; Guest and Conway, 2002; Peiró *et al.*, 2007), we propose that normative contract positively affects employees' perceptions of organizational justice and is not only based on their own perceptions of psychological

contract. The underlying assumption is that a shared perceptions of psychological contract fulfilment strengthens employees' beliefs that the organization cares about their exchange relationship and may be more likely to provide fair treatment in general, even if aspects of the individual psychological contract have been breached. Based on this rationale, we hypothesize:

H2. After controlling for psychological contract fulfilment at the individual-level, the normative contract will show a positive relationship with organizational justice.

Cross-level interactions between normative contracts and psychological contract violation

As noted above, we propose that normative contracts have an augmentation effect above and beyond individual perceptions of psychological contract fulfilment. We will now argue how individuals who experience feelings of violation and are exposed to a positive context (normative contract) evaluate the quality of their employment relationship in terms of fairness. Attempting to explain the emergence of contextual factors within exchange relationships, we propose a potential direct cross-level effect of normative contract as organizational context and an interactive effect with psychological contract violation, whereby the normative contract moderates the negative consequences of psychological contract violation on organizational justice.

Prior studies support the existence of links between psychological contract and organizational justice (Guest *et al.*, 2010), which allows us to propose a mechanism linking the cross-level interaction effect of the normative contract (organizational-level) and psychological contract violation (individual level) on individuals' evaluations of justice in organizations. From social comparison and equity perspectives, while also integrating psychological contract theory (Windle and von Treuer, 2014), we argue that employees who

experience feelings of violation use social comparisons with their co-workers (Morrison and Robinson, 1997) to evaluate whether the exchange was fair overall. In this regard, employees' reactions depend on the work context where the comparison takes place (Buunk and Mussweiler, 2001). In the current study, the effect described is thought to occur when employees compare themselves and their situations to significant others in the organization (Adams, 1965): (1) comparing with others being in better or more favorable conditions and (2) comparing with others who are in worse or less favorable conditions. In addition, Morrison and Robinson (1997) argued that social contracts may serve as an important frame of reference: "If the breach and the means by which it occurred are perceived to contradict the prevailing social contract, the feeling of violation emanating from the breach experience will be much more intense" (1997, p. 246). Thus, on the one hand, we expect that employees in organizations with a low normative contract will report lower perceptions on PC violation if they compare themselves with colleagues in worse conditions. On the other hand, we expect workers in organizations with a high normative contract to show higher perceptions of PC violation if they compare themselves with colleagues in better conditions. Following this line of argumentation, we hypothesize:

H3. After controlling for psychological contract fulfilment at individual level, the normative contract will moderate the relationship between psychological contract violation and organizational justice, so that this negative relationship will be stronger for high than low normative contracts.

Method

Procedure for data collection and sample characteristics

The data used in this paper are part of PSYCONES, an EU-funded research project conducted in accordance with international ethical guidelines that are consistent with the American

Psychological Association. Data was gathered in seven countries: Sweden, Belgium, Germany, Great Britain, Israel, the Netherlands, and Spain with the aim of analyzing psychological contracts among temporary and permanent employees, as well as the relationships between legal and psychological contracts with job attitudes, behaviors and health variables. Main results of this project were presented by Guest *et al.* (2010). The rich data set has been used in many publications, but normative contracts are analyzed for the first time in this study, using the international data set from the project. Questionnaires were distributed in each official language. Items were translated from the original English version using translation and back translation teams. Measurement invariance could be assured between the different country samples (see Rigotti *et al.*, 2010). Participation was voluntary and respondents' anonymity and confidentiality were guaranteed.

Our sample consisted of 5338 (37.2% temporary, 62.8% permanent) employees from 214 companies (36.3% public, 63.7% private). Organizations were selected from three sectors¹ (manufacturing 38.9%, retail and service 27.8%, education 33.3%). 55.1% of the sample subjects were women, and the mean age was 37.11 years ($SD = 11.46$). They reported an average of 35.01 ($SD = 11.52$) working hours per week. The average tenure was 7.99 ($SD = 9.01$) years.

Specific information about subsamples by country is as follows: Sweden, 730 employees from 24 companies; Belgium, 639 employees from 23 companies; Germany, 628 employees from 32 companies; Great Britain, 643 employees from 19 companies; Israel, 960 employees from 27 companies; the Netherlands, 796 employees from 42 companies; Spain, 942 employees from 47 companies.

¹ The PSYCONES data included organisations from three sectors that were selected because of availability and accessibility in all participating countries, because of the amount of temporary workers in each sector, and because of the range of skills and educational level represented across them. In practice, these sector categories were interpreted quite broadly (Guest *et al.*, 2010, p. 213).

Measures

Psychological Contract Fulfilment. The 15-item scale developed by Guest *et al.* (2010) was used to assess the fulfilment of obligations by the organization. Items were rated on a 5-point, Likert-type response scale ranging from 1 (yes, it was promised, but promise not kept at all) to 5 (yes, it was promised, and promise fully kept). The higher the scores are, the higher the level of fulfilment of all promises. Cronbach's alpha value for the scale was .93.

Normative Contract. This variable is considered as a collective phenomenon, and so the individual ratings of psychological contract fulfilment mentioned above were aggregated at the organizational level. Prior to aggregating, justification for agreement was tested using recommended indexes. Both within-organizational agreement by means of the ADM² index = 0.66 (*SD* = 0.15) and the ICC³ (1) = 0.10, and between-organizational differences through one-way ANOVA: $F(213, 4780) = 3.76$ ($p < 0.001$) were assessed, allowing for aggregation.

Psychological Contract Violation. A conceptual distinction has been made between breach (non-fulfilment) and violation of psychological contract. Whereas breach only covers the cognitive awareness of an unfulfilled deal, violation, involves the emotional reaction (Guest *et al.*, 2010, p. 283; Robinson and Morrison, 2000), Violation has been described as “involving feelings of betrayal and deeper psychological distress, [whereby]... the victim experiences anger, resentment, a sense of injustice and wrongful harm” (Rousseau, 1989, p. 129). In consequence, a measure of PC violation was developed for PSYCONES project (Guest *et al.*, 2010) asking to what extent employees feel three negative moods (angry,

² ADM index values indicate intra-organization agreement. Burke and Dunlap (2002) recommend using the criterion of $ADM < c/6$, where c is the number of response alternatives, to interpret the index. For a Likert-type 5-point scale, $c/6$ is equal to 0.83. Consequently, we concluded that there was within-organizational agreement as the ADM index value was less than 0.83.

³ The ICC (1) is a measure of inter-rater reliability (consistency) that also shows the percentage of variance that resides at the organizational level. Thus, we could conclude that 10% of the variance of psychological contract fulfilment can be explained by (Burke *et al.*, 1999) differences across organizations.

violated, disappointed) and three positive moods (happy, pleased and grateful) regarding how far the organization has or has not kept their commitments. Items were rated on a 5-point, Likert-type response scale ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Items reflecting positive moods were reverse-scored, so that high scores on this scale indicated psychological contract violation. Cronbach's alpha for the scale was .85.

Organizational Justice. The 3-item adapted scale developed by Guest and Conway (1998) was used to measure the global perception of organizational justice, including one item for each dimension: distributive justice (regarding if the employee is fairly paid for the work done), procedural justice (if the employee feel that organizational changes are implemented fairly), and interactional justice (if the employee feels fairly treated by managers and supervisors). Employees responded on a 5-point Likert-type scale ranging from 1 (*Not at all*) to 5 (*Totally*). Cronbach's alpha was .72.

Control variables. Variables included at the individual level were: type of employment contract (0 = temporary, 1 = permanent) and the gender of the employees (0 = female, 1 = male). Control variables included at the organizational level were: six dummy variables (coded with "1" and "0") for country, using Spain as a reference, size of each company (total number of employees per organization), and company ownership (0 = public, 1 = private).

Analysis

We conducted a Harman's one-factor test (Podsakoff *et al.*, 2003) with LISREL 8.80 (Jöreskog and Sörbom, 2006) to assess potential common method variance induced by the use of single informants and to assess the factorial validity of the three scales used in our study (i.e., psychological contract fulfilment, organizational justice, and psychological contract violation). Confirmatory factor analysis (CFA) models were used to compare a three-factor

model to a single-factor model (combining all three scales as one)⁴. The CFA results provided acceptable fit indices for both the single-factor model ($\chi^2 = 975.454$, $p < 0.01$, $df = 252$; RMSEA = 0.068; NNFI = 0.960; CFI = 0.964, AGFI = 0.967) and the three-factor model ($\chi^2 = 756.791$, $p < 0.01$, $df = 249$; RMSEA = 0.057; NNFI = 0.972; CFI = 0.975, AGFI = 0.974). Nevertheless, the three-factor model provided a superior fit to the data than the single-factor model⁵. These results provided validity for the scales used in this study (their use as individual scales in the model was supported), and they also make it unlikely for common method variance to be a major concern (Cheung and Rensvold, 2002).

Hierarchical linear modeling (HLM; Raudenbush and Bryk, 2002) was used to test the study hypotheses. A series of HLM models were performed to test for the hypothesized relationships using LISREL 8.80 (Jöreskog and Sörbom, 2006). Previously, we checked if organizational justice varied both within and between organizations⁶. The results indicated that organizational justice showed significant within-group variance ($\sigma^2 = 0.76$, $p < 0.001$) and significant between-group variance ($\sigma^2_{\tau00} = 0.10$, $p < 0.001$). Moreover, the ICC (1) value was 0.11 ($p < 0.001$), indicating that 11% of the variance in organizational justice lies between organizations; it was significant and, therefore, provided a basis for examining individual- and organizational-level predictors.

Thus, having confirmed that organizational justice varied both within and between organizations, a sequence of nested HLM models was developed to sequentially test the

⁴ The Weighted Least Squares (WLS) method was used, and the inputs for each analysis were the polychoric correlations matrix and the asymptotic covariance matrix of the items. In order to test differences between the two nested models, differences larger than 0.01 between NNFI (Δ TLI; Widaman, 1985) and CFI (Δ CFI; Cheung and Rensvold, 2002) values were considered as an indication of non-negligible practical differences.

⁵ Incremental changes were higher than 0.01 when comparing both CFI and TLI values, indicating that the three-factor model showed a non-negligible increase in goodness of fit, and so it was selected as the best-fitting model.

⁶ The prior requirement of significant within- and between-group variance in organizational justice (Hofmann, 1997) was assessed by estimating the null model, where organizational justice was specified as the outcome variable, and no individual- or organizational-level predictors were included in the model.

hypotheses. First, in Model 1, we examined the influence on organizational justice of individual variables that were introduced as control variables, such as type of employment contract, gender, and fulfilment of the psychological contract. Then, to find support for Hypothesis 1, we run Model 2, which also included the main effect of psychological contract violation on organizational justice⁷. Additionally, in order to test the hypothesized cross-level effect (Hypothesis 2), we estimated Model 3, which assessed the influence of normative contract on organizational justice, and also added country, firm size, and company ownership as control variables at the organizational level⁸. Finally, to test for Hypothesis 3, we run Model 4, which included a cross-level interaction checking the moderator role of normative contract in the relationship between psychological contract violation and organizational justice⁹.

Before the models were tested, the variables were centered following centering recommendations discussed in the literature (Enders and Tofighi, 2007). Psychological contract violation was centered at its group mean; grand mean centering was used with psychological contract fulfilment¹⁰. Finally, normative contract was centered at its grand mean.

Results

Table I shows the means, standard deviations, Cronbach's alpha, and bivariate correlations for all study variables. It shows that organizational justice significantly correlated in the

⁷ Models 1 and 2 only include individual-level predictors, and provide information on the within-group variance in organizational justice that is explained by the predictor variables. The focus is on the variability on organizational justice of the individuals within the organizations.

⁸ Model 3 includes organizational-level predictors, and the focus is on the percentage of variance of the intercept (mean value on organizational justice across organizations) that is explained by the predictor variables.

⁹ In Model 4 the focus is on the percentage of variance in the slope (defining the relationship between psychological contract violation and organizational justice) across organizations that is explained by the predictor variables.

¹⁰ Following Enders and Tofighi (2007), individual-level predictors involved in a cross-level interaction should be centered at its group mean. Individual-level predictors that are included in the model as control variables should be centered at the grand mean.

hypothesized direction with all the major variables included in our analyses. The internal consistency estimates for the different scales were good, ranging from 0.72 to 0.93. The average score on psychological contract violation was 2.29, where a score of 2 is equivalent to “somewhat disagree”. This result suggests that the general level of violation was quite low, although the standard deviation of 0.86 indicates that there was a wide range of responses.

‘Please insert table I about here’

The results of the multilevel analyses are shown in models 1–4 in Table II. In Model 1, both control variables, type of employment contract ($\gamma_{10} = -0.11, p < 0.01$), and psychological contract fulfilment ($\gamma_{30} = 0.61, p < 0.01$) were significantly related to organizational justice perceptions. Temporary employees showed higher scores in organizational justice, and PC fulfilment positively predicted organizational justice perceptions. Results indicate that both predictors explain 32% of the within-group variance in organizational justice. Model 2 revealed that psychological contract violation was negatively and significantly related to organizational justice ($\gamma_{40} = -0.47, p < 0.01$). Moreover, psychological contract violation increased the explained within-group variance in organizational justice by approximately 23%. Thus, Hypothesis 1 was supported.

‘Please insert table II about here’

As Model 3 in table II shows, after controlling for the effect of psychological contract fulfilment at the individual level, normative contract had significant positive main effect on organizational justice ($\gamma_{01} = 0.56, p < 0.01$), and this model increased the explained variance in the intercept (mean value on organizational justice across organizations) by approximately 51%. Thus, Hypothesis 2 was supported. Moreover, when the interaction term between psychological contract violation and normative contract was added to the final model (Model

4), its parameter estimate was negative and marginally significant for organizational justice ($\gamma_{41} = -0.09, p = 0.07$). Due to the difficulty in detecting significant interactions, p values < 0.10 can be considered appropriate when testing moderator effects (Champoux and Peters, 1987; Shieh, 2009). Moreover, it has been stated that when testing interaction effects in the context of multilevel modeling, the issue about statistical power is even more severe (Aguinis *et al.*, 2013; Mathieu *et al.*, 2012). Additionally, it should be noted that this interaction term was statistically significant when running the analysis with a different operationalization of organizational justice. Concretely, organizational justice was originally measured using a four items scale that included two items from distributive justice. Our rationale for using only three items relied on the consideration of a “balanced” composite measure of justice, including one item for each dimension¹¹. For all those reasons, we thought that it would worth paying attention to this marginally significant result in the cross-level interaction. Model 4 increased the explained variance in the slope by approximately 10%.

To illustrate the nature of the interaction, we used the web utility provided by Preacher *et al.* (2006) which allows probing 2-way interaction effects in hierarchical linear modeling (multilevel modeling). Simple slopes for the conditional effects of individual psychological contract violation on perceived organizational justice for low and high values of normative contract (i.e., one standard deviation below and above the sample mean) were estimated, and results for the corresponding regression lines were plotted (see Figure II). As a result, our marginally significant interaction term suggested that the slopes were different from each

¹¹ The results of the multilevel analyses with the four item measure of organizational justice were in line with the results with the three item measure. Both control variables, type of employment contract ($\gamma_{10} = -0.14, p < 0.01$), and psychological contract fulfilment ($\gamma_{30} = 0.59, p < 0.01$) were significantly related to organizational justice perceptions. Moreover, psychological contract violation ($\gamma_{40} = -0.48, p < 0.01$) and normative contract ($\gamma_{01} = 0.44, p < 0.01$) were significantly related to organizational justice. Finally, as indicated, the interaction term between psychological contract violation and normative contract ($\gamma_{41} = -0.24, p < 0.01$) was negative and, in this case, statistically significant, for organizational justice.

other. Specifically, the slope values obtained with the PROCESS macro (Hayes, 2013) for SPSS (using the pick-a-point approach) indicated that the negative relationship between psychological contract violation and organizational justice was stronger when normative contract was high (slope = -0.54, $t = -25.02$, $p < 0.01$) than when normative contract was low (slope = -0.49, $t = -26.48$, $p < 0.01$). Employees in contexts with positive normative contract showed higher organizational justice than those in contexts with less positive normative contract, when PC violation is higher as well as when it is lower. But the decrease in organizational justice as a result of higher PC violation is slightly stronger among employees in more positive normative contract than among employees in social environments with less positive normative contracts, showing support for Hypothesis 3.

‘Please insert figure II about here’

To further explore the nature of the cross-level interaction effect, we offer in Figure III a plot of the region of significance (95% confidence band; lines in red in Figure III) of the simple slope describing the relationship between PC violation and organizational justice as a function of normative contract (also obtained with the web utility provided by Preacher *et al.*, 2006). According to the plot, the effect of PC violation on organizational justice was negative and significantly different from zero for almost all values of normative contract, showing a stronger negative relationship as the value of normative contract increases. The effect would not be statistically significant for values of normative contract well below the mean (close to -3 SD). This means that when normative contract scores are very low, the influence of individual perceptions of PC violation had lower effects on organizational justice. A potential explanation could be that, in such cases where all organizational members are perceiving a non-fulfilment of PC, the own perception of violation becomes less relevant. In this case, every worker could perceive a lack of justice from their employer as a result of generalized

perceptions of non-fulfillment. Even employees not experiencing PC violation on their own could develop feelings of unfairness as a result of unequal treatment to their colleagues.

‘Please insert figure III about here’

Discussion

Results from this multilevel study extend the current research by simultaneously examining psychological contract predictors at individual level (psychological contract fulfilment and violation) and organizational level (normative contract), focusing on the individual level of organizational justice.

First, this study found that employees who experience feelings of violation, assigning responsibility for a serious infringement of their psychological contract to their organization, had unfavorable reactions by diminishing their perceptions of justice within their employment relationships. Beyond established evidence about the detrimental effects of non-fulfilment of psychological contract on work outcomes (Zhao *et al.*, 2007), this result is consistent with studies on the negative effects of psychological contract violations, such as reducing performance (Turnley and Feldman, 1999) and increasing turnover (Robinson and Rousseau, 1994). In addition, the distinguishable effect of violation on organizational justice reinforces the theoretical distinction proposed between PC breach (considered as non-fulfilment of PC promises) and PC violations, confirming the proposals of PSYCONES framework about psychological contract (Guest, 2004; Guest *et al.*, 2010).

Our findings have implications beyond the detrimental effects of employee responses to violation. We found that a significant portion of the variance in justice perceptions (23%) was attributable to the experience of psychological contract violation, after controlling for the effects of psychological contract (non)-fulfilment. This result agrees with evidence provided by Baumeister *et al.* (2001) and de Jong *et al.* (2017) about the deep impact of negative

experiences, who reviewed a wide variety of phenomena, confirming an asymmetrical pattern of reactions where bad experiences have a stronger impact than comparable good experiences. In our study, the results of HLM analyses showed that, beyond the positive effects of psychological contract fulfilment, feelings of violation have a significant negative impact on employees, in terms of unfair treatment displayed by the employer, confirming the strong effect of bad experiences on the employment relationship. It is also congruent with results of Costa and Neves (2017) who found that blame attributions of breach (a core element in PC violation definition) negatively predicted employees' organizational commitment and organizational citizenship behaviors.

Second, the present study is among the first to test the effect of shared perceptions of psychological contract fulfilment (normative contract) on organizational justice. The study found that the normative contract has a direct cross-level effect on organizational justice at the individual level. The results indicate that the normative contract is used as a contextual referent in guiding employees' reactions to organizational actions (Nadin and Williams, 2012; Windle and von Treuer, 2014). Thus, creating a positive normative contract is essential to employees' perceptions of justice, making them feel valued by employers so that they can reciprocate with positive work attitudes and behaviors. Furthermore, the findings also reveal that employees adjust their evaluations of justice in response to both the individual- and organizational-level psychological contract. The results imply that individual perceptions cannot be ignored, even when the emergence of a normative contract provides a context, complementing the quality of exchange assessment (Bliese and Jex, 1999). Furthermore, individuals exposed to this shared context would use it as a referent for making sense of their own psychological contract, as (in)equality in the exchange relationship (Rousseau, 1995). Thus, our results contribute to explain the relevant role of social context in the development

of psychological contract, its dynamics and effects, providing some answers to the claim for a multi-foci approach to the analysis of PC (Alcover *et al.*, 2017). In particular, our results suggest that consequences of non-fulfilment of promises made by the company could have an effect although the employee is not the direct recipient of such unfulfilled promises. Employee's justice perceptions could suffer even when the unfulfilled promises are not their own but refer to significant others.

Third, the cross-level interaction effects of the normative contract with the experience of psychological contract violation is an important finding. It suggests that employees' shared perceptions about the fulfilment of obligations by the organization, moderates the individual effect of contract violation on organizational justice. Our findings showed that in organizations with high levels of a normative contract (shared perceptions of high fulfilment of promises), the negative influence of contract violation on employees' overall justice perceptions is even more pronounced than in organizations with a low normative contract, supporting the exacerbating effects of positive contextual referents.

In this case, a positive context (high normative contract) would further exacerbate individuals' negative responses to contract violation experiences, diminishing overall perceptions of justice. Placing this in a social comparison framework, our findings suggest that individuals under threatening circumstances (i.e., PC violation), when comparing with significant others in better conditions (i.e., high normative contract showing that collective perceptions of PC are positive) experienced more detrimental effects on justice perceptions than individuals' comparing with others in worse situations (i.e., low normative contract). These results are consistent with the pattern found in previous studies because they show that comparisons with others who are better off lead to negative consequences (Klein, 1997; Major, 1994), and comparisons with others who are worse off lead to positive consequences

(Buunk and Ybema, 2003; Tennen *et al.*, 2000). In the same line, our results contribute to unfold the multi-foci approach to PC analysis (Alcover *et al.*, 2017). In particular, their proposition 8 says that “Perceptions of PC fulfillment regarding job-related promises will be strongly influenced by comparisons with the PC fulfillment received by cohesive others in relation to each organizational agent, with respect to whom the balance will be one of fulfillment, over-fulfillment, or under-fulfillment” (p.18). Our results confirm that shared perceptions of colleagues about psychological contract play a significant role on the effects of PC breach and violation on job outcomes, serving as a reference framework for comparisons.

A suggestion for future research is to examine explicit comparison processes. This will provide further insights into the way comparisons with others affect employees’ responses in organizational settings. Moreover, this result might reinforce the importance of considering the influence of organizational variables on employees’ attitudes and behaviors (Klein and Kozlowski, 2000).

Apart from the results of the hypothesis testing, another finding that should be discussed is the composite measure of overall justice used as a perceptual response to the psychological contract. This global measure of justice was found to be significantly related to the (non)fulfilment of the deal. Overall, our results offer support for overall justice as a general indicator of the quality of the exchange relationship between employees and employers, and the global evaluation of the organization as a whole (Colquitt *et al.*, 2005; Guest, 2004; Robinson *et al.*, 1994; van den Bos *et al.*, 2001). Nonetheless, future research using a dimensional approach to organizational fairness perceptions in relation to different types and contents of psychological contracts may help to disentangle more specific processes involved in shaping employees’ attitudes and behaviors.

In conclusion, we can highlight two main contributions regarding psychological contract theory and organizational justice research. First, our results give support to the conceptual distinction between PC breach and PC violation in line with previous research (Morrison and Robinson, 1997), showing that PC violation (as a result of attributional processes of responsibility to the company for lack of promises fulfilment) had an additional detrimental effect beyond PC breach. In other words, judgement of justice by employees results not only from (un)fulfilment of promises but specially from the betrayal attributions made by individuals. Second, our results underpin the relevance of social comparison processes during the shaping of psychological contracts, outlining the role played by the social context when employees interpret the labor relationships with their companies. In this sense, we contribute to unfold the multi-foci approach to Psychological Contract (Alcover *et al.*, 2017), paying attention to different agents in the process of developing individual PC perceptions.

Practical implications and limitations

In addition to the aforementioned theoretical implications, our findings provide some practical implications. First, the distinct role of PC breach and PC violation outlines the relevance for companies to pay efforts to detect if employees are perceiving unfulfilled promises, and the need to explain the causes for this non fulfilment. Companies need to ensure that employees do not attribute unfulfilled promises to the unwillingness of the firm or to lack of involvement with workers. As PC violation has a more severe effect than PC breach, companies and managers should be sensitive to perceptions of PC breach. Specially they need to confront with employees blaming the company for these breach, if they want organizational justice to be maintained and enhanced. Organizations should be wary, not only about failing to fulfil the

deal, but also about psychological contract violation; that is, better explaining, clarifying, and narrowing the psychological contract breach is the employer's responsibility.

Second, employers need to understand the importance of creating and maintaining a positive psychological contract at the community level, as well as at the individual level. Shared perceptions about psychological contract predicts organizational justice beyond individual perceptions about promises received. Despite PC has been considered an idiosyncratic deal (Rousseau, 1995), employees also perceive unfulfilled promises by their colleagues, which in turn affect their perceptions of organizational justices, as well as the fulfilment of promises received individually.

Third, our results suggest that establishing individual deals that differ from the common deal might be detrimental to overall fairness perceptions. Hence, individual deals should be transparent and based on overall fair procedures. Managers must especially take care of employees who feel poorly treated when others are treated well because this is the most harmful combination and affects perceptions of fairness. Detecting (and facing with) what employees are perceiving mistreatment when in favorable social contexts becomes a critical policy to maintain fairness perceptions among their staff.

Despite these contributions, some limitations remain. First, this study used a cross-sectional design, making it difficult to draw firm conclusions about causality. Second, our interest was focused on employees' perceptions of employment promises, regardless of their employers' perspective. In addition, only promises made by companies to employees are considered.

Third, the use of a composite measure of overall justice perceptions may hamper a differential understanding of the effects related to distributive, procedural, and interactional justice. Future research needs to include the employers' viewpoint of their set of

psychological contract promises as an additional source of information, as well as commitments made by employees to their employers. In addition, more studies including PC breach and PC violation should be carried out to disentangle the differential effects of both variables on other job outcomes. Fourth, studies carried out in work settings where psychological contract violations are more explicitly manifested might reinforce the results found. Finally, this study outlines the need to include social context in the analysis of psychological contract, paying attention to the social exchange and comparisons processes, not only in the traditional dimension of employee-organization, but also including comparisons with coworkers' perceptions. Shared perceptions of relevant agents about PC could influence the formation and development of PC individual perceptions, their dynamics, and the effects on work outcomes. Calls for a multi-foci approach to PC study (Alcover *et al.*, 2017), implies considering shared perceptions regarding the several agents involved in this process.

Despite these limitations, the current study offers evidence about the relevant role played by the normative contract (shared perceptions among organizational members) in psychological contract theory, serving as a frame of reference for individuals and influencing individuals' perceptions of organizational justice from a multilevel approach.

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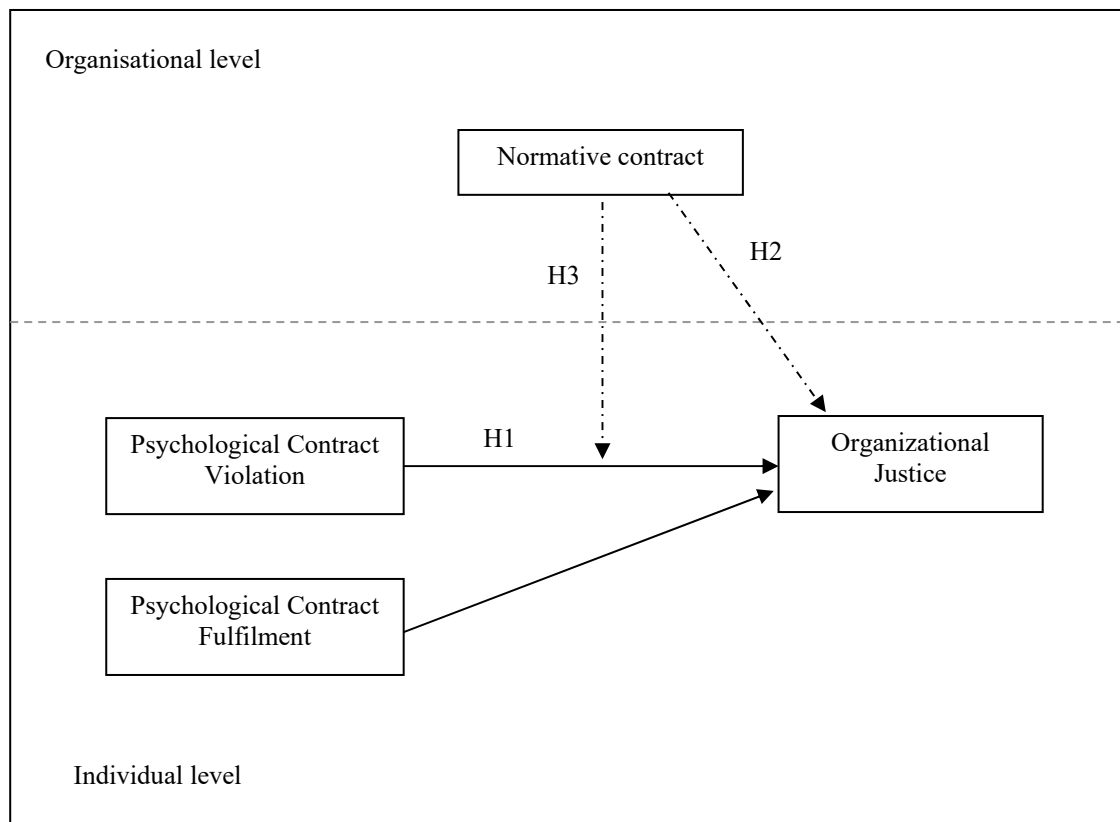
Figure I. Conceptual model incorporating the research hypotheses

Figure II. Relationship between psychological contract violation and organizational justice as a function of normative contract

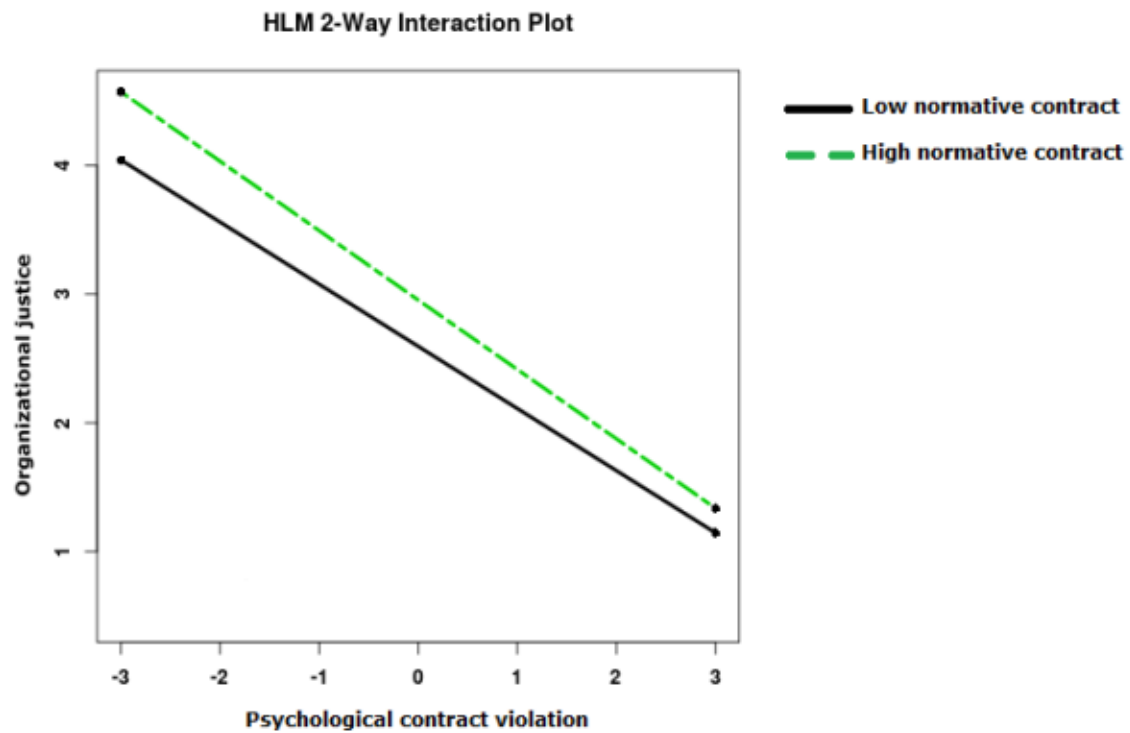
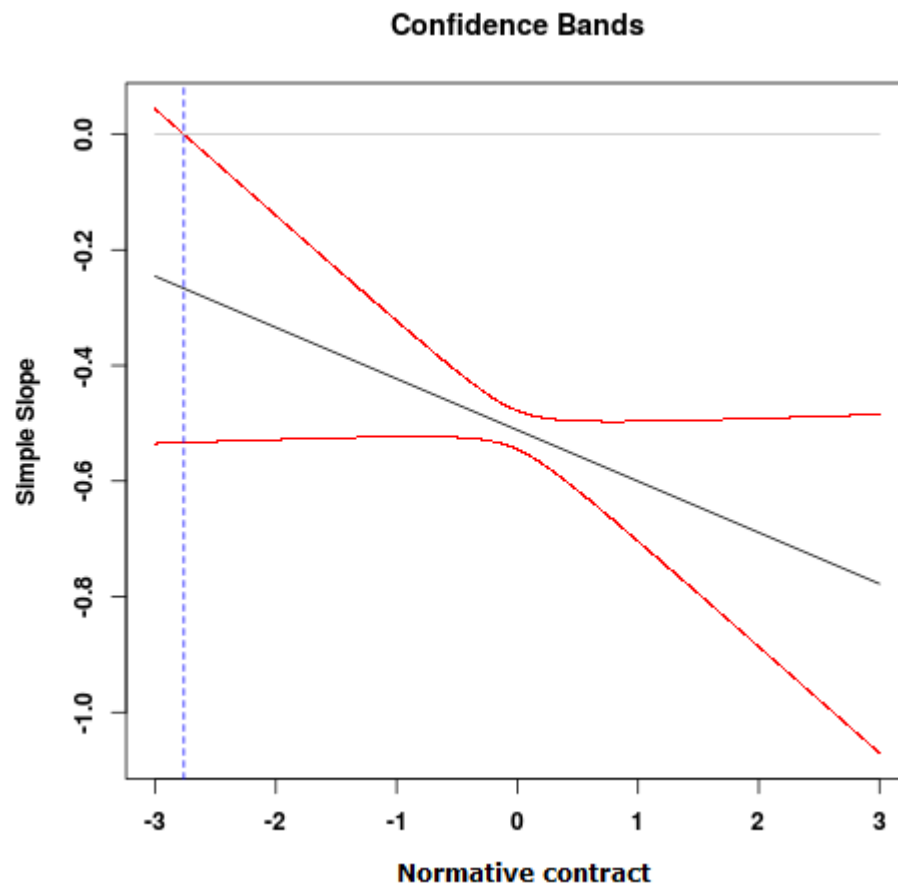


Figure III. Region of significance of the simple slope describing the relationship between psychological contract violation and organizational justice as a function of normative contract



Note. The horizontal line denotes an effect of zero. The vertical line represents the boundary of the region of significance.

Table I. Descriptive statistics and correlations of study variables

	Range	Mean	SD	1	2	3	4	5	6	7	8
1. Employment contract	Dummy	-	-								
2. Gender	Dummy	-	-	0.03*							
3. PC fulfilment	1-5	3.69	0.84	-0.10**	-0.04**	(0.93)					
4. PC violation	1-5	2.29	0.86	0.13**	-0.01ns	-0.58**	(0.85)				
5. Organizational justice	1-5	3.23	0.93	-0.11**	-0.01ns	0.57**	-0.67**	(0.72)			
6. Firm size	15-6500	645.51	11161.9	-0.01ns	0.14**	-0.02ns	0.01ns	0.01ns			
7. Company ownership	Dummy	-	-	-0.02ns	0.08**	0.04**	-0.13**	0.11**	-0.07**		
8. Normative contract	1-5	3.69	0.32	-0.08**	-0.10**	0.38**	-0.30**	0.30**	-0.06**	0.09**	

Note: * $p < 0.05$; ** $p < 0.01$; ns: not significant. Spearman rank correlation was used when the data were dummy. Pearson's correlation coefficient was computed for interval data. Cronbach's alpha coefficients are in brackets. PC = Psychological Contract. N on level 1 = 5338; N on level 2 = 214.

Table II. Multilevel regression analysis of PC fulfilment and PC violation on organizational justice with normative contract as moderator variable

		Model 1			Model 2			Model 3			Model 4		
		Parameter	SE	z	Parameter	SE	z	Parameter	SE	z	Parameter	SE	z
Individual Level													
Control	(Intercept) (γ_{00})	3.33	0.02	133.58**	3.32	0.02	138.79**	3.25	0.04	76.52**	3.25	0.04	76.85**
	Employment contract (γ_{10})	-0.11	0.03	-4.38**	-0.06	0.02	-2.75**	-0.06	0.02	-2.90**	-0.06	0.02	-2.85**
	Gender (γ_{20})	0.04	0.02	1.68ns	0.01	0.02	0.57ns	0.02	0.02	0.88ns	0.02	0.02	0.89ns
	PC fulfilment (γ_{30})	0.61	0.02	34.61**	0.36	0.02	19.46**	0.32	0.02	16.86**	0.32	0.02	16.92**
Main effect	PC violation (γ_{40})				-0.47	0.02	-26.30**	-0.50	0.02	-26.94**	-0.50	0.02	-27.12**
Organizational Level													
Control	Dummy 1 (γ_{02})							-0.04	0.05	-0.83ns	-0.04	0.04	-0.87ns
	Dummy 2 (γ_{03})							-0.10	0.05	-1.93ns	-0.10	0.05	-1.94ns
	Dummy 3 (γ_{04})							0.05	0.04	1.15ns	0.05	0.04	1.13ns
	Dummy 4 (γ_{05})							0.01	0.05	0.19ns	0.01	0.05	0.17ns
	Dummy 5 (γ_{06})							-0.20	0.05	-3.67**	-0.20	0.05	-3.71**
	Dummy 6 (γ_{07})							-0.09	0.05	-1.92ns	-0.09	0.05	-1.93ns
Main effects	Firm size (γ_{08})							0.01	0.01	1.20ns	0.01	0.01	1.20ns
	Ownership (γ_{09})							0.10	0.03	3.26**	0.10	0.03	3.28**
	Norm.contract (γ_{01})							0.56	0.05	11.33**	0.54	0.05	10.86**
	Interaction NC* PCV (γ_{41})										-0.09	0.05	-1.79†
R ²		0.32**			0.55**			0.55**			0.55**		

Note: † $p < 0.10$; ** $p < 0.01$; ns: not significant. PC = Psychological Contract. Norm. = Normative. NC = Normative Contract. PCV = PC Violation.