



You scratch my back, I'll scratch yours: Unethical pro-organizational behavior and deviance in response to different psychological contract states

Yannick Griep^{a,b,*}, Johannes M. Kraak^c, Jesse Fenneman^a, Alfredo Jiménez^c, Xander D. Lub^{d,e,f}

^a Behavioural Science Institute, Radboud University, Nijmegen, the Netherlands

^b Stress Research Institute, Stockholm University, Stockholm, Sweden

^c KEDGE Business School, Bordeaux, France

^d Hogeschool Utrecht, Utrecht, the Netherlands

^e Nyenrode Business School, Breukelen, the Netherlands

^f VU University Amsterdam, Amsterdam, the Netherlands

ARTICLE INFO

Keywords:

Psychological contract
Fulfillment
Breach
Deviance
Unethical pro-organizational behavior
Polynomials

ABSTRACT

In this multi-study paper, we integrate Social Exchange Theory and the discretionary workplace behavior literature. Specifically, we posit that by breaching their psychological contract (PC) obligations, organizations may trigger negative reciprocity, which in turn may increase deviant behavior. Moreover, we posit that by fulfilling their legitimately PC obligations, organizations may trigger positive reciprocity, which in turn may increase unethical pro-organizational behavior. Across two studies (3-wave field study with traditional breach measure and 2-wave field study with expanded breach measure and polynomial regression), we found repeated evidence for our hypotheses. Specifically, we found that PC breach (Study 1) and PC under-fulfillment (Study 2) are positively related to the enactment of organizational deviance via negative reciprocity. Furthermore, we found that PC fulfillment (Study 1) and high absolute levels of PC fulfillment (Study 2) are positively related to unethical pro-organizational behavior via positive reciprocity. Implications for theory and practice are discussed.

In the past decade, we have been overwhelmed with a barrage of reports regarding unethical and scandalous behavior in many sectors and layers of society. Think about the Boeing employees who knew—but chose to lie to members of Congress—about the technical difficulties of the 737 Max, or attorney Michael Avenatti who is facing a 36-count federal indictment for allegations of having stolen millions from his clients, or Volkswagen officials who tried to cover up the fact that they had intentionally programmed their turbocharged direct injection diesel engines to activate their emission controls only during laboratory emissions testing. These scandals indicate that unethical acts are omnipresent in organizations, even when (groups of) individuals had the option to engage in more ethical behavior such as speaking up or telling the truth. Research has indeed demonstrated the pervasiveness of unethical behavior in the workplace by demonstrating that 75% to 95% of all employees steal from their employer at least once (Case, 2000; Coffin, 2003), that the financial costs associated with workplace theft cost organizations between \$10 and \$120 billion annually (Bennett et al., 2019; Bourke, 1994; Coffin, 2003), and that 19% of employees admitted

to lying to employees, customers, vendors, or the public (Gurchiek, 2006). Moreover, these unethical behaviors might carry additional hidden human costs such as reduced employee morale, well-being, and performance (Robinson & Greenberg, 1998). Understandably, these economical and hidden human capital costs are a major concern to organizations (Bennett et al., 2019) and a critically important question quickly arises: “Why do employees engage in unethical behavior in the workplace?”

In an attempt to answer this question, the literature has primarily focused on contextual drivers (e.g., ethical leadership, organizational culture, ethical climate, codes of conduct) and a long list of individual level factors (e.g., negative personality traits, moral identity, cognitive moral development, empathy and anger) to understand why employees engage in unethical behavior. Despite the importance of these studies, Kish-Gephart and colleagues' meta-analysis (2010) revealed that these studies generally present very small effects and leave much of the variance in enactment of different types of unethical behavior unexplained. One major way forward would be to further nuance the subtle,

* Corresponding author at: Behavioural Science Institute, Radboud University, Montessorilaan 3, Postbus 9104 6500 HE Nijmegen, The Netherlands.

E-mail address: y.griep@psych.ru.nl (Y. Griep).

<https://doi.org/10.1016/j.jbusres.2022.113537>

Received 13 March 2022; Received in revised form 28 November 2022; Accepted 3 December 2022

Available online 18 December 2022

0148-2963/© 2022 The Author(s). Published by Elsevier Inc. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

yet theoretically and practically important differences between different types of unethical behavior. As is evident from the examples provided in the introduction, some of these unethical acts are self-focused and hence offer direct benefits to the individual committing the behavior (e.g., Michael Avenatti who allegedly stole millions from his clients). In contrast, other unethical acts are other-focused and directly benefiting the organization on whose behalf the individual is committing the unethical act (e.g., choosing to lie to members of Congress about the technical difficulties of the 737 Max; benefiting Boeing). While the literature has predominantly employed a self-focused view on unethical behavior, the other-focused view warrants more research attention. By differentiating these types of unethical behavior in the workplace, we might be able to provide a more nuanced and theoretically sound response to the above posed research question; a call to action which was also made by Mackey et al. (2021) in their recent meta-analysis of different deviance concepts.

In this paper, we therefore propose that Social Exchange Theory (Blau, 1964; Gouldner, 1960; Cropanzano et al., 2017), operationalized through Psychological Contract Theory (PC; Rousseau et al., 2018) may offer an important additional, and more nuanced, explanation as to why employees engage in unethical behavior in the workplace. We focus on two specific types of unethical behavior. First, we focus on *organizational deviance (OD)*—defined as behavior that violates significant organizational norms and in doing so threatens the well-being of an organization (Bennett & Robinson, 2003): a self-focused view on unethical behavior. Second, we focus on *unethical pro-organizational behavior (UPB)*—defined as behavior intended to promote the effective functioning of the organization and in doing so violate core societal values, mores, laws, or standards of proper conduct (Umpress & Bingham, 2011; Umpress et al., 2020): an other-focused view on unethical behavior.

When drawing on Social Exchange Theory (Blau, 1964; Gouldner, 1960) and PC Theory (Rousseau et al., 2018), we know that employees who perceive a negative discrepancy between what their organization is obligated to provide versus what it actually delivered—labelled PC breach—will be more likely to engage in OD (e.g., Bordia et al., 2008; Jensen et al., 2010; Restubog et al., 2015) via negative reciprocity (Gouldner, 1960; Morrison & Robinson, 1997). In contrast, when employees perceive that their organization fulfills their PC, they will be more likely to engage in UPB as a way to “repay” their organization for the fair treatment they received (e.g., Turnley et al., 2003; Conway et al., 2011) via positive reciprocity (Gouldner, 1960; Morrison & Robinson, 1997). Our 2-study paper thus holds the potential to expand our knowledge regarding the underlying psychological processes through which different PC states may result in different types of unethical behavior (OD or UPB). In Study 1 we will focus on the mediating role of positive and negative reciprocity norms in the relationship between breach/fulfillment and OD and UPB. After establishing the mediating role of positive and negative reciprocity, we conducted Study 2 to look into how the different PC fulfillment states (i.e., under-, over-, and absolute levels of fulfillment) are related to OD and UPB using polynomial regression and response surface analysis. Moreover, despite not being the main objective of Study 2, we also focused on the mediating role of reciprocity norms by means of the block variable approach (i.e., all polynomial terms are treated as a block variable as per the advice of Edwards & Cable, 2009; Zhang et al., 2012). In doing so, we extend the traditional focus on hostile and self-focused views of unethical behavior (OD) in relation to negative deviations by also including other-focused views of unethical behavior (UPB) in relation to the “dark side” of PC fulfillment or high absolute levels of PC fulfillment.

1. Theoretical background

1.1. Psychological contract Theory and the role of reciprocity

A PC captures an employee’s mental model of the exchange agreement between him/herself and the organization (Rousseau, 2001).

Traditionally, employees hold a PC with their organization when they believe that their organization is obligated to provide certain transactional inducements (e.g., competitive salary and benefits)—described as being materialistic, tangible, specific, static, short-term in nature, and including minimal emotional investment—and relational inducements (e.g., fair treatment)—described as intangible, subjective, flexible, long-lasting, and requiring significant emotional investment—in return for their contributions (e.g., excellent performance, loyalty). An established PC is characterized by sustained ongoing exchanges that necessitate minimal cognitive effort (Rousseau, 1995; Rousseau et al., 2018) until an anomalous situation activates an individual’s mental model of their PC (Rousseau et al., 2018). Indeed, it is one thing to hold a highly valued PC in which both parties have high mutual obligations toward one another, it is an entirely different, and arguably more important, issue whether one’s employer actually fulfills those obligations.

Perhaps the most studied PC states are those of breach and fulfillment. PC breach is defined as occasions where employees believe that their organization has failed to fulfil its obligations, whereas PC fulfillment is defined as occasions where employees believe that their organization has fulfilled its obligations as per previously made agreements (Morrison & Robinson, 1997). Traditionally, these PC states are seen as one of the main drivers of affective, attitudinal, and behavioral change in the workplace. PC breach has for example been found to be associated with lower levels of job satisfaction, trust, OCB, in-role performance and organizational commitment and increased turnover intentions, whereas PC fulfillment is associated with positive outcomes (for a meta-analysis see Zhao et al., 2007; for a recent review see Coyle-Shapiro et al., 2019).

These affective, cognitive, and behavioral changes following perceptions of PC breach or fulfillment are traditionally premised upon Social Exchange Theory (Blau, 1964; Cropanzano et al., 2017), which states that the quality of an exchange relationship between two parties develops through the exchange of resources as per the norm of reciprocity (Gouldner, 1960). In general, reciprocity encompasses *quid pro quo* behaviors. Accordingly, if one party (e.g., the employer) provides beneficial treatment, the other party (e.g., the employee) feels obligated to reciprocate by providing beneficial treatment in return. Although reciprocating beneficial treatment is voluntary and one may choose not to reciprocate, those who fail to reciprocate may incur penalties (e.g., reduced trust and future beneficial treatment), whereas those who reciprocate engage in a self-perpetuating positive and beneficial exchange relationship (see Cropanzano et al., 2017; Cropanzano & Mitchell, 2005; Blau, 1964). The reciprocity norms underlying this exchange come in two forms: positive and negative. The *positive norm of reciprocity* promotes stability in relationships through considerate, valued, and balanced exchanges. Favorable treatment by one’s organization (e.g., PC fulfillment) generates favorable employee treatment (Cropanzano et al., 2017; Cropanzano & Mitchell, 2005; Gouldner, 1960). In contrast, the *negative norm of reciprocity* proposes that when employees believe that they are on the receiving end of unfavorable treatment (e.g., PC breach), they will feel the desire to “return injuries” rather than “benefits” to the other party (Cropanzano et al., 2017; Cropanzano & Mitchell, 2005; Gouldner, 1960, p. 172).

1.2. Differentiating discretionary workplace behavior: Unethical versus ethical and harming versus helping

The discretionary workplace behavior literature recognizes that discretionary behavior in the workplace can be differentiated along the *ethical versus unethical* and the *counterproductive (harming) versus productive (helping)* dimensions to generate important differences between OD and UPB (Mackey et al., 2021). OD can take many forms, ranging from minor (e.g., taking unauthorized breaks, arriving late at work, unauthorized Internet surfing) to serious (e.g., theft, sabotage, damaging the company’s property) acts. These deviant behaviors are commonly described as unethical and antisocial behavior undertaken by employees with the objective to inflict harm upon the organization

(Bennett & Robinson, 2003). UPB may include acts of commission (e.g., lying, adding misleading or false information, cheating) and acts of omission (e.g., destroying, removing or withholding information, covering up scandals) that are considered unethical in the sense that they violate standards of ethical behavior, judged in terms of justice, law, or widely held social norms (Umphress & Bingham, 2011; Umphress et al., 2020). Although unethical, this type of behavior is considered pro-organizational because employees engage in it with a desire to help, having their organization's best interest in mind. However, it is not part of one's formal job descriptions nor is it ordered by an organizational agent (Gurchiek, 2006; Vardi & Weitz, 2004). There are a few important notes to be made with regards to this definition. First, enactment of unethical behavior without the specific intention to benefit the organization (e.g., errors, mistakes, or unconscious negligence) does not constitute UPB. Second, the final result of UPB may deviate from employees' intentions to protect their organization and ultimately produce unbeneficial and destructive outcomes (e.g., lying about technical difficulties to protect Boeing may have heightened suspicion and ultimately prompted a worldwide grounding of all 737 Max airplanes in 2019). Third, the anticipated negative consequence of UPB for entities other than the organization can outweigh the desired beneficial consequence for the organization (e.g., two fatal crashes with a Boeing 737 Max resulted in 346 deaths). A wealth of research has demonstrated, through a series of confirmatory factor analyses, that UPB is conceptually different from other types of unethical behavior such as interpersonal deviance and OD (Umphress et al., 2010), illegal corporate behavior (Baucus & Baucus, 1997), organizational misbehavior (Vardi & Weitz, 2004), positive deviance (Warren, 2003), and pro-social rule-breaking (Morrison, 2006).

2. Hypotheses study 1

2.1. The role of reciprocity in the relationship between psychological contract breach/fulfillment and deviance/unethical pro-organizational behavior

Given the prevalence and high economical and human capital costs associated with OD (e.g., Bennett et al., 2019; Bourke, 1994; Coffin, 2003), researchers have mainly focused on identifying its antecedents. Among the most important and preventable antecedents of OD are employee reactions to unfavorable organizational experiences (Bennett & Robinson, 2003). Bennett and Robinson (2003) were effectively describing PC Breach by referencing Social Exchange Theory (Blau, 1964; Cropanzano et al., 2017; Cropanzano & Mitchell, 2005) and the norm of reciprocity (Gouldner, 1960). Moreover, Mitchell and Ambrose (2007) have argued extensively that social exchange perceptions may explain why employees engage in different types of unethical behavior in the workplace.

According to these frameworks, employees will repay their organization by downwardly adjusting their behaviors when receiving unfavorable treatment from their organization. That is, employees are likely more inclined to engage in OD when they perceive PC breach compared to a situation in which their PC is fulfilled. Indeed, several studies found a positive relationship between perceptions of PC breach and different types of OD such as neglect of in-role performance (Costa & Neves, 2017; Zagenczyk et al., 2015), anti-citizenship behavior (Kickul, 2001), customer-directed deviance (Gong & Wang, 2022), absenteeism (Deery et al., 2006), workplace deviance (e.g., Balogun et al., 2018; Bordia et al., 2008; Restubog et al., 2007, 2015), and abuse, production deviance, theft, and withdrawal (Jensen et al., 2010). The desire to retaliate in the aftermath of unfavorable treatment plays an important role in our conceptualization of the relationship between PC breach and OD. The principle of retaliation is a common theme in OD research (Bennett & Robinson, 2003) and forms the crux of the negative norm of reciprocity (Gouldner, 1960). Specifically, Gouldner (1960, p.172) stated that when employees believe to be on the receiving end of unfavorable treatment

(PC breach), they feel the desire to "return injuries" rather than "return benefits" to the other party. When employees perceive PC breach, they are more likely to endorse a negative norm of reciprocity, which in turn may trigger retribution by means of OD (e.g., Balogun et al., 2018; Bordia et al., 2008; Costa & Neves, 2017; Deery et al., 2006; Gong & Wang, 2022; Jensen et al., 2010; Kickul, 2001; Restubog et al., 2007; Restubog et al., 2015; Zagenczyk et al., 2015). Two reviews of the literature (Cropanzano et al., 2017; Cropanzano & Mitchell, 2005) support the notion that negative reciprocity mediates the relationship between unfavorable organizational treatment and OD. We thus hypothesize:

Hypothesis 1. *Negative reciprocity will mediate the positive relationship between perceptions of PC breach and enactment of OD.*

Although generally assumed to elicit only favorable and ethical behavior (see Blau, 1964; Conway & Briner, 2005; Gouldner 1960), we propose that positive social exchange relationships characterized by PC fulfillment may also encourage enactment of UPB, suggesting that employees may do "bad things for good reasons." Generally speaking, exchange imbalances are resolved in a quid pro quo fashion: positive treatment from the organization (e.g., PC fulfillment) is reciprocated—through the positive reciprocity norm (Gouldner, 1960)—with positive attitudes and behaviors (e.g., Wayne et al., 1997). In other words, when employees perceive that their PC is fulfilled compared to breached, they are likely to be more inclined to engage in behaviors that may benefit the organization (see Turnley et al., 2003; Conway et al., 2011) such as UPB. The positive norm of reciprocity dictates that favorable treatment by one party generates favorable treatment by the receiving party (Cropanzano et al., 2017; Cropanzano & Mitchell, 2005; Gouldner, 1960). In other words, employees who perceive PC fulfillment are more likely to endorse a positive norm of reciprocity, which in turn prompts them to act in ways intended to help their organization and further consolidate their positive exchange relationship (e.g., enhanced cooperative behavior: Perugini et al., 2003; citizenship behavior: Griep & Vantilborgh, 2018; work effort and performance: Orpen, 1994). While the literature has traditionally focused on extra-role behaviors, our review of the discretionary workplace behavior literature has demonstrated that PC fulfillment may also trigger UPB because this type of discretionary behavior has an underlying intention to help the organization (Umphress & Bingham, 2011; Umphress et al., 2020). Similar arguments have been made in the field of organizational support where Wang et al (2021) found that employees who perceive high levels of organizational support are more likely to engage in UPB through feelings of indebtedness to the organization (i.e., positive reciprocity norms). We thus argue that employees who perceive PC fulfillment, are more likely to engage in UPB and that this relationship is mediated by positive reciprocity. We thus hypothesize:

Hypothesis 2. *Positive reciprocity will mediate the positive relationship between perceptions of PC fulfillment and enactment of UPB.*

3. Method study 1

3.1. Participants

We approached managers in the service industry, with whom the authors already had a pre-existing relationship, to gauge their interest in participating in our 3-wave study. Managers who indicated that their organization was interested in participating in our study were requested to forward a personal email to their employees with the request to take part in our study. In doing so, we reached 435 Canadian employees working in the service industry, of whom 322 completed the first wave (response rate = 74.02 %), 272 completed the second wave (response rate = 62.53 %), and 250 completed the third wave (response rate = 57.47 %). Respondents were on average 42.09 years old ($SD = 11.79$), 45.00 % were female, 41.40 % had obtained a university degree, 82.10

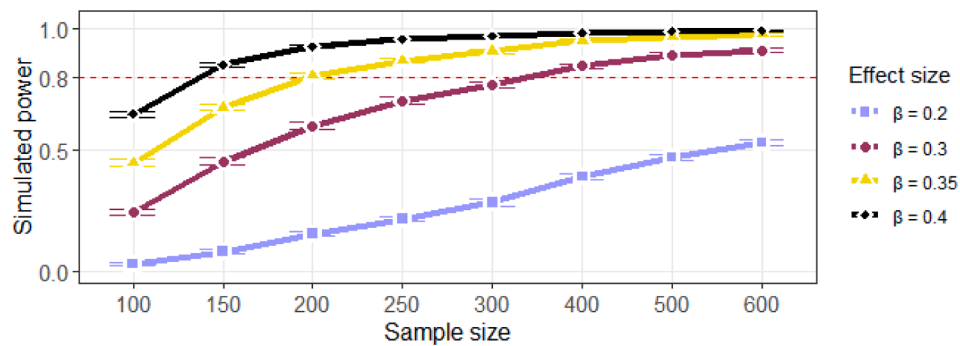


Fig. 1. Power simulation to determine sample size.

% had a permanent full-time contract, and their mean company tenure was 10.86 years ($SD = 6.22$).

We conducted a power simulation to determine sample size. In this simulation, PC breach predicts positive and negative reciprocity norms, which in turn predicts OD and UPB. Furthermore, our simulations explicitly estimated two indirect effects, where PC breach indirectly predicted OD and OB via the reciprocity norms. We assumed (1) that the standard error of each beta was 0.1, (2) each variable had a unique variance of 1, (3) an alpha of 0.05, and (4) that both indirect effects had to reach statistical significance. We varied both the sample size and effect size (standardized beta) of each predictor. We computed the observed power for each combination by running 5000 iterations for each combination (see Fig. 1). This analysis suggests that a sample size of 250 participants was sufficient to have an 80 % power to detect an effect of $\beta \geq 0.325$.

3.2. Procedure and Materials

We used a longitudinal design with three measurement points (T1, T2, and T3), each separated by one month. Although to date there are no theoretical guidelines on optimal time lags in PC research (Griep et al., 2019), the use of a time-lag of one month is sufficiently long to eliminate recollection and anchoring biases (Taylor et al., 2009), yet short enough to ensure that respondents' perceptions of what they got promised remained relatively stable over a period of one week up to four months (Bakker & Bal, 2010; Dormann & Griffin, 2015; Ng et al., 2014). An important benefit of having this repeated measurement design is to reduce risks potentially owing to common-method bias (Podsakoff et al., 2012) because it allows us to estimate the effect of, for example, PC breach at T1 on enactment of UPB and OD at T3 via reciprocity norms at T2 rather than focusing on the synchronous relationships at the same point in time. A final advantage of this research design pertains to the inclusion of auto-regressive effects; by including this effect, we can model actual change in a variable over time which boosts our confidence that a significant association is due to the independent variable predicting a significant proportion of the variance in the dependent variable rather than to the self-sustaining nature of the dependent variable over time. Respondents received a personal email containing a link to an online survey. We asked respondents to complete the survey within five business days. We treated the data as missing when respondents failed to (timely) complete the survey. Upon completion of the study, a research assistant removed all email addresses (required to connect the different waves of data collection) from the file.

Perceptions of PC breach were measured with the 5-items by Robinson and Morrison (2000) rated on a 5-point Likert scale ranging from (1) "strongly disagree" to (5) "strongly agree". An example item is "I have not received everything promised to me in exchange for my contributions" ($\alpha_{T1} = 0.92$).

Reciprocity norms were measured with 10 items for the positive norm of reciprocity and 14 items for the negative norm of reciprocity by Eisenberger et al. (2004) rated on a 7-point Likert scale ranging from (1)

"strongly disagree" to (7) "strongly agree". An example item of positive reciprocity is "I always repay my organization when it has done me a favor" ($\alpha_{T1} = 0.90$; $\alpha_{T2} = 0.91$), and an example item of negative reciprocity is "If my organization treats me badly, I feel I should treat it even worse" ($\alpha_{T1} = 0.93$; $\alpha_{T2} = 0.94$).

OD was measured with 12-items by Bennett and Robinson (2000) rated on a 7-point Likert scale ranging from (1) "never" to (7) "daily". An example item is: "I took an additional or longer break than is acceptable at my workplace" ($\alpha_{T2} = 0.94$; $\alpha_{T3} = 0.93$).

UPB was measured with 7-items by Liu and Qiu (2015), rated on a 7-point Likert scale ranging from (1) "never" to (7) "daily". An example item is: "I withheld negative information about my company or its products from customers and clients because it benefits my organization" ($\alpha_{T2} = 0.92$; $\alpha_{T3} = 0.94$).

3.3. Analytic Strategy

To investigate our hypotheses, we estimated a mediation model in Mplus version 8.2 (Muthén & Muthén, 2012). The mediation effects were tested using the product-of-coefficients approach and their significance was scrutinized by means of 10,000 bootstrap samples 95 % bias-corrected confidence intervals (CIs); hereafter simply referred to as 95 % CI. Specifically, we multiplied the regression coefficients linking perceptions of PC breach at T1 to reciprocity norms at T2 with the regression coefficients linking reciprocity norms at T2 to OD and UPB at T3. In order to model change in each variable over time, we included auto-regressive effects. Finally, because a large body of work has found a strong positive relationship between trait negative affectivity and negative behavioral outcomes, we also measured trait negative affectivity at T1 with the 10-item Positive and Negative Affect Schedule (PANAS) by Watson et al. (1988) rated on a 5-point Likert scale ranging from (1) "very slightly or not at all" to (7) "extremely" ($\alpha = 0.93$). In line with best practice recommendations by, among others, Becker and colleagues (2016) we compared and contrasted a model in which we included trait negative affectivity as a control variable with a model in which we did not include trait negative affectivity as a control.

4. Results study 1

4.1. Measurement Model

We tested whether perceptions of PC breach at T1, reciprocity norms at T2, OD and UPB at T3, and trait negative affectivity at T1 can be empirically distinguished from each other. We used Hu and Bentler's (1995) conventional standards to assess model fit: Root Mean Square Error of Approximation ($0.05 < RMSEA \leq 0.08$: reasonable fit; $0 \leq RMSEA \leq 0.05$: close fit), Standardized Root Mean Square Residual ($0.05 < SRMR \leq 0.08$: reasonable fit; $0 \leq SRMR \leq 0.05$: close fit), the Comparative Fit Index ($0.90 \leq CFI < 0.95$: good fit; $0.95 \leq CFI \leq 1.00$: excellent fit), and the Tucker-Lewis Index ($0.90 \leq TLI < 0.95$: good fit; $0.95 \leq TLI \leq 1.00$: excellent fit). Our results showed that the

Table 1
Means, Standard Deviations, and Inter-Correlations Study 1.

	<i>M</i>	<i>SD</i>	1.	2.	3.	4.	5.	6.
1. Perceptions of PC breach – T1	2.48	1.04	–					
2. Positive norm of reciprocity – T2	4.50	1.26	-0.27***	–				
3. Negative norm of reciprocity – T2	3.23	1.31	0.32***	0.13	–			
4. Organizational deviance – T3	2.09	1.18	0.21**	0.12	0.56***	–		
5. UPB – T3	2.58	1.51	-0.02	0.24***	0.44***	0.58***	–	
6. Trait negative affectivity – T1	1.50	0.73	0.19**	19**	0.50***	0.62***	0.54***	–

Note. *: $p < .05$. **: $p < .01$. ***: $p < .001$.

hypothesized model (Model 1), in which each construct loaded onto a separate latent factor, had a reasonable to good fit, $\chi^2(1413) = 2385.72$, $p < .001$, CFI = 0.90, TLI = 0.90, RMSEA = 0.06, SRMR = 0.07. We compared this 6-factor structure to an alternative 5-factor structure (combined OD and UPB into one latent variable; Model 2), another alternative 5-factor structure (combined positive and negative reciprocity norms into one latent variable; Model 3), an alternative 4-factor structure (combined OD and UPB into one latent variable and combined positive and negative reciprocity norms into one latent variable; Model 4), and an alternative 1-factor structure (combined all variables into a single latent variable; Model 5). We found that Model 1 fit the data significantly better than Model 2 [$\Delta \chi^2(5) = 449.20$, $p < .001$ ($\chi^2(1418) = 2834.92$, CFI = 0.85, TLI = 0.83, RMSEA = 0.07, SRMR = 0.10)], Model 3 [$\Delta \chi^2(5) = 1339.49$, $p < .001$ ($\chi^2(1418) = 3725.21$, CFI = 0.75, TLI = 0.73, RMSEA = 0.09, SRMR = 0.22)], Model 4 [$\Delta \chi^2(9) = 1776.80$, $p < .001$ ($\chi^2(1422) = 4162.52$, CFI = 0.70, TLI = 0.68, RMSEA = 0.10, SRMR = 0.23)], and Model 5 [$\Delta \chi^2(15) = 2762.81$, $p < .001$ ($\chi^2(1428) = 5148.53$, CFI = 0.60, TLI = 0.57, RMSEA = 0.11, SRMR = 0.14)].

4.2. Invariance Testing

To examine the measurement invariance for the above described theoretical CFA model (without the inclusion of trait negative affectivity because this trait was only measured at T1) across our three waves of data collection, we conducted a multi-group confirmatory factor analysis in which we examined a series of models, which successively imposed more constraints: (1) configural equivalence (same factor structure across waves), (2) metric equivalence (factor loadings constrained to be equal across waves), and (3) scalar equivalence (item intercepts constrained to be equal across waves). For model comparison, we used ΔCFI because this metric is both independent of model complexity and sample size whereas the $\Delta \chi^2$ is only independent of model complexity to evaluate invariance (Cheung & Rensvold, 2002), where a ΔCFI of < 0.01 usually indicates that the constrained model should be retained (e.g., configural equivalence model should be kept relative to the metric equivalence model) and a ΔCFI improvement of 0.01 or more indicates that the higher equivalence model should be retained (e.g., metric equivalence model should be kept relative to the configural equivalence model). First, we found support for metric invariance across our three measurement moments; all proposed constructs were defined by the same set of items and constraining the factor loadings to be the same across the three waves of data collection resulted in trivial differences in model fit (CFI value improved by $\Delta CFI = 0.035$). Second, we also found support for scalar invariance across our three measurement moments; item intercepts were the same across all three waves of data collection (CFI value improved by $\Delta CFI = 0.011$).¹

4.3. Descriptive Results

Means, standard deviations, and correlations appear in Table 1.

4.4. Preliminary Tests

We first estimated and compared, in light of parsimoniousness, a full mediation model with a partial mediation model. We compared models using a chi-square difference test and found that a full mediation model fits the data significantly better ($\Delta \chi^2(2) = 11.27$, $p < .001$) than a partial mediation model. Hence, the below presented results are from the full mediation model.

Next, keeping with best practices recommendations (e.g., Becker et al., 2016), we also compared and contrasted a model in which we include trait negative affectivity as a control variable with a model in which we did not include trait negative affectivity as a control. We found that the inclusion of trait negative affectivity significantly improved model fit ($\Delta \chi^2(3) = 108.25$, $p < .001$). Therefore, it should come as no surprise that trait negative affectivity was significantly associated with the enactment of OD ($\beta = 0.53$; $SE = 0.07$; $p < .001$) and the enactment of UPB ($\beta = 0.52$; $SE = 0.06$; $p < .001$). In line with best practice recommendations by, among others, Bernerth and Aguinis (2016) we thus kept trait negative affectivity in our model, meaning that all of the below presented results are from the full mediation model with the inclusion of trait negative affectivity.

4.5. Test of Hypotheses

We found that perceptions of PC breach at T1 were positively related to negative reciprocity at T2 ($\beta = 0.32$; $SE = 0.06$; $p < .001$), which in turn was positively related to OD at T3 ($\beta = 0.29$; $SE = 0.07$; $p < .001$). Moreover, we found that negative reciprocity at T2 [$(\beta = 0.10$, 95 %CI = [0.03; 0.16])] mediated the relationship between perceptions of PC breach at T1 and OD at T3, supporting Hypothesis 1. Next, we found that perceptions of PC breach at T1 were negatively related to positive reciprocity at T2 ($\beta = -0.27$; $SE = 0.08$; $p < .001$), which in turn was positively related to UPB at T3 ($\beta = 0.15$; $SE = 0.06$; $p = .012$). Moreover, we found that positive reciprocity at T2 [$(\beta = -0.06$, 95 %CI = [-0.12; -0.001])] mediated the relationship between perceptions of PC breach at T1 and the enactment of UPB at T3, supporting Hypothesis 2.

5. Discussion study 1

Consistent with our expectations, grounded in Social Exchange Theory (Cropanzano et al., 2017; Cropanzano & Mitchell, 2005; Blau, 1964) and the norm of reciprocity (Gouldner, 1960), we found a positive relationship between PC breach and negative reciprocity, which in turn was positively related to OD. Furthermore, we found a negative relationship between PC breach and positive reciprocity, which in turn was positively related to UPB. Despite the strengths of this first study, a number of questions remain.

First, although we have demonstrated that employees have higher UPB intentions following perceptions of PC fulfillment, we have used a traditional approach to operationalize PC breach and fulfillment. Although most studies to date have used the traditional PC breach scale (and reverse scored this scale for PC fulfillment) of Robinson and Morrison (2000), this approach ignores seminal arguments from scholars (e.g., Lambert et al., 2003; Montes & Irving, 2008) and evidence that PC breach should be considered as a continuum ranging from the

¹ $CFA_{configural} = 0.911$; $CFA_{metric} = 0.946$; $CFA_{scalar} = 0.957$.

perception that one's organization provided (far) fewer inducements than obligated (under-fulfillment) to the perception that one's organization provided (far) more inducements than obligated (over-fulfillment). Similarly, PC fulfillment should also be operationalized as a continuum ranging from the perceptions that one's organization has initially promised (very) few inducements and also delivers these inducements (low absolute levels of fulfillment) to the perceptions that one's organization has initially promised many inducements and also delivers these inducements (high absolute levels of fulfillment). We therefore conducted an additional study using the expanded approach (Lambert et al., 2003), so that we could study the effects of different PC states (i.e., under-, over- and absolute levels of PC fulfillment) on OD and UPB. The expanded approach uses polynomial regression analysis combined with response surface methodology (see Shanock et al., 2010). This methodology allows to visualize the dependent variable at all the values of both independent variables, which makes it possible to assess how under-, over- and absolute levels of PC fulfillment trigger OD and UPB. By doing so, we contribute to the PC literature by adding additional understanding of how different PC states are related to OD and UPB. Although, the objective of this second study was not to directly replicate the mediating role of reciprocity norms, we did also conduct mediated polynomial regression analysis with the block variable approach (i.e., all polynomial terms are treated as a block variable as per the advice of Edwards & Cable, 2009; Zhang et al., 2012).

6. Hypotheses study 2

6.1. The expanded approach

The expanded approach helps to overcome a series of issues inherent to the literature's traditional use of direct measures of PC breach (see Robinson & Morrison, 2000). The three main issues are (1) that it only captures perceptions of under-fulfillment while ignoring perceptions of over-fulfillment, (2) that it treats PC fulfillment as the opposite end of PC breach on the same continuum, and (3) that it uses difference scores between promised and delivered inducements (for a critique see Hansen & Griep, 2016). The three main issues associated with the use of difference scores are (1) difference scores have lower reliabilities than their separate components and conceal the relative contribution of each component (i.e., promised versus delivered contributions), (2) the use of difference scores creates a PC breach indicator that only reflects the difference between promised and delivered inducements but does not allow for the joint assessment of promised and delivered inducements in the same model, thus overlooking an important part of the dynamic of the social exchange, and (3) difference scores constrain the relative importance of a difference between promised and delivered inducements to be equal in size (Cohen et al., 2010). For example, imagine a situation in which one has a score of 6 (out of 7) on promised inducements and a score of 5 (out of 7) on delivered inducements. The resulting difference score would be $6 - 5 = 1$. Imagine another employee who has a score of 2 (out of 7) on promised inducements and a score of 1 (out of 7) on delivered inducements. The resulting difference score would also be 1 ($2 - 1$), yet the underlying social exchange dynamic is substantially different and the absolute levels at which fulfillment takes place can be responsible for triggering different levels of OD and UPB. To overcome the aforementioned issues (and to further unpack the findings of Study 1) we decided to adopt the expanded approach in Study 2; allowing us to assess the influence of both promised and delivered inducements, as well as the influence of low versus high absolute levels of fulfillment and under- versus over-fulfillment in relation to enactment of OD and UPB.

6.2. From under to Over-Fulfillment: Direct effects on OD

We consider PC breach as a continuum ranging from under-fulfillment to over-fulfillment (see Lambert et al., 2003; Montes &

Irving, 2008). In line with Social Exchange Theory (Cropanzano et al., 2017; Cropanzano & Mitchell, 2005; Blau, 1964) and the negative norm of reciprocity (Gouldner, 1960), when employees believe that they are on the receiving end of unfavorable treatment (i.e., PC under-fulfillment), they will feel the desire to repay their employer by engaging in negative behavior as well (Cropanzano et al., 2017; Cropanzano & Mitchell, 2005). Indeed, previous research (e.g., Bal et al., 2010; Hyde et al., 2009) found that under-fulfillment triggers negative outcomes. In the case of PC over-fulfillment, however, Lambert and colleagues (2003) have argued that the effect of over-fulfillment depends on the type of inducement that was promised and delivered. When the over-fulfillment of a certain inducement interferes with the abilities, needs, and desires of employees, it will have a negative effect (much like under-fulfillment) on outcomes. This argument aligns with previous arguments by Olson et al. (1996) stating that receiving excess inducements is not always beneficial because people may find the unpredictability associated with over-fulfillment unpleasant. However, if the over-fulfillment of a certain inducement can be used to satisfy a wide range of needs and desires, a positive effect on outcomes is to be expected. In light of the PC inducements measured in this study, we have no a priori theoretical reasons to assume that receiving excess transactional or relational inducements will interfere with one's abilities, needs, and/or desires. Hence, we expect that the relationship between PC under-fulfillment and OD enactment will be negative and will increase in negativity as we move from perceptions of over-fulfillment to perceptions of under-fulfillment. We hypothesize the following:

Hypothesis 3. *Perceptions of PC under-fulfillment on (H3a) transactional and (H3b) relational PC inducements are more positively related to OD enactment than perceptions of PC over-fulfillment.*

6.3. From low to high absolute level of fulfillment: Direct effects on UPB

As stated earlier, we also consider PC fulfillment as a continuum ranging from low absolute to high absolute PC fulfillment, as per the advice of Lambert and colleagues (2003) and Montes and Irving (2008). In line with Social Exchange Theory (Cropanzano et al., 2017; Cropanzano & Mitchell, 2005; Blau, 1964) and the Positive Norm of Reciprocity (Gouldner, 1960), employees are expected to reciprocate their organization's fulfillment of the promised inducements with favorable behavior. Previous research (Kraak et al., 2018) has indeed found a negative relationship between levels of PC fulfillment and turnover intentions. Furthermore, Lambert and colleagues (2003) and Irving and Montes (2009) reported higher levels of employee satisfaction as experience of PC fulfillment moved from low absolute to high absolute levels of PC fulfillment. These findings are consistent with those in previous literature that the effects of PC fulfillment on outcomes are highest when both promised and delivered inducements are high, and thus when employees experience high absolute levels of PC fulfillment (Lambert et al., 2003; Montes & Irving, 2008). We therefore expect that the relationship between PC fulfillment and UPB enactment will be positive and will increase in strength as levels of fulfillment increase from low absolute to high absolute PC fulfillment for all types of PC inducements (i.e., transactional & relational). We thus hypothesize the following:

Hypothesis 4. *Higher absolute levels of PC fulfillment on (H4a) transactional and (H4b) relational PC inducements are more positively related to UPB enactment than lower absolute levels of PC fulfillment.*

6.4. Mediated effects of reciprocity

In line with the rationale in Study 1, drawn from Social Exchange Theory (Blau, 1964; Cropanzano et al., 2017; Cropanzano & Mitchell, 2005) and the norm of reciprocity (Gouldner, 1960), we also propose that when employees perceive PC under-fulfillment they are more likely to endorse a negative norm of reciprocity, which in turn may trigger retribution by means of OD whereas when these employees perceive

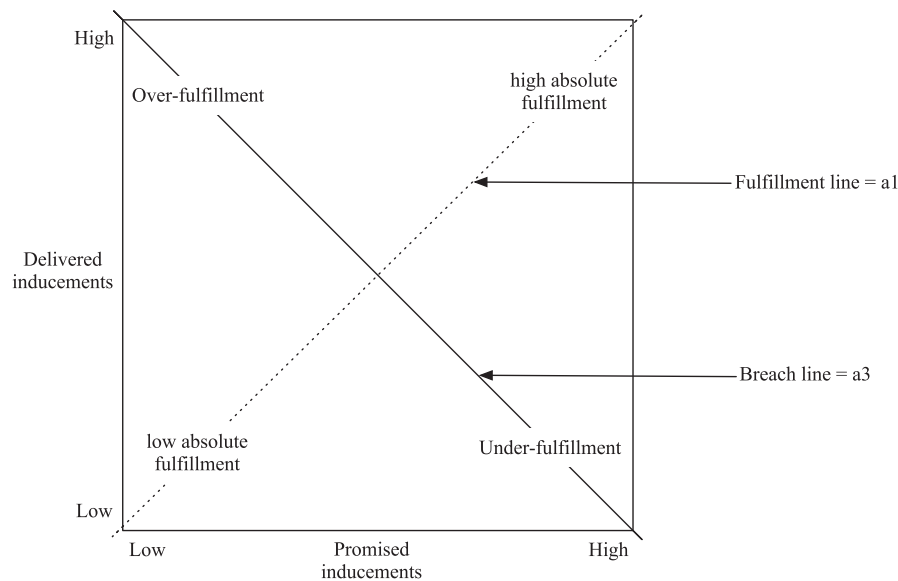


Fig. 2. Graphical aid for interpreting breach and fulfillment lines in response surfaces.

higher absolute levels of PC fulfillment, they are more likely to engage in UPB mediated by positive reciprocity. This brings us to the following hypotheses:

Hypothesis 5. *Negative reciprocity will mediate the relationship between the composite score of perceptions of PC under-fulfillment on (H5a) transactional and (H5b) relational PC inducements and OD enactment, such that a low composite score (high promised and low delivered inducements combination) is positively related to negative reciprocity, which in turn is positively related to OD enactment.*

Hypothesis 6. *Positive reciprocity will mediate the relationship between the composite score of higher absolute levels of PC fulfillment on (H6a) transactional and (H6b) relational PC inducements and UPB enactment, such that a high composite score (high promised and high delivered inducements) is positively related to positive reciprocity, which in turn is positively related to UPB enactment.*

7. Method study 2

7.1. Participants

We recruited 827 North-American participants through an on-line panel provider (CloudResearch) to take part in a 2-wave study, each 10-minute long in exchange for US\$1.50 per completed survey. Online panels have been described as reliable sources to access diverse samples (e.g., Landers & Behrend, 2015), with quality of the data that is not substantially different compared to a non-paid random sample (e.g., Behrend et al., 2011), especially when researchers embed attention checks in the survey. Out of these 827 respondents, 776 completed the first wave (response rate = 93.83 %), and 681 completed the second wave (response rate = 82.35 %). Upon observing the attention checks imbedded in the survey, we removed 48 participants (7.05 %) who failed to correctly answer one or more of these attention checks, resulting in a final sample of 633 individuals who completed both waves (response rate = 76.54 %). Participants were on average 44.21 years old ($SD = 16.50$), 58.80 % were female, 40.40 % were male and 0.80 % were non-binary. 7.10 % had obtained a primary school degree, 33.60 % had obtained a secondary school degree, 34.80 % had obtained an undergraduate or equivalent degree, 16.70 % had obtained a graduate degree, and 7.7 % had obtained a post-graduate degree. The average company tenure of our respondents was 8.71 years ($SD = 8.67$). 73.90 % of our sample worked full-time, 84.60 % held a permanent position, and 33.60

% was in a management position. Our respondents came from a wide range of sectors (top five listed here): health services (11.80 %), education (11.70 %), financial services (8.40 %), professional services (5.40 %), and public services (5.40 %).

After computing composite scores ($a1$ and $a3$), we used these composite scores in a model where the composite scores predicted positive and negative reciprocity norms, which in turn predicted UPB and OD, respectively. The design of this model is similar to the one used in study 1. Consequentially, we relied on the same simulation to determine that a sample size of 633 participants was sufficient to detect an effect of $\beta \geq 0.250$.

7.2. Procedure and Materials

We used a longitudinal design with two measurement points (T1, and T2), each separated by one month to limit common method variance effects (Podsakoff et al., 2012; for a detailed overview of benefits see Study 1). As in Study 1, we deemed a month time interval between measurements as sufficiently long to eliminate recollection and anchoring biases (Taylor et al., 2009), yet short enough to ensure that respondents' perceptions of what they got promised remained relatively stable (see also Buch, Kuvaas, Shore, & Dysvik, 2014 for the stability of obligated and delivered inducements over the course of a month). We asked respondents to complete the survey within five business days. We treated the data as missing when respondents failed to (timely) complete the survey. Upon completion of the study, a research assistant removed all CloudResearch IDs (required to connect the different waves of data collection) from the file.

Promised and delivered inducements were measured using the relational and transactional PC scale of Rousseau's (2000) Psychological Contract Inventory, which has been recommended for PC research (Freese & Schalk, 2008) and has demonstrated excellent psychometric properties in previous studies (e.g., Hui, et al., 2004). The *relational PC scale* contained 8 items, rated on a 7-point Likert scale ranging from (1) "strongly disagree" to (7) "strongly agree". An example item is "Be concerned for your personal welfare" ($\alpha_{\text{PromisedT1}} = 0.91$; $\alpha_{\text{DeliveredT2}} = 0.92$). The *transactional PC scale* contained 8 items, rated on a 7-point Likert scale ranging from (1) "strongly disagree" to (7) "strongly agree". An example item is "A job limited to specific, well-defined responsibilities" ($\alpha_{\text{PromisedT1}} = 0.86$; $\alpha_{\text{DeliveredT2}} = 0.85$). In line with recommendations for congruence research (Edwards & Parry, 1993), the items and rating scales were identical for both the versions of the scales

that measured promised (T1) and delivered (T2) inducements. The only difference between these measures were the instructions. At T1, respondents were asked to indicate to what extent certain inducements were promised whereas at T2, they were asked to what extent these inducements were actually delivered.

Reciprocity norms were measured with 10 items for the positive norm of reciprocity and 14 items for the negative norm of reciprocity by Eisenberger et al. (2004) rated on a 7-point Likert scale ranging from (1) “strongly disagree” to (7) “strongly agree”. An example item of positive reciprocity is “I always repay my organization when it has done me a favor” ($\alpha_{T1} = 0.91$; $\alpha_{T2} = 0.89$), and an example item of negative reciprocity is “If my organization treats me badly, I feel I should treat it even worse” ($\alpha_{T1} = 0.94$; $\alpha_{T2} = 0.91$).

OD enactment was measured with 12-items by Bennett and Robinson (2000) rated on a 7-point Likert scale ranging from (1) “never” to (7) “daily”. An example item is: “I took an additional or longer break than is acceptable at my workplace” ($\alpha_{T1} = 0.93$; $\alpha_{T2} = 0.96$).

UPB enactment was measured with 7-items by Liu and Qiu (2015) rated on a 7-point Likert scale ranging from (1) “never” to (7) “daily”. An example item is: “I withheld negative information about my company or its products from customers and clients because it benefits my organization” ($\alpha_{T1} = 0.90$; $\alpha_{T2} = 0.93$).

7.3. Analytic Strategy

To test hypotheses 3 and 4, we used polynomial regression analysis combined with response surface methodology (see Edwards & Parry, 1993; Shanock et al., 2010) to counter considerable conceptual and methodological issues inherent to traditional approaches of measuring PC breach and fulfillment research and the critique on the use of difference scores or direct measures of PC breach. The following equation illustrate this approach:

$$Z = b_0 + b_1X + b_2Y + b_3X^2 + b_4XY + b_5Y^2 + e$$

In this equation the following terms are represented: promised (X) and delivered (Y) inducements, the interaction between promised and delivered inducements (XY), and the second-order terms to capture nonlinear effects of promised (X²) and delivered (Y²) inducements. This equation forms the basis for the polynomial regression analysis with response surfaces as it allows us to ultimately test our hypotheses along the fulfillment (the line flows from low to high absolute levels of fulfillment to represent congruence between promised and delivered inducements; labeled as a1) and the breach (the line runs from over-fulfillment to under-fulfillment to represent low promises-high deliveries and high promises-low deliveries, respectively; labeled as a3) line (see Fig. 2). Prior to conducting the polynomial regression analysis, we scale-centered our independent variables to remove all non-essential collinearity and to facilitate the interpretation of the regression and further response surface analysis (Edwards, 2002; Edwards & Parry, 1993). To ease the interpretation of the polynomial regression, we relied on the macro of Shanock et al. (2010) to plot its response surface. This response surface forms a 3-dimensional representation of the combined effects of promised and delivered inducements on the enactment of OD and UPB. Two lines in this surface play a key role in testing hypotheses 3 and 4: the fulfillment (labeled as a1) and the breach (labeled as a3) line. A positive coefficient on a1 represents a positive relationship between fulfillment and the dependent variables; as the level of fulfillment increases from low levels to high levels of absolute fulfillment, so does the level of the dependent variables. In contrast, a positive coefficient on a3 represents a positive relationship between breach and the dependent variables; as breach perceptions move from over-fulfillment to under-fulfillment, the level of the dependent variables increases as well. Investigating the slope and curvature along the fulfillment line tells us how OD and UPB enactment varies when moving from low absolute fulfillment to high absolute fulfillment, while the slope and curvature of

the breach line show us how OD and UPB enactment changes when moving from over- to under- fulfillment (Edwards, 2002). The two remaining coefficients (a2 and a4) indicate if there is a convex (upward curving) or concave (downward curving) surface (Shanock et al., 2010). However, due to the nature of hypotheses 3 and 4, the coefficient of interest to test hypothesis 3 (pertaining to the breach line) is the a3 coefficient, whereas the coefficient of interest to test hypothesis 4 (pertaining to the fulfillment line) is the a1 coefficient. As in Study 1, we included auto-regressive effects.

To test hypotheses 5 and 6, we conducted a mediated polynomial regression analysis in Mplus version 8.2 (Muthén & Muthén, 2012) with the block variable approach. Specifically, we obtained one path coefficient for promised and delivered inducements—which were represented by the five polynomial terms X, Y, XY, X², and Y²—by treating these five terms as a block variable as recommended by Edwards and Cable (2009) and Zhang et al. (2012). Such a block variable represents a weighted linear composite of the terms that constitute the block, in which the weights are the estimated regression coefficients for the terms in the block (Edwards & Cable, 2009; Zhang et al., 2012). As such, the block variable represents the joint effects of the five polynomial terms. We regressed this block variable for relational and transactional inducements on negative and positive reciprocity, and negative and positive reciprocity on OD and UPB enactment respectively.

8. Results study 2

8.1. Measurement Model

We tested whether perceptions of promised relational and transactional inducements at T1, delivered relational and transactional inducements at T2, reciprocity norms at T2, and OD and UPB at T2, can be empirically distinguished from each other. As in Study 1, we used Hu and Bentler's (1995) conventional standards to assess model fit. Our results showed that the hypothesized model (Model 1) in which each construct loaded onto a separate latent factor had a reasonable to good fit, $\chi^2(2261) = 5214.18$, $p < .001$, CFI = 0.91, TLI = 0.90, RMSEA = 0.05, SRMR = 0.07. We compared this 8-factor structure to an alternative 6-factor structure (combined promised relational and transactional into one latent variable and combined delivered relational and transactional into one latent variable; Model 2), an alternative 7-factor structure (combined UPB and OD into one latent variable; Model 3), another alternative 7-factor structure (combined negative and positive reciprocity norms into one latent variable; Model 4), an alternative 3-factor structure (combined promised relational and transactional into one latent variable, combined delivered relational and transactional into one latent variable, combined UPB and OD into one latent factor, and combined negative and positive reciprocity norms into one latent variable; Model 5), and an alternative 1-factor structure (combined all variables into a single latent variable; Model 6). We found that Model 1 fit the data significantly better than Model 2 [$\Delta \chi^2(13) = 1458.95$, $p < .001$ ($\chi^2(2274) = 6673.13$, CFI = 0.87, TLI = 0.85, RMSEA = 0.06, SRMR = 0.08)], Model 3 [$\Delta \chi^2(7) = 1535.12$, $p < .001$ ($\chi^2(2268) = 6749.30$, CFI = 0.87, TLI = 0.85, RMSEA = 0.06, SRMR = 0.08)], Model 4 [$\Delta \chi^2(7) = 1854.27$, $p < .001$ ($\chi^2(2268) = 7068.45$, CFI = 0.86, TLI = 0.84, RMSEA = 0.06, SRMR = 0.11)], Model 5 [$\Delta \chi^2(22) = 4636.65$, $p < .001$ ($\chi^2(2283) = 9850.83$, CFI = 0.78, TLI = 0.76, RMSEA = 0.07, SRMR = 0.12)], and Model 6 [$\Delta \chi^2(28) = 8966.94$, $p < .001$ ($\chi^2(2289) = 14181.12$, CFI = 0.65, TLI = 0.62, RMSEA = 0.09, SRMR = 0.16)].

8.2. Invariance Testing

As in Study 1 we examined measurement invariance for the above-described theoretical CFA model. We found support for metric invariance across our two measurement moments; all proposed constructs were defined by the same set of items and constraining the factor loadings to be the same across both waves resulted in trivial differences

Table 2
Means, Standard Deviations, and Inter-Correlations Study 2.

	M	SD	1.	2.	3.	4.	5.	6.	7.	8.
1. Promised relational inducements – T1	4.83	1.19	–							
2. Delivered relational inducements –T2	4.84	1.20	0.81***	–						
3. Promised transactional inducements –T1	4.32	1.17	0.49***	0.39***	–					
4. Delivered relational inducements –T2	4.37	1.30	0.44***	0.52***	0.78***	–				
5. Positive norm of reciprocity – T2	4.57	1.41	0.17***	0.14***	0.19***	0.20***	–			
6. Negative norm of reciprocity – T2	3.63	1.38	0.08	0.03	0.14***	0.09*	0.34***	–		
7. Organizational deviance –T2	2.26	1.43	0.12**	0.08*	0.26***	0.22***	0.43***	0.70***	–	
8. UPB –T2	2.67	1.52	0.27***	0.24***	0.32***	0.31***	0.70***	0.48***	0.69***	–

Note. *: $p < .05$. **: $p < .01$. ***: $p < .001$.

Table 3
Polynomial regression analysis with OD as dependent variable in Study 2.

	Transactional inducements		Relational inducements	
	Step 1	Step 2	Step 1	Step 2
Intercept	2.26	2.25	2.26	2.31
Promised inducements (X)	0.29***	0.31***	0.20*	0.26*
Delivered inducements (Y)	0.04	0.01	-0.07	-0.14
Promised inducements squared (X^2)		0.05		0.01
Delivered inducements squared (Y^2)		-0.08*		-0.08
Promised \times Delivered inducements (XY)		0.07		0.05
R^2	0.065	0.077	0.016	0.021
R^2 change		0.012*		0.005*
<i>Surface Tests</i>				
a1		0.32***		0.12*
a2		0.04		-0.02
a3		0.31*		0.40***
a4		-0.10		-0.12

Note. *: $p < .05$. **: $p < .01$. ***: $p < .001$.

Table 4
Polynomial regression analysis with UPB as dependent variable in Study 2.

	Transactional inducements		Relational inducements	
	Step 1	Step 2	Step 1	Step 2
Intercept	2.37	2.62	2.67	2.67
Promised inducements (X)	0.26***	0.29***	0.27**	0.35***
Delivered inducements (Y)	0.17*	0.15*	0.09	0.02
Promised inducements squared (X^2)		0.08		0.06
Delivered inducements squared (Y^2)		-0.08*		-0.05
Promised \times Delivered inducements (XY)		0.07		-0.002
R^2	0.106	0.123	0.070	0.076
R^2 change		0.017**		0.006*
<i>Surface Tests</i>				
a1		0.44***		0.37***
a2		0.07		0.01
a3		0.15		0.34*
a4		0.18		0.12

Note. *: $p < .05$. **: $p < .01$. ***: $p < .001$.

in model fit (CFI value improved by $\Delta CFI = 0.027$). Second, we also found support for scalar invariance across our two measurement moments; item intercepts were the same across all three waves of data collection (CFI value improved by $\Delta CFI = 0.013$).²

8.3. Descriptive Results

Means, standard deviations, and correlations appear in Table 2.

² $CFA_{\text{configural}} = 0.912$; $CFA_{\text{metric}} = 0.939$; $CFA_{\text{scalar}} = 0.952$.

8.4. Hypothesis Testing

To test hypotheses 3 and 4, we regressed OD and UPB on the first- and second-order independent variables. Model 2 forms the basis for the polynomial regression analysis with response surfaces as this equation allows us to ultimately test our hypotheses along the fulfillment (labeled as a1) and the breach (labeled as a3) line (see Fig. 2). We repeated these analyses for relational inducements as well, following the same steps. Table 3-4 shows the results for both inducement types. Moreover, we also present the coefficients for the fulfillment and breach lines, as well as the slopes for these lines in Table 3-4 under the header surface tests. Finally, we provide a graphical representation of the response surfaces for both dependent variables (i.e., OD and UPB) in Fig. 3. For sake of interpretability, we henceforth refer to under- and over-fulfillment when discussing the results pertaining to the PC breach line, however we do acknowledge that this refers to the PC breach continuum of which under- and over-fulfillment are the extreme ends. For similar reasons, we refer to low and high levels of absolute fulfillment when discussing the results pertaining to the fulfillment line, however we do acknowledge that this refers to the PC fulfillment continuum of which low and high absolute levels of fulfillments are the extremes of the continuum.

With regards to OD enactment, we found that OD enactment was higher along the breach line, specifically under high levels of under-fulfillment (compared to over-fulfillment). This was confirmed by the significant positive a3 coefficients across transactional ($\beta = 0.31, p < .001$; confirming H3a) and relational ($\beta = 0.40, p = .033$; confirming H3b) PC inducements. The response surface in Fig. 3 (upper) depicts a steep increase in OD enactment as the breach lines moves from over- to under-fulfillment for both transactional and relational PC inducements. Moreover, we also found that OD enactment was higher along the fulfillment line, specifically under high levels (compared to low levels) of absolute fulfillment. This was confirmed by the significant positive a1 coefficients across transactional ($\beta = 0.32, p < .001$) and relational ($\beta = 0.12, p = .035$) PC inducements. A closer look at the curvature coefficient (a4 and a2; see Table 3) reveals that there is no significant nonlinear effect in the breach and fulfillment line for OD, respectively.

With regards to UPB enactment, we found that UPB enactment was higher along the fulfillment line, specifically under high levels (compared to low levels) of absolute fulfillment. This was confirmed by the significant positive a1 coefficients across transactional ($\beta = 0.44, p < .001$; confirming H4a) and relational ($\beta = 0.37, p = .004$; confirming H4b) PC inducements. The response surface in Fig. 3 (lower) depicts a steep increase in UPB enactment as the fulfillment lines moves from low levels to high levels of absolute fulfillment for both transactional and relational PC inducements. Moreover, we also found that UPB enactment was higher along the breach line, specifically under high levels of under-fulfillment (compared to over-fulfillment). This was confirmed by the significant positive a3 coefficients across relational ($\beta = 0.34, p = .047$) PC inducements, but not for transactional inducements ($\beta = 0.15, p = .299$). A closer look at the curvature coefficient (a2 and a4; see Table 4) reveals that there is no significant nonlinear effect in the fulfillment and breach line for UPB, respectively.

To test hypotheses 5 and 6, we first estimated and compared, in light

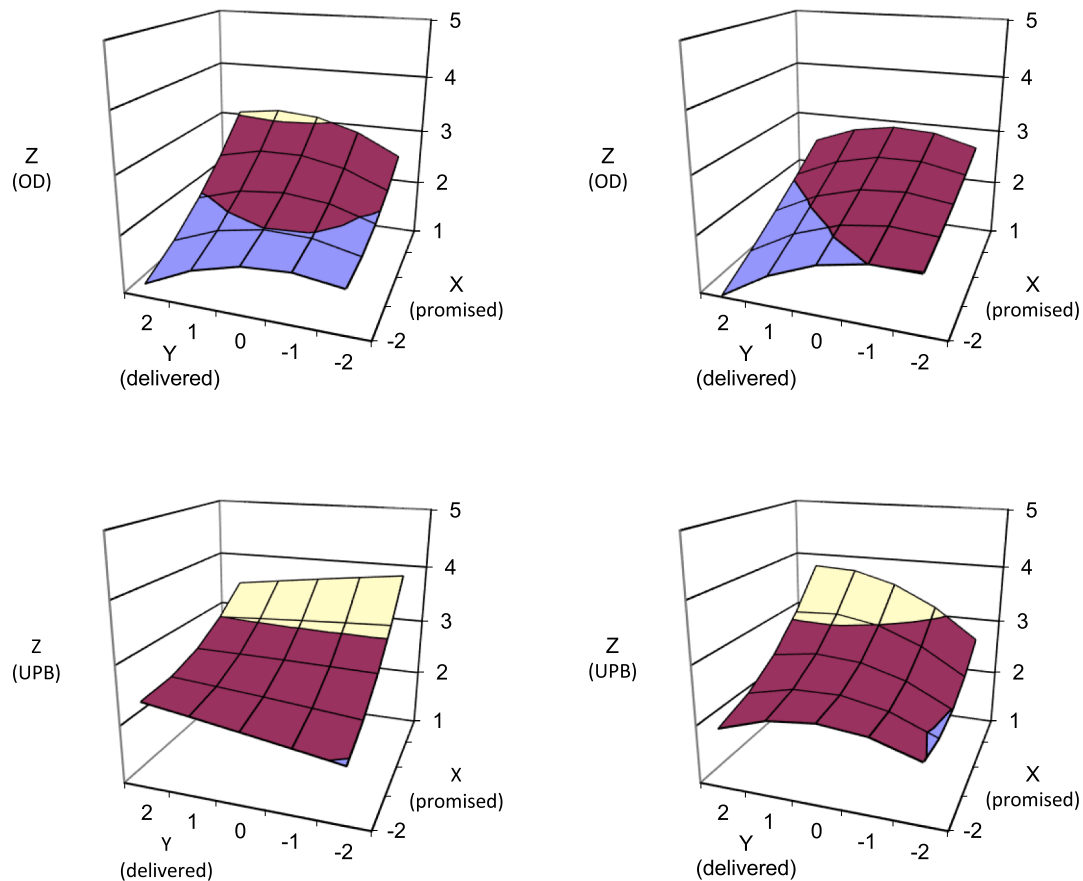


Fig. 3. OD (upper) and UPB (bottom) enactment response surface for transactional (left) and relational (right) PC inducements.

of parsimoniousness, a full mediation model with a partial mediation model. We compared models using a chi-square difference test and found no significant ($\Delta \chi^2(4) = 8.46, p = .076$) difference between the full mediation model (and the partial mediation model). In light of parsimoniousness, the full mediation model is hence the desired model and all of the following results are from the full mediation model. We found that the block variable for relational ($\beta = -0.16, SE = 0.05, p < .001$) and transactional ($\beta = -0.08, SE = 0.04, p = .040$) inducements at T1 was negatively related to negative reciprocity at T2, which in turn was positively related to OD enactment at T2 ($\beta = 0.61, SE = 0.02, p < .001$). Moreover, we found that negative reciprocity at T2 mediated the relationship between the block variable for relational [$\beta = -0.13, 95\%CI = [-0.19; -0.05]$] and transactional [$\beta = -0.11, 95\%CI = [-0.16; -0.04]$] inducements at T1 and OD enactment at T2. From these findings it can be concluded that a *low* score on the block variable for relational and transactional inducements is positively related to negative reciprocity which in turn was positively related to OD enactment, thereby supporting hypothesis 5. Next, we found that the block variable for relational ($\beta = 0.18, SE = 0.05, p < .001$) and transactional ($\beta = 0.17, SE = 0.05, p < .001$) inducements at T1 was positively related to positive reciprocity at T2, which in turn was positively related to UPB enactment at T2 ($\beta = 0.62, SE = 0.03, p < .001$). Moreover, we found that positive reciprocity at T2 mediated the relationship between the block variable for relational [$\beta = 0.13, 95\%CI = [0.06; 0.21]$] and transactional [$\beta = 0.05, 95\%CI = [0.001; 0.10]$] inducements at T1 and UPB enactment at T2. From these findings it can be concluded that a *high* score on the block variable for relational and transactional inducements is positively related to positive reciprocity which in turn was positively related to UPB enactment, thereby supporting hypothesis 6.

9. Discussion study 2

In line with our expectations for hypotheses 3 and 4, we found a positive relationship between PC under-fulfillment (for transactional and relational PC inducements) and OD enactment and between high absolute levels of PC fulfillment (for transactional and relational PC inducements) and UPB enactment. Although not part of our formal hypothesis development, we also found (1) a positive relationship between PC under-fulfillment (for relational PC inducements) and UPB enactment, and (2) a positive relationship between high absolute levels of PC fulfillment (for transactional and relational PC inducements) and OD enactment. Moreover, in line with our hypotheses 5 and 6, we found that negative reciprocity mediates the relationship between a low score on the block variable for relational and transactional inducements (i.e., high promised and low delivered inducements combination) and OD enactment, whereas we found that positive reciprocity mediates the relationship between a high score on the block variable for relational and transactional inducements (i.e., high promised and high delivered inducements combination) and UPB enactment, furthering our findings obtained from Study 1 regarding the mediating role of reciprocity norms. In what follows, we discuss, and further explore, the implications of the two above-mentioned relationships that were not part of our formal hypothesis development.

First, with regards to the positive relationship between PC under-fulfillment and UPB enactment, we believe that this relationship can be partially explained by the fact that [Umphress et al. \(2010\)](#) focused exclusively on the beneficial aspects of UPB (i.e., the desire to help and do good for the organization) and disregarded the potentially downstream negative and destructive consequences of these acts for the organization itself. Several items of the UPB scale point toward aspects such as withholding information or misrepresenting/exaggerating the

Table A1
Themes Identified in the Data.

Theme Description	Illustrative quotes
UPB explanation	
Would not engage in this type of behavior (N = 27; 51.92 %)	
Would engage in this type of behavior (N = 25; 48.08 %), because ...	
...Negative reciprocity (N = 14; 56.00 %)	<p>“If they don’t care about my feelings or well-being then the same acts are simply returned”</p> <p>“As a way to get back to them for not doing what they said they would do”</p> <p>“I would feel that if the company could lie to me and deceive me then I would have the right to do so to them”</p> <p>“Because I would feel as if the organization lied to me or didn’t care about me. They are making false promises”</p> <p>“I am more like to engage in these behaviors because it makes me feel that my organization doesn’t care about me or appreciate me in any way; they get their negative treatment in return”</p> <p>“Out of anger and feelings of betrayal I might try to engage in some acts that could get them in bad papers; I would get even”</p>
...Lack of trust in organization (N = 6; 24.00 %)	<p>“They put certain restrictions on the people of the company for so long. If they company lies to you and tells you one thing and does another action, you lose trust in that company”</p> <p>“There’s a lack of trust between the employee and the organization. If the employee doesn’t believe that the organization is going to honor what they’ve promised, the employee may resort to lying, cheating, etc. to protect him or herself”</p> <p>“You can no longer trust what you are told”</p> <p>“Mutual trust is broken when one party fails to deliver on pre agreed upon expectations. The other party then feels betrayed and resentful for breaking trust and promises. It is then easier to engage in behavior to attempt to retaliate”</p>
...Enactment of omission with purpose to harm organization but not clients (N = 5; 20.00 %)	<p>“I’d work less hard and have no loyalty to the company and would probably badmouth them to friends. I’d most likely leak to the press information that was factual, that could harm the company, but protect consumers”</p> <p>“The company has broken the social contract and deserves to be punished. I would do acts of omission and would not want to physically harm the company or its facilities”</p> <p>“When I feel that my employer has been less able to provide than I had been led to believe by an implicit contract, I would no longer go above and beyond, as they say, for that employer. I would still do my job, but I will engage in acts of commission”</p> <p>“Out of anger I might engage in cases of omission”</p>
OD explanation	
Would not engage in this type of behavior (N = 28; 53.85 %)	
Would engage in this type of behavior (N = 24; 46.15 %), because ...	
...Entitlement and deservingness (N = 16; 66.67 %)	<p>“A person given a LOT counts themselves as deserving of it, so cutting a few “small corners” is just getting them what they are entitled to”</p> <p>“Some individuals are likely to cheat in any environment. Where rules are perceived to be lax some people will try to get away with as much as they can. Some workers may also feel</p>

Table A1 (continued)

Theme Description	Illustrative quotes
	<p>they are owed more than what they’re getting”</p> <p>“Sense of entitlement”</p> <p>“If my organization provided me these extras, I might start to think that I am better than others and entitled to them”</p> <p>“Because I might feel morally superior and feel like I can get away with it”</p> <p>“Feelings of entitlement; much like a spoiled kid who lashes out”</p> <p>“I would do this as a way to get ahead and because I feel like I earned these things I might get away with some bad behavior”</p> <p>“Because I would feel like I earned these rewards and hence seem to be able to get away with a little extra”</p>
...Negative reciprocity (N = 4; 16.67 %)	<p>“When your company lies to you in return you tend to do the same”</p> <p>“Because I am angry and want to get back at them”</p>
...Lack of trust and integrity of the organization (N = 2; 8.33 %)	<p>“Lack of trust and maybe because the deviation sounds too good to be true that you start to doubt their honesty and integrity”</p> <p>“I have experienced this myself, having received more than was promised which made me doubt what they wanted from me in return, so I questioned their honesty and integrity”</p>
...Tempting nature of OD enactment (N = 2; 8.33 %)	<p>“It may sound good and become tempting”</p>

truth (and even spreading lies) about the company’s products, services, or financial statements to customers/client (labelled acts of commission by [Umphress et al., 2010](#)). Although these acts seem to benefit the organization in the short term (e.g., increased sales and/or investments), chances are that the outcomes associated with these acts will backfire and eventually reflect negatively on the organization (e.g., customer complaints, lawsuits, termination of contracts in favor of competitors). Recently, some scholars (e.g., [Liu & Qiu, 2015](#); [Chen et al., 2016](#)) have argued that employees who engage in UPB may be aware of the potentially detrimental effects of their behaviors and may choose to engage in this type of behavior over other types of OD because “at the surface” UPB signals a desire to help and benefit the organization whereas simultaneously damaging the organization through negative reciprocity, in a way that is much harder to detect compared to more overtly acts of OD (see [Griep & Vantilborgh, 2018](#)). In a short qualitative follow-up study (for the full details of this qualitative study, see [Appendix A](#)) among 52 North American respondents, we indeed found additional support for this theoretical explanation. While 51.92 % (27 respondents) said that they would not engage in any type of UPB when confronted with PC under-fulfillment, the remaining 25 respondents said that they would engage in UPB for reasons that could be summarized as negative reciprocity (56 %; 14 respondents) or lack of trust in the organization (24 %; 6 respondents); but they would only engage in acts of commission with the purpose of harming the organization but not the clients of said organization (20 %; 5 respondents).

Second, with regards to the positive relationship between high absolute levels of PC fulfillment and OD enactment, we believe that this relationship can be partially explained by an increase of self-entitlement in the aftermath of high absolute levels of PC fulfillment. Self-entitlement—defined as the “a pervasive sense that one deserves more and is entitled to more than others” ([Campbell et al. 2004, p. 31](#))—in the context of education and work ([Twenge, 2006](#); [Laird et al., 2015](#)) has experienced a substantial increase over recent decades with students and employees expecting their professors and employers to go to exceptional lengths to accommodate their needs and preferences even in the face of increasing flexibility and improved studying or working conditions (see [Greenberger et al., 2008](#)). Several scholars have

demonstrated convincingly that a host of factors might contribute to one's feelings of entitlement. Among them are some aspects which are directly relevant to the current study, namely the experience of high rewards on dimensions such as salary, benefits, praise, job flexibility, career plans and duties (i.e., transactional and relational PC inducements; Harvey & Harris, 2010) which may lead to inflated self-esteem (Deci et al., 1999; Twenge & Campbell, 2003), which may encourage entitled individuals to engage in a wide array of maladaptive attitudes and behaviors. Indeed, a range of studies has demonstrated that entitled individuals (1) come to expect high levels of rewards (i.e., high absolute PC fulfillment) with little regards for the impact of their behavior on others, including beleaguering and lashing out to others (Greenberger et al., 2008), (2) exhibit higher complaint intention (Evanschitzky et al., 2011), (3) decrease perceived fairness at work (Xia & Kukar-Kinney, 2013), and (4) have higher feelings of deservingness (Reczek et al., 2014). Furthermore, entitled employees tend to have unrealistic expectations toward their job and organization because they expect to continuously receive more from their organization, even when they already objectively receive a high number of inducements or even receive objectively more than they deserve (Dragova-Koleva, 2017). As a consequence, it has been argued that entitled employees might engage in more acts of greed and aggression towards other entities (Campbell et al. 2004), assertive or even aggressive behaviors (Richins, 1983), conflicts with supervisors (Harvey & Martinko, 2009), co-worker abuse (Harvey & Harris, 2010), and enactment of deviance (Harvey et al., 2014): elements which are central to the enactment of OD. In the previously mentioned short qualitative follow-up study (see Appendix A) we found that while 53.85 % (28 respondents) said that they would not engage in any type of OD when confronted with high absolute levels of PC-fulfillment, the remaining 24 respondents said that they would engage in OD for reasons that could be summarized as entitlement and deservingness (66.67 %; 16 respondents), negative reciprocity (16.67 %; 4 respondents), lack of trust and integrity of the organization (8.33 %; 2 respondents), and due to the tempting nature of OD (8.33 %; 2 respondent).

Finally, we found that promised, rather than delivered inducements are the main driving factor of OD and UPB (see Tables 3 and 4). These results are not in line with prior work by Montes and Zweig (2009) where they found, using both student and employee samples, that influence of promised inducements appears in most cases to be minimal, yet present. There can be multiple reasons for these differences in results between our study and the Montes and Zweig study. For one, there is a very important differences in the type of measure used across both studies with some of the studies in the Montes and Zweig study using a global direct PC breach measure (suffering from the issues we have identified above) and our study using an indirect PC breach measure following the expanded approach. Second, other work by some of the same authors (i.e., Montes & Irving, 2008), does find support for the role of promised inducements in relation to satisfaction and employee intentions to accept future contracts and/or a permanent employment offer with their organization. Similarly, a range of scholars have demonstrated that promised inducements, sometimes akin to delivered inducements, are important predictors of satisfaction (Lambert, 2011), perceived violation and turnover intentions (Kraak et al., 2017), job embeddedness (Dechawatanapaisal, 2022), and positive and negative mood (Conway & Briner, 2002).

10. General discussion

With the current paper, we aimed to understand an important and timely theoretically and societally relevant question: "Why do employees engage in unethical behavior in the workplace?" In this paper, we propose that the Social Exchange Theory (Blau, 1964; Gouldner, 1960) and its application in PC Theory (Rousseau et al., 2018) may offer an important additional and more nuanced explanation as to why employees engage in unethical behavior in the workplace. Through

repeated support for our hypotheses, we demonstrated that when employees experience a negative discrepancy in the form of PC breach (Study 1) and/or PC under-fulfillment (Study 2), they are more likely to engage in self-focused unethical behavior such as OD as a way to "get even" with their organization as mediated by negative reciprocity. In contrast, when employees experience either PC fulfillment (Study 1) or high absolute levels of PC fulfillment (Study 2), they are more likely to engage in other-focused unethical behavior such as UPB as a way to "repay" their organization for the fair treatment as mediated by positive reciprocity.

Moreover, in this paper we extend the existing PC literature by demonstrating possible negative consequences of PC fulfillment, high absolute levels of PC fulfillment, and PC over-fulfillment by focusing on UPB: a type of behavior enacted with the aim of helping the organization but with potential damaging downstream effects (e.g., Liu & Qiu, 2015; Chen et al., 2016). Traditionally, the PC literature has predominantly focussed on the negative outcomes of PC breach (e.g., for a meta-analysis see Zhao et al., 2007; for a recent review see Coyle-Shapiro et al., 2019) and, albeit to a lesser extent, on the positive outcomes of PC fulfillment (e.g., Conway & Briner, 2005). With few exceptions (e.g., see Lambert et al., 2003 for a demonstration that PC over-fulfillment is negatively associated with satisfaction under certain conditions) there seems to be consensus that PC fulfillment, high absolute levels of PC fulfillment, and PC over-fulfillment are *good* and that PC breach is *bad*. In this paper, we use the metaphor of *love* (being prepared to act unethically with the intention to benefit the organization) and *hate* (getting back at the organization) to demonstrate that PC fulfillment (Study 1) or a positive discrepancy in the form of high absolute levels of PC fulfillment (Study 2) can also have a dark side to it in the form of UPB. Our study thus expands our knowledge on the relationships between different PC states and unethical behavior by demonstrating that PC breach and PC under-fulfillment may trigger OD whereas PC fulfillment, PC over-fulfillment and high absolute levels of PC fulfillment may trigger UPB.

Finally, our results provide further evidence for the importance of differentiating PC states in relation to different types of unethical behavior. Although previous research already found a positive relationship between PC breach and a wealth of deviant behaviors (e.g., Bordia et al., 2008; Bordia et al., 2014; Griep & Vantilborgh, 2018; Jensen et al., 2010; Restubog et al., 2015), the PC literature has largely overlooked PC under-fulfillment in relation to important employee outcomes. By only focusing on PC breach, previous literature has thus overlooked instances during which employees do not perceive that their employer has failed to fulfill its obligations in full, but instead received less than what the organization was obligated to provide. We demonstrated that such cases of PC under-fulfillment had a similar, yet smaller positive effect on OD; demonstrating the importance of studying PC under-fulfillment. We found similar effects for the understudied concept of PC over-fulfillment and high absolute levels of PC fulfillment, which had a similar, yet more profound positive effect on the enactment of UPB, demonstrating the detrimental effects of PC over-fulfillment and/or high absolute levels of PC fulfillment (at least in relation to unethical behavior).

10.1. Limitations

Like all studies, our 2-study paper has limitations that deserve further attention. First, although we used two longitudinal studies, we are still mindful of potential common method variance issues (Podsakoff et al., 2012). We reduced the risks owing to common method bias by (1) testing the proposed effects over time after controlling for autoregressive effects, and (2) by presenting all scales in a random order. This approach boosts our confidence that the observed relations across our studies are a function of the studied constructs and relationships rather than methodological artifacts.

A second limitation concerns the self-report nature of the data. In

particular, asking respondents to report on their enactment of OD and UPB might be particularly susceptible to social desirability. However, meta-analytical evidence (Berry et al., 2012) indicates that employees are willing to report unethical behavior. Moreover, and arguably more interesting, Berry and colleagues (2012) found that self-reports of unethical behavior provide a more reliable and valid assessment compared to observer-reports when respondents anonymity was safeguarded. Accordingly, and in line with the recommendations of Berry and colleagues (2012), we used self-reports to assess OD and UPB but took steps to assure anonymity (e.g., we did not collect personal information).

10.2. Further directions

Based on our findings, we see three main interesting avenues for future research to build upon our work and further our knowledge (1) testing alternative affective drivers in addition to the above described cognitive mediators (i.e., reciprocity norms) underlying the PC breach-OD and PC fulfillment-UPB relationship, (2) focusing on alternative social exchange antecedents, and (3) focusing on individual difference variables as boundary conditions of our findings.

First, we suggest that future research would assess the role of anger in the relationship between PC breach or under-fulfillment and enactment of OD. Specifically, in their conceptual model on the development of violation feelings in response to PC breach, Morrison and Robinson (1997, p. 587) theorized that PC breach triggers a “negative emotional reaction of anger and betrayal”. These feelings of anger may in turn trigger a desire to retaliate toward the entity deemed responsible for the PC breach and its accompanying feelings of anger. A wealth of research has demonstrated that employees may respond to unfavorable treatment of others, such as PC breach, by choosing to retaliate with the objective of inflicting harm, and that this relationship is driven by anger (for a meta-analysis see Rudolph et al., 2004). With respect to the relationship between PC fulfillment (Study 1) and high absolute levels of PC fulfillment (Study 2) and the enactment of UPB, we propose that future research could focus on the role of indebtedness. In their groundbreaking paper on discreet affective responses to PC fulfillment, Conway and Briner (2002) have demonstrated that feelings of indebtedness mediated the relationship between PC fulfillment and over-fulfillment and positive employee reactions aimed at benefiting their organization (i.e., UPB). Moreover, Watkins et al. (2006) found that receiving fair treatment in a social exchange relationship characterized by expectations of reciprocation—such as is the case in an employee-employer relationship at work (e.g., Rousseau, 1989)—triggered high levels of indebtedness which in turn triggered a strong desire to help the benefactor by engaging in behavior with the objective of helping the benefactor (enactment of UPB).

Second, based on our current results, we see many avenues for future research to focus on alternative Social Exchange concepts—such as leader member exchange (LMX), organizational support (POS), and overall justice climate (OJC)—as antecedents of differential unethical behavior reactions (e.g., OD versus UPB). Specifically, in employer-employee relationships that are characterized by high-quality LMX or high perceptions of POS or OJC, employees tend to reciprocate by performing their job better, by having higher loyalty and commitment, and by engaging in more OCB (for a meta-analysis see Cohen-Charash & Spector, 2001). Employees who experience such high-quality exchange relationships may feel the obligation to repay the considerate treatment they received from their supervisor/organization by increasing their enactment of UPB (and OCB) and may overlook the moral implications of this behavior as a way of reciprocating the positive treatment they received from their supervisor/organization (Settoon et al., 1996). In contrast, in low-quality exchange relationships—characterized by either low-quality LMX or low perceptions of POS or OJC—employees tend to feel less valued and respected by the organization (for a meta-analysis see Gerstner & Day, 1997). As a consequence, they may feel more inclined to engage in OD to balance the scales as per the negative norm of

reciprocity (e.g., negative treatment is resolved in a quid pro quo fashion and reciprocated with negative attitudes and behavior; Mitchell & Ambrose, 2007).

Third, although we theoretically focused on the direct effects and mediating mechanisms, we acknowledge the importance of potential moderators of the relationship between different PC states and the enactment of OD or UPB. One such important individual difference moderator is moral identity; defined as the degree to which being a moral person is important to an individual's identity (Bennett et al., 2005). Shao et al. (2008) proposed that individual differences in the level of centrality of morality to the self is a strong self-regulatory mechanism that may link moral judgment and moral behavior, meaning that individuals who define themselves based on moral characteristics are more likely to act in a moral way (e.g., refraining from OD or UPB), irrespectively of whether they experienced PC breach or fulfillment. A second important individual difference moderator is feelings of entitlement, defined as an individual's preference for receiving special treatment, attention and benefits irrespectively of one's performance (Naumann et al., 2002; Snow et al., 2001). Generally speaking, individuals tend to have a lower tolerance for under-reward situations (i.e., PC under-fulfillment and breach) and a higher tolerance for being over-rewarded (i.e., PC over-fulfillment or high absolute levels of PC fulfillment) compared to non-entitled individuals (Naumann et al., 2002). Building on this, Fisk (2010) reviewed the empirical work on the relationship between entitlement and workplace deviance and concluded that entitled individuals are more likely to engage in a wide range of deviant behaviors. As a corollary, it would thus be interesting to explore the moderating role of entitlement on the relationship between under-reward situations and OD to determine whether entitled individuals are more likely to engage in more OD when their PC is under-fulfilled or breached. In contrast, because entitled individuals generally expect being granted special privileges without any desire to reciprocate this favorable treatment and because entitled individuals have a higher tolerance for being over-rewarded (Naumann et al., 2002), it is likely that the experience of PC fulfillment or over-fulfillment will not lead to a corresponding increase in UPB (and OCB).

10.3. Practical implications

This research has three main implications for practice. First, organizations should recognize that both PC breach and under-fulfillment could lead to an increase in OD. The current focus on more pronounced negative workplace events such as PC breach (i.e., the dominant focus of PC literature; Bordia et al., 2008; Bordia et al., 2014; Griep & Vantilborgh, 2018; Jensen et al., 2010; Restubog et al., 2015) could lead to a PC ‘blind spot’ in which PC under-fulfillment or high absolute levels of PC fulfillment is not fully appreciated as a potential trigger for negative employee behavior such as OD. In today's world of rapid change and compromises, employers are not always able to deliver upon their obligations and are potentially more likely to partially deliver an obligation in an attempt to sustain a positive employee-employer relationship (e.g., Griep & Vantilborgh, 2018). However, in doing so, employees are at increased risk of experiencing PC under-fulfillment, which in turn tends to be positively related to OD. Organizations should therefore be cautious not to treat PC breach/fulfillment as a simple yes/no question but should instead focus on a much wider range of deviations from their original obligations and take the potential negative consequences of under-fulfillment into consideration.

Second, organizations should be aware of potential negative consequences of PC fulfillment and high absolute levels of PC fulfillment, in particular in relation to UPB. We demonstrated that employees are more likely to opt for UPB under conditions previously assumed to only lead to positive employee behavior. An increased enactment of UPB is particularly likely to occur when delivered inducements exceeded employer obligations. Through the positive norm of reciprocity, employees will potentially go too far in “repaying” the employer's benevolence as a way

to restore balance in the PC (Shore & Barksdale, 1998) by engaging in behavior that—although not desirable from a Corporate Social Responsibility point of view—they believe will benefit the organization. This contribution is relevant for practice because many organizations will focus on employees who are *‘not happy’*, monitoring for obvious indicators for OD such as absenteeism, neglect, theft or sabotage. However, our results indicate that organizations should have a clear interest in monitoring *‘happy employees’* as well, and should monitor indicators of behavior related to UPB such as acts of withholding information or lying to clients and stakeholders with the aim to benefit the organization (Umphress et al., 2010; Umphress et al., 2020). The potential backlash of scandals, small—like a potential client finding out that they were lied to by an employee—or large—such as those surrounding the Boeing 737 Max or the Volkswagen diesel gate scandals—can have a major impact on organizations, the careers of the people working for these organizations, and the wider community.

Third, organizations could opt for a strategic perspective and determine policies that can help to systematically identify UPB. Although employees are likely trying to help the organization in good faith, they are actually engaging in behavior with potentially very damaging consequences. Although specific policies for monitoring UPB fall outside of the scope of this paper, there are several “sensitive employment groups” for which organizations could develop such initiatives. For example, employees who work outside of the company premises (e.g., salespeople or consultants that work in-house with a client organization), employees who have a lot of freedom outside of normal working hours when there is less supervision (e.g., people in the hospitality industry, employees working a night shift), or employees who are sent to foreign customers and/or subsidiaries as international commuters and expatriates. If organizations only pay attention to obvious signs of OD, they have a potential blind spot for unethical employee behavior that may lead to catastrophic consequences for the organization itself in the long run (e.g., customer complaints, angry clients, suppliers and/or shareholders, lawsuits).

11. Conclusion

In this 2-study paper we found that when employees perceive either PC breach or PC under-fulfillment, they are more likely to engage in OD as mediated by negative reciprocity, whereas when they perceive PC fulfillment or high absolute levels of PC fulfillment, they are more likely to engage in UPB as mediated by positive reciprocity. In a further exploratory study (see discussion Study 2), we also further explored two unexpected findings with regards to (1) a positive relationship between PC under-fulfillment and UPB enactment and (2) positive relationship between high absolute levels of PC fulfillment and OD enactment and found support for previous theoretical arguments for both of these findings. First, with regards to the first unexpected finding, we found that employees prefer acts of omission from the range of UPB acts over OD when experiencing PC under-fulfillment; our qualitative data indicated that these acts of omission are preferred because “at the surface” these acts signal a desire to help and benefit the organization while simultaneously damaging the organization in a way that is much harder to detect compared to the more overtly acts of OD. Second, with regards to the positive relationship between high absolute levels of PC fulfillment and OD our qualitative data indicate that employees mainly experience an inflated sense of entitlement and deservingness in the aftermath of high absolute levels of PC fulfillment, which triggers their desire to engage in OD. Overall, our paper demonstrated the importance of differentiating PC states in relation to different unethical behaviors in the workplace.

Research Ethics

This research was approved by the Social Science Ethics Committee from Radboud University under the following reference number ECSW-

LT-2022-1-31-62983.

Data Availability Statement

The data used in this manuscript can be found on The Open Science Framework using the following <https://doi.org/10.17605/OSF.IO/5Q36T>.

CRedit authorship contribution statement

Yannick Griep: Writing – review & editing, Writing – original draft, Visualization, Software, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Johannes M. Kraak:** Writing – review & editing, Writing – original draft, Validation, Resources, Project administration, Methodology, Investigation, Conceptualization. **Jesse Fenneman:** Writing – review & editing, Visualization, Software, Methodology, Formal analysis. **Alfredo Jiménez:** Writing – review & editing, Writing – original draft. **Xander D. Lub:** Writing – review & editing, Writing – original draft.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

The data used in this manuscript is available on the Open Science Framework; we mentioned the link on the title page

Acknowledgements

We would like to thank Dr. Samantha D. Hansen and Drs. Elizabeth M. Beekman for their insightful comments on previous versions of this manuscript. Moreover, we are grateful to the insightful comments from two anonymous reviewers and our Associate Editor (Dr. Joel B. Carnevale). Yannick Griep and Johannes Kraak have contributed equally to this research and are shared first author.

Funding

This research was supported by Social Sciences and Humanities Research Council of Canada (grant 435-2018-0633).

Appendix A. Method explorative study

Participants. We recruited 70 North-American participants through an on-line panel provider (CloudResearch) to take part in a short qualitative free text response study in exchange for US\$1.00. Online panels have been described as reliable sources to access diverse samples (e.g., Landers & Behrend, 2015), with quality of the data that is not substantially different compared to a non-paid random sample (e.g., Behrend et al., 2011), especially when researchers embed attention checks in the survey (i.e., checking the quality of the free text responses for coherent sentences and grammar). Out of these 70 respondents, we removed 18 respondents who did not provide qualitative responses (e.g., incorrect grammar throughout or nonsense responses that had nothing to do with the questions being posed), resulting in a final sample of 52 individuals who completed the study (response rate = 74.29 %). Participants were, on average, 53.65 years old ($SD = 17.51$), 64.70 % were female and 35.30 % were male. 2.00 % had obtained a primary school degree, 45.10 % had obtained a secondary school degree, 35.30 % had obtained an undergraduate or equivalent degree, and 17.60 % had obtained a graduate or post-graduate degree. The average company tenure of our respondents was 10.98 years ($SD = 12.21$). 35.30 % of our sample

worked full-time, 58.80 % held a permanent position, and 21.60 % was in a management position. Our respondents came from a wide range of sectors (top five listed here): professional services (58.80 %), education (11.80 %), construction (7.80 %), public services (3.90 %), and health services (3.90 %).

Procedure and Materials. The study started by explaining the goals of the study, assuring the anonymity of respondents, and obtaining informed consent. Next, we presented respondents with two free test response questions. In the first question, we presented respondents with the finding we obtained in Study 2 with regards to the positive relationship between PC under-fulfillment and UPB enactment and asked them to think about the reasons as to why they would engage in UPB when experiencing PC under-fulfillment. Specifically, we provided them with the following question: *“We found that when your organization promised to provide you with relational inducements (examples are being concerned for your well-being, sacrificing organizational interests for your interest, being concerned for your long-term well-being) but provides you with less than originally promised, you are more likely to engage in a series of behaviors that are characterized by acts of commission (e.g., lying, adding misleading or false information, cheating) and acts of omission (e.g., destroying, removing or withholding information, covering up scandals) that are considered unethical in the sense that they violate globally held standards of ethical behavior judged in terms of justice, law, or widely held social norms. Keeping this in mind, we are wondering why you would engage in these types of behaviors when your organization provides you with less relational inducements than originally promised. Please write down the reasons, when applicable, as to why you would engage in these types of behaviors when your organization provides you with less relational inducements than originally promised.”*

In the second question, we presented respondents with the finding we obtained in Study 2 with regards to the positive relationship between high absolute levels of PC fulfillment and OD enactment and asked them to think about the reasons as to why they would engage in OD when experiencing high absolute levels of PC fulfillment. Specifically, we provided them with the following question: *“We found that when your organization promised to provide you with a high amount of relational inducements (examples are being concerned for your well-being, sacrificing organizational interests for your interest, being concerned for your long-term well-being) and a high amount of transactional inducements (examples are training you for your current job, providing you with secure employment, and providing you with stable benefits for your family) and consequently provides you with a high amount of said relational and transactional inducements, you are more likely to engage in a series of behaviors that are unethical and antisocial such as taking property from work without permission, spending too much time on non-work related tasks, coming in late without permission, neglecting to follow instructions, putting little effort into your work. Keeping this in mind, we are wondering why you would engage in these types of behaviors when your organization promises and provides you with a high amount of relational and transactional inducements. Please write down the reasons, when applicable, as to why you would engage in these types of behaviors when your organization promises and provides you with a high amount of relational and transactional inducements.”* Upon completion of the study, a research assistant removed all CloudResearch IDs from the data file.

Our sample of 52 respondents meets the requirements of both code (i.e., traditionally occurs around the ninth interview) and meaning (i.e., traditionally occurs between sixteen to twenty-four interviews) saturation (Hennink et al., 2017). Our sample size also provided sufficient opportunity to evaluate the reasons why one would engage in UPB in the aftermath of PC under-fulfillment and why one would engage in OD in the aftermath of high absolute levels of PC fulfillment because (1) all 52 respondents were able to recall at least one instance during which they experienced either PC under-fulfillment and/or high absolute levels of PC fulfillment (consistent with previous research; Robinson & Rousseau, 1994), and (2) more than half of our sample was able to provide a reason as to why they would engage in UPB or OD in the above described cases

(all other respondents indicated that they would not engage in these types of behaviors in these specific incidences).

Analytic Strategy. The qualitative data obtained above was thematically analysed, which is an approach for identifying themes within data (Braun & Clarke, 2006). We adopted a bottom-up “inductive analysis” approach, allowing themes to emerge organically from the data (Braun & Clarke, 2006, p. 83; Pratt, 2009). Themes were identified at a “latent or interpretative level” (Braun & Clarke, 2006, p. 84) by coding whole passages with mentioned themes. When participants mentioned multiple or contradictory themes within a single passage, we coded the passage with all the relevant themes. We used “investigator [or researcher] triangulation” to ensure that different perspectives informed the thematic coding and to achieve inter-coder consistency (Carter et al., 2014). Our process involved two researchers independently coding the data and then developing a combined coding scheme that captured the range of themes in the data. The coding process was accomplished with an inter-coder agreement of 94.80 %. The few variations in coding were discussed and for each instance agreement was reached. One of the researchers then coded the entire dataset with the combined coding scheme.

A.1. Results

All relevant data were coded under two major themes: (1) why one would engage in UPB in the aftermath of PC under-fulfillment and (2) why one would engage in OD in the aftermath of high absolute levels of PC fulfillment (see Table A1). We also present descriptions, frequency with which each theme was mentioned, and illustrative quotes for each of the major themes presented in Table A1.

As can be seen from Table A1, 27 respondents (51.92 %) would not engage in any type of UPB when being confronted with PC under-fulfillment. The remaining 25 respondents (48.08 %) indicated that they would engage in UPB in the aftermath of PC under-fulfillment. The reasons they presented for this can be summarized as (1) negative reciprocity (14 respondents; *“I am more like to engage in these behaviors because it makes me feel that my organization doesn't care about me or appreciate me in any way; they get their negative treatment in return”* and *“As a way to get back to them for not doing what they said they would do”*), (2) lack of trust in the organization (6 respondents; *“You can no longer trust what you are told”* and *“They put certain restrictions on the people of the company for so long. The company lies to you tells you one thing and does another action you lose trust in that company”*), and (3) enactment of commission with the purpose to harm the organization but not its clients (5 respondents; *“I'd work less hard and have no loyalty to the company and would probably badmouth them to friends. I'd most likely leak to the press information that was factual, that could harm the company, but protect consumers”* and *“When I feel that my employer has been less able to provide than I had been led to believe by an implicit contract, I would no longer go above and beyond, as they say, for that employer. I would still do my job, but I will engage in acts of commission”*).

As can be seen from Table A1, 28 respondents (53.85 %) would not engage in any type of OD when being confronted with high absolute levels of PC fulfillment. The remaining 24 respondents (46.15 %) indicated that they would engage in OD in the aftermath of high absolute levels of PC fulfillment. The reasons they presented for this can be summarized as (1) entitlement and deservingness (16 respondents; *“A person given a LOT counts themselves as deserving of it, so cutting a few small corners is just getting them what they are entitled to”* and *“Feelings of entitlement; much like a spoiled kid who lashes out”*), (2) negative reciprocity (4 respondents; *“When your company lies to you in return you tend to do the same”*), (3) lack of trust and integrity of the organization (2 respondents; *“I have experienced this myself, having received more than was promised which made me doubt what they wanted from me in return, so I questioned their honesty and integrity”*), and (5) the tempting nature of OD enactment (2 respondents; *“It may sound good and become tempting”*).

A.2. Conclusion

Overall, these exploratory findings seem to suggest that approximately half of our respondents would engage in any type of UPB or OD when being confronted with PC under-fulfillment or high absolute levels of PC fulfillment, respectively. The reasons they mention as to why they would engage in UPB following PC under-fulfillment are mainly related to *negative reciprocity* (56.00 %) and to a far lesser extent to feelings of reduced trust in the organization. Interestingly, respondents who specifically mentioned which type of UPB they would engage in, all referenced acts of commission but not acts of omission, indicating that they are willing to harm the organization but not its clients in the aftermath of being confronted with PC under-fulfillment. The reasons they mention as to why they would engage in OD following high absolute levels of PC fulfillment are mainly related to *entitlement and deservingness* (66.67 %) and to a far lesser extent to negative reciprocity, lack of trust and integrity in the organization, and the potential tempting nature of OD enactment.

References

- Bakker, A. B., & Bal, M. P. (2010). Weekly work engagement and performance: A study among starting teachers. *Journal of Occupational and Organizational Psychology*, 83(1), 189–206. <https://doi.org/10.1348/096317909X402596>
- Bal, P. M., Chiaburu, D. S., & Jansen, P. G. W. (2010). Psychological contract breach and work performance: Is social exchange a buffer or an intensifier? *Journal of Managerial Psychology*, 25(3), 252–273. <https://doi.org/10.1108/02683941011023730>
- Balogun, A. G., Oluyemi, T. S., & Afolabi, O. A. (2018). Psychological contract breach and workplace deviance: Does emotional intelligence matter? *Journal of Psychology in Africa*, 28(1), 8–14. <https://doi.org/10.1080/14330237.2018.1426808>
- Baucus, M. S., & Baucus, D. A. (1997). Paying the piper: An empirical examination of longer-term financial consequences of illegal corporate behavior. *Academy of Management Journal*, 40(1), 129–151. <https://doi.org/10.2307/257023>
- Becker, T. E., Atinc, G., Breugh, J. A., Carlson, K. D., Edwards, J. R., & Spector, P. E. (2016). Statistical control in correlational studies: 10 essential recommendations for organizational researchers. *Journal of Organizational Behavior*, 37(2), 157–167. <https://doi.org/10.1002/job.2053>
- Behrend, T. S., Sharek, D. J., Meade, A. W., & . (2011). The viability of crowdsourcing for survey research. *Behavior Research Methods*, 43(3), 800–813. <https://doi.org/10.3758/s13428-011-0081-0>
- Bennett, R. J., Aquino, K., Reed, A., & Thau, S. (2005). The normative nature of employee deviance and the impact of moral identity. In P. Spector, & S. Fox (Eds.), *Counterproductive Workplace Behavior* (pp. 107–126). Washington D.C.: American Psychological Association.
- Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology*, 85(3), 349–360. <https://doi.org/10.1037/0021-9010.85.3.349>
- Bennett, R. J., & Robinson, S. L. (2003). The past, present, and future of workplace deviance research. In J. Greenberg (Ed.), *Organizational behavior: The state of the science* (pp. 247–281). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Bennett, R. J., Marasi, S., & Locklear, L. (2019). Workplace deviance. In *Oxford research encyclopedia of business and management* (pp. 1–25). New York: Oxford University Press.
- Bernerth, J. B., & Aguinis, H. (2016). A Critical Review and Best-Practice Recommendations for Control Variable Usage. *Personnel Psychology*, 69, 229–283. <https://doi.org/10.1111/peps.12103>
- Berry, C. M., Carpenter, N. C., & Barratt, C. L. (2012). Do other-reports of counterproductive work behavior provide an incremental contribution over self-reports? A meta-analytic comparison. *Journal of Applied Psychology*, 97(3), 613–636. <https://doi.org/10.1037/a0026739>
- Blau, P. M. (1964). *Exchange and power in social life*. New-York, NY: Wiley & Sons.
- Bourke, A. J. I. I. I. (1994). Get smart about getting ripped off. *HR Focus*, 71, 18.
- Bordia, P., Kiazad, K., Restubog, S. L. D., DiFonzo, N., Stenson, N., & Tang, R. L. (2014). Rumor as Revenge in the Workplace. *Group & Organization Management*, 39(4), 363–388. <https://doi.org/10.1177/1059601114540750>
- Bordia, P., Restubog, S. L. D., & Tang, R. L. (2008). When employees strike back: Investigating mediating mechanisms between psychological contract breach and workplace deviance. *Journal of Applied Psychology*, 93(5), 1104–1117. <https://doi.org/10.1037/0021-9010.93.5.1104>
- Case, J. (2000). *Employee theft: The profit killer*. Del Mar, CA: John Case & Associates.
- Campbell, W. K., Bonacci, A. M., Shelton, J., Exline, J. J., & Bushman, B. J. (2004). Psychological entitlement: Interpersonal consequences and validation of a self-report measure. *Journal of Personality Assessment*, 83(1), 29–45. https://doi.org/10.1207/s15327752jpa8301_04
- Chen, M., Chen, C. C., & Sheldon, O. J. (2016). Relaxing moral reasoning to win: How organizational identification relates to UPB. *Journal of Applied Psychology*, 101(8), 1082–1096. <https://doi.org/10.1037/apl0000111>
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling*, 9(2), 233–255. https://doi.org/10.1207/S15328007SEM0902_5
- Coffin, B. (2003). Breaking the silence on white collar crime. *Risk Management*, 50(9), 8–9.
- Cohen, A., Nahum-Shani, I., & Doveh, E. (2010). Further insight and additional inference methods for polynomial regression applied to the analysis of congruence. *Multivariate Behavioral Research*, 4, 828–852. <https://doi.org/10.1080/00273171.2010.519272>
- Cohen-Charash, Y., & Spector, P. E. (2001). The role of justice in organizations: A meta-analysis. *Organizational Behavior and Human Decision Processes*, 86(2), 278–321. <https://doi.org/10.1006/obhd.2001.2958>
- Conway, N., & Briner, R. B. (2002). A daily diary study of affective responses to psychological contract breach and exceeded promises. *Journal of Organizational Behavior*, 23(3), 287–302. <https://doi.org/10.1002/job.139>
- Conway, N., & Briner, R. B. (2005). *Understanding psychological contracts at work: A critical evaluation of theory and research*. Oxford, UK: Oxford University Press.
- Conway, N., Guest, G., & Trenberth, L. (2011). Testing the differential effects of changes in psychological contract breach and fulfillment. *Journal of Vocational Behavior*, 79(1), 267–276. <https://doi.org/10.1016/j.jvb.2011.01.003>
- Costa, S. P., & Neves, P. (2017). Forgiving is good for health and performance: How forgiveness helps individuals cope with the psychological contract breach. *Journal of Vocational Behavior*, 100, 124–136. <https://doi.org/10.1016/j.jvb.2017.03.005>
- Coyle-Shapiro, J.-A.-M., Pereira Costa, S., Doden, W., & Chang, C. (2019). Psychological contracts: Past, present, and future. *Annual Review of Organizational Psychology and Organizational Behavior*, 6(1), 145–169. <https://doi.org/10.1146/annurev-orgpsych-012218-015212>
- Cropanzano, R., Anthony, E. L., Daniels, S. R., & Hall, A. V. (2017). Social exchange theory: A critical review with theoretical remedies. *Academy of Management Annals*, 11(1), 479–516. <https://doi.org/10.5465/annals.2015.0099>
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31(6), 874–900. <https://doi.org/10.1177/0149206305279602>
- Dechawatanapaisal, D. (2022). Do broken promises matter? The effects of psychological contract breach on job embeddedness and nurses' work attitudes. *International Journal of Workplace Health Management*, 15(4), 515–533. <https://doi.org/10.1108/IJWHM-07-2021-0143>
- Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125(6), 627–668. <https://doi.org/10.1037/0033-2909.125.6.627>
- Deery, S. J., Iverson, R. D., & Walsh, J. T. (2006). Toward a better understanding of psychological contract breach: A study of customer service employees. *Journal of Applied Psychology*, 91(1), 166–175. <https://doi.org/10.1037/0021-9010.91.1.166>
- Dormann, C., & Griffin, M. A. (2015). Optimal time lags in panel studies. *Psychological Methods*, 20(4), 489–505. <https://doi.org/10.1037/met0000041>
- Dragova-Koleva, S. A. (2017). Entitlement attitude in the workplace and its relationship to job satisfaction and organizational commitment. *Current Issues in Personality Psychology*, 6(1), 34–46. <https://doi.org/10.5114/cipp.2017.67230>
- Edwards, J. R. (2002). Alternatives to difference scores: Polynomial regression analysis and response surface methodology. In F. Drasgow, & N. W. Schmitt (Eds.), *Advances in measurement and data analysis*. San Francisco: Jossey-Bass.
- Edwards, J. R., & Cable, D. M. (2009). The value of value congruence. *Journal of Applied Psychology*, 94(3), 654–677. <https://doi.org/10.1037/a0014891>
- Edwards, J. R., & Parry, M. E. (1993). On the use of polynomial regression equations as an alternative to difference scores in organizational research. *Academy of Management Journal*, 36, 1577–1613. <https://doi.org/10.5465/256822>
- Eisenberger, R., Lynch, P., Avelage, J., & Rohdieck, S. (2004). Who takes the most revenge? Individual differences in negative reciprocity norm endorsement. *Personality and Social Psychology Bulletin*, 30(6), 787–799. <https://doi.org/10.1177/0146167204264047>
- Evanschitzky, H., Brock, C., & Blut, M. (2011). Will you tolerate this? The impact of affective commitment on complaint intention and postrecovery behavior. *Journal of Service Research*, 14(4), 410–425. <https://doi.org/10.1177/1094670511423956>
- Fisk, G. M. (2010). “I want it all and I want it now!” an examination of the etiology, expression, and escalation of excessive employee entitlement. *Human Resource Management Review*, 20(2), 102–114. <https://doi.org/10.1016/j.hrmr.2009.11.001>
- Freese, C., & Schalk, R. (2008). How to measure the psychological contract? A critical criteria-based review of measures. *South African Journal of Psychology*, 38, 269–286. <https://doi.org/10.1177/008124630803800202>
- Gerstner, C. R., & Day, D. V. (1997). Meta-Analytic review of leader-member exchange theory: Correlates and construct issues. *Journal of Applied Psychology*, 82(6), 827–844. <https://doi.org/10.1037/0021-9010.82.6.827>
- Gong, T., & Wang, C. Y. (2022). The effects of a psychological contract breach on customer-directed deviance. *Journal of Business Research*, 138, 374–386. <https://doi.org/10.1016/j.jbusres.2021.09.040>
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25(2), 161–178. <https://doi.org/10.2307/2092623>
- Gurchiek, K. (2006). US workers unlikely to report office misconduct. *HR Magazine*, 51, 38.
- Greenberger, E., Lessard, J., Chen, C., & Farruggia, S. P. (2008). Self-entitled college students: Contributions of personality, parenting, and motivational factors. *Journal of Youth and Adolescence*, 37(10), 1193–1204. <https://doi.org/10.1007/s10964-008-9284-9>
- Griep, Y., & Vantilborgh, T. (2018). Reciprocal effects of psychological contract breach on counterproductive and OCBs: The role of time. *Journal of Vocational Behavior*, 104, 141–153. <https://doi.org/10.1016/j.jvb.2017.10.013>
- Griep, Y., Cooper, C., Robinson, S., Rousseau, D. M., Hansen, S. D., Tomprou, M., ... Linde, B. J. (2019). Psychological contracts: Back to the future. In Y. Griep, &

- C. Cooper (Eds.), *Handbook of research on the psychological contract at work* (pp. 397–414). Edward Elgar Publishing Ltd.
- Hansen, S. D., & Griep, Y. (2016). Psychological contracts. In J. Meyer (Ed.), *Handbook of employee commitment* (pp. 119–135). Northampton, MA: Edward Elgar Publishers.
- Harvey, P., & Harris, K. J. (2010). Frustration-based outcomes of entitlement and influence of supervisor communication. *Human Relations*, 63(11), 1639–1660. <https://doi.org/10.1177/0018726710362923>
- Harvey, P., Harris, K. J., Gillis, W. E., & Martinko, M. J. (2014). Abusive supervision and the entitled employee. *Leadership Quarterly*, 25(2), 204–217. <https://doi.org/10.1016/j.leaqua.2013.08.001>
- Harvey, P., & Martinko, M. J. (2009). An empirical examination of the role of attributions in psychological entitlement and its outcomes. *Journal of Organizational Behavior*, 30(4), 459–476. <https://doi.org/10.1002/job.549>
- Hu, L.-T., & Bentler, P. M. (1995). Evaluating model fit. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications* (pp. 76–99). Thousand Oaks, CA: Sage Publications.
- Hui, C., Lee, C., & Rousseau, D. M. (2004). Psychological Contract and Organizational Citizenship Behavior in China: Investigating Generalizability and Instrumentality. *Journal of Applied Psychology*, 89(2), 311–321. <https://doi.org/10.1037/0021-9010.89.2.311>
- Hyde, P., Harris, C., Boaden, R., & Cortvriend, P. (2009). Human relations management, expectations and healthcare: A qualitative study. *Human Relations*, 62(5), 701–725. <https://doi.org/10.1177/0018726709103455>
- Irving, P. G., & Montes, S. D. (2009). Met expectations: The effects of expected and delivered inducements on employee satisfaction. *Journal of Occupational and Organizational Psychology*, 82, 431–451. <https://doi.org/10.1348/096317908X312650>
- Jensen, J. M., Opland, R. A., & Ryan, A. M. (2010). Psychological contracts and counterproductive work behaviors: Employee responses to transactional and relational breach. *Journal of Business and Psychology*, 25(4), 555–568. <https://doi.org/10.1007/s10869-009-9148-7>
- Kickul, J. (2001). When Organizations Break Their Promises: Employee Reactions to Unfair Processes and Treatment. *Journal of Business Ethics*, 29(4), 289–307. <https://doi.org/10.1023/A:1010734616208>
- Kish-Gephart, J. J., Harrison, D. A., & Treviño, L. K. (2010). Bad apples, bad cases, and bad barrels: Meta-analytic evidence about sources of unethical decisions at work. *Journal of Applied Psychology*, 95(1), 1–31. <https://doi.org/10.1037/a0017103>
- Kraak, J. M., Lunardo, R., Herrbach, O., & Durrieu, F. (2017). Promises to employees matter, self-identity too: Effects of psychological contract breach and older worker identity on violation and turnover intentions. *Journal of Business Research*, 70, 108–117. <https://doi.org/10.1016/j.jbusres.2016.06.015>
- Kraak, J. M., Russo, M., & Jiménez, A. (2018). Work-life balance psychological contract perceptions for older workers. *Personnel Review*, 47, 1194–1210. <https://doi.org/10.1108/PR-10-2017-0300>
- Laird, M., Harvey, P., & Lancaster, J. (2015). Accountability, entitlement, tenure, and satisfaction in Generation Y. *Journal of Managerial Psychology*, 30(1), 87–100. <https://doi.org/10.1108/JMP-08-2014-0227>
- Lambert, L. S. (2011). Promised and delivered inducements and contributions: An integrated view of psychological contract appraisal. *Journal of Applied Psychology*, 96(4), 695–712. <https://doi.org/10.1037/a0021692>
- Lambert, L. S., Edwards, J. R., & Cable, D. M. (2003). Breach and fulfillment of the psychological contract: A comparison of traditional and expanded views. *Personnel Psychology*, 56(4), 895–934. <https://doi.org/10.1111/j.1744-6570.2003.tb00244.x>
- Landers, R. N., & Behrend, T. S. (2015). An inconvenient truth: Arbitrary distinctions between organizational, Mechanical Turk, and other convenience samples. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 8(2), 142–164. <https://doi.org/10.1017/iop.2015.13>
- Liu, Y. Z., & Qiu, C. B. (2015). UPB: Concept, measurement and empirical research. *Journal of Human Resource and Sustainability Studies*, 3(3), 150–155. <https://doi.org/10.4236/jhrss.2015.33020>
- Mackey, J. D., McAllister, C. P., Ellen, B. P., III, & Carson, J. E. (2021). A meta-analysis of interpersonal and organizational workplace deviance research. *Journal of Management*, 47(3), 597–622. <https://doi.org/10.1177/0149206319862612>
- Mitchell, M. S., & Ambrose, M. L. (2007). Abusive supervision and workplace deviance and the moderating effects of negative reciprocity beliefs. *Journal of Applied Psychology*, 92(4), 1159–1168. <https://doi.org/10.1037/0021-9010.92.4.1159>
- Montes, S. D., & Irving, P. G. (2008). Disentangling the effects of promised and delivered inducements: Relational and transactional contract elements and the mediating role of trust. *Journal of Applied Psychology*, 93(6), 1367–1381. <https://doi.org/10.1037/a0012851>
- Montes, S. D., & Zweig, D. (2009). Do promises matter? An exploration of the role of promises in psychological contract breach. *Journal of Applied Psychology*, 94(5), 1243–1260. <https://doi.org/10.1037/a0015725>
- Morrison, E. W. (2006). Doing the job well: An investigation of pro-social rule breaking. *Journal of Management*, 32(1), 5–28. <https://doi.org/10.1177/0149206305277790>
- Morrison, E. W., & Robinson, S. L. (1997). When employees feel betrayed: A model of how psychological contract violation develops. *Academy of Management Review*, 22(1), 226–256. <https://doi.org/10.5465/AMR.1997.9707180265>
- Muthén, L. K., & Muthén, B. O. (2012). *Mplus User's Guide* (7th ed). Los Angeles, CA: Muthén & Muthén.
- Naumann, S. E., Minsky, B. D., & Sturman, M. C. (2002). The use of the concept “entitlement” in management literature: A historical review, synthesis, and discussion of compensation policy implications. *Human Resource Management Review*, 12(1), 145–166. [https://doi.org/10.1016/S1053-4822\(01\)00055-9](https://doi.org/10.1016/S1053-4822(01)00055-9)
- Ng, T. W., Feldman, D. C., & Butts, M. M. (2014). Psychological contract breaches and employee voice behaviour: The moderating effects of changes in social relationships. *European Journal of Work and Organizational Psychology*, 23(4), 537–553. <https://doi.org/10.1080/1359432X.2013.766394>
- Olson, J. M., Roese, N. J., & Zanna, M. P. (1996). Expectancies. In E. T. Higgins, & A. W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 211–238). The Guilford Press.
- Orpen, C. (1994). The effect of time-management training on employee attitudes and behavior: A field experiment. *The Journal of Psychology: Interdisciplinary and Applied*, 128(4), 393–396. <https://doi.org/10.1080/00223980.1994.9712743>
- Perugini, M., Gallucci, M., Presaghi, F., & Ercolani, A. P. (2003). The personal norm of reciprocity. *European Journal of Personality*, 17(4), 251–283. <https://doi.org/10.1002/per.474>
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63, 539–569. <https://doi.org/10.1146/annurev-psych-120710-100452>
- Reczek, R. W., Haws, K. L., & Summers, C. A. (2014). Lucky loyalty: The effect of consumer effort on predictions of randomly determined marketing outcomes. *Journal of Consumer Research*, 41(4), 1065–1078. <https://doi.org/10.1086/678052>
- Restubog, S. L. D., Bordia, P., & Tang, R. L. (2007). Behavioural outcomes of psychological contract breach in a non-western culture: The moderating role of equity sensitivity. *British Journal of Management*, 18(4), 376–386. <https://doi.org/10.1111/j.1467-8551.2007.00531.x>
- Restubog, S. L. D., Zagenczyk, T. J., Bordia, P., Bordia, S., & Chapman, G. J. (2015). If you wrong us, shall we not revenge? Moderating roles of self-control and perceived aggressive work culture in predicting responses to psychological contract breach. *Journal of Management*, 41(4), 1132–1154. <https://doi.org/10.1177/0149206312443557>
- Richins, M. L. (1983). An analysis of consumer interaction styles in the marketplace. *Journal of Consumer Research*, 10(1), 73–82. <https://doi.org/10.1086/208946>
- Robinson, S. L., & Greenberg, J. (1998). Employees behaving badly: Dimensions, determinants and dilemmas in the study of workplace deviance. In C. L. Cooper, & D. M. Rousseau (Eds.), *Trends in organizational behavior* (Vol. 5, pp. 1–30). New York, NY: John Wiley & Sons Ltd.
- Robinson, S. L., & Morrison, E. W. (2000). The development of psychological contract breach and violation: A longitudinal study. *Journal of Organizational Behavior*, 21(5), 525–547. [https://doi.org/10.1002/1099-1379\(200008\)21:5<525::AID-JOB40>3.0.CO;2-T](https://doi.org/10.1002/1099-1379(200008)21:5<525::AID-JOB40>3.0.CO;2-T)
- Rousseau, D. M. (1989). Psychological and implied contracts in organizations. *Employee Responsibilities and Rights Journal*, 2, 121–139. <https://doi.org/10.1007/BF01384942>
- Rousseau, D. M. (1995). *Psychological contracts in organizations*. Thousand Oaks, CA: Sage Publications Inc.
- Rousseau, D. M. (2000). *The psychological contract inventory*. Technical report, CCEER, Heinz School of Public Policy. Pittsburgh, PA: Carnegie Mellon University.
- Rousseau, D. M. (2001). Schema, promise and mutuality: The building blocks of the psychological contract. *Journal of Occupational and Organizational Psychology*, 74(4), 511–542. <https://doi.org/10.1348/096317901167505>
- Rousseau, D. M., Hansen, S. D., & Tomprou, M. (2018). A dynamic phase model of psychological contract processes. *Journal of Organizational Behavior*, 39(9), 1081–1098. <https://doi.org/10.1002/job.2284>
- Rudolph, U., Roesch, S. C., Greitemeyer, T., & Weiner, B. (2004). A meta-analytic review of help giving and aggression from an attributional perspective: Contributions to a general theory of motivation. *Cognition and Emotion*, 18(6), 815–848. <https://doi.org/10.1080/02699930341000248>
- Settoon, R. P., Bennett, N., & Liden, R. C. (1996). Social exchange in organizations: Perceived organizational support, leader-member exchange, and employee reciprocity. *Journal of Applied Psychology*, 81(3), 219–227. <https://doi.org/10.1037/0021-9010.81.3.219>
- Shanock, L., Baran, B., Gentry, W., Pattison, S., & Heggstad, E. (2010). Polynomial regression with response surface analysis: A powerful approach for examining moderation and overcoming limitations of difference scores. *Journal of Business and Psychology*, 25, 543–554. <https://doi.org/10.1007/s10869-010-9183-4>
- Shao, R., Aquino, K., & Freeman, D. (2008). Beyond moral reasoning: A review of moral identity research and its implications for business ethics. *Business Ethics Quarterly*, 18(4), 513–540. <https://doi.org/10.5840/beq200818436>
- Shore, L. M., & Barksdale, K. (1998). Examining degree of balance and level of obligation in the employment relationship: A social exchange approach. *Journal of Organizational Behavior*, 19(S1), 731–744. [https://doi.org/10.1002/\(SICI\)1099-1379\(1998\)19:1+<731::AID-JOB969>3.0.CO;2-P](https://doi.org/10.1002/(SICI)1099-1379(1998)19:1+<731::AID-JOB969>3.0.CO;2-P)
- Snow, J. N., Kern, R. M., & Curlette, W. L. (2001). Identifying personality traits associated with attrition in systematic training for effective parenting groups. *The Family Journal*, 9(2), 102–108. <https://doi.org/10.1177/1066480701092003>
- Taylor, P. J., Russ-Eft, D. F., & Taylor, H. (2009). Gilding the outcome by tarnishing the past: Inflationary biases in retrospective pretests. *American Journal of Evaluation*, 30(1), 31–43. <https://doi.org/10.1177/1098214008328517>
- Turnley, W. H., Bolino, M. C., Lester, S. W., & Bloodgood, J. M. (2003). The impact of psychological contract fulfillment on the performance of in-role and OCBs. *Journal of Management*, 29(2), 187–206. <https://doi.org/10.1177/014920630302900204>
- Twenge, J. M. (2006). *Generation Me-Revised and Updated: Why today's young Americans are more confident, assertive, entitled and more miserable than ever before*. New York, NY: Free Press.
- Twenge, J. M., & Campbell, W. K. (2003). “Isn't it fun to get the respect that we're going to deserve?”: Narcissism, social rejection, and aggression. *Personality and Social Psychology Bulletin*, 29(2), 261–272. <https://doi.org/10.1177/0146167202239051>
- Umphress, E. E., & Bingham, J. B. (2011). When employees do bad things for good reasons: Examining UPBs. *Organization Science*, 22(3), 621–640. <https://doi.org/10.1287/orsc.1100.0559>

- Umphress, E. E., Bingham, J. B., & Mitchell, M. S. (2010). Unethical behavior in the name of the company: The moderating effect of organizational identification and positive reciprocity beliefs on UPB. *Journal of Applied Psychology, 95*(4), 769–780. <https://doi.org/10.1037/a0019214>
- Umphress, E. E., Gardner, R. G., Stoverink, A. C., & Leavitt, K. (2020). Feeling activated and acting unethically: The influence of activated mood on unethical behavior to benefit a teammate. *Personnel Psychology, 73*(1), 95–123. <https://doi.org/10.1111/peps.12371>
- Vardi, Y., & Weitz, E. (2004). *Misbehavior in organizations: Theory, research, and management*. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Wang, X., Zheng, X. J., & Zhao, S. (2021). Repaying the debt: An examination of the relationship between perceived organizational support and unethical pro-organizational behavior by low performers. *Journal of Business Ethics, online first*. <https://doi.org/10.1007/s10551-021-04809-0>
- Warren, D. E. (2003). Constructive and destructive deviance in organizations. *Academy of Management Review, 28*(4), 622–632. <https://doi.org/10.2307/30040751>
- Watkins, P. C., Scheer, J., Ovnicek, M., & Kolts, R. (2006). The debt of gratitude: Dissociating gratitude and indebtedness. *Cognition and Emotion, 20*(2), 217–241. <https://doi.org/10.1080/02699930500172291>
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*(6), 1063–1070. <https://doi.org/10.1037/0022-3514.54.6.1063>
- Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal, 40*(1), 82–111. <https://doi.org/10.2307/257021>
- Xia, L., & Kukar-Kinney, M. (2013). Examining the penalty resolution process: Building loyalty through gratitude and fairness. *Journal of Service Research, 16*(4), 518–532. <https://doi.org/10.1177/1094670513481109>
- Zagenczyk, T. J., Cruz, K. S., Cheung, J. H., Scott, K. L., Kiewitz, C., & Galloway, B. (2015). The moderating effect of power distance on employee responses to psychological contract breach. *European Journal of Work and Organizational Psychology, 24*(6), 853–865. <https://doi.org/10.1080/1359432X.2014.961432>
- Zhang, Z., Wang, M. O., & Shi, J. (2012). Leader-follower congruence in proactive personality and work outcomes: The mediating role of leader-member exchange. *Academy of Management Journal, 55*(1), 111–130. <https://doi.org/10.5465/amj.2009.0865>
- Zhao, H., Wayne, S. J., Glibkowski, B. C., & Bravo, J. (2007). The impact of psychological contract breach on work-related outcomes: A meta-analysis. *Personnel Psychology, 60* (3), 647–680. <https://doi.org/10.1111/j.1744-6570.2007.00087.x>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. <https://doi.org/10.1191/1478088706qp0630a>
- Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. J. (2014). The use of triangulation in qualitative research. *Oncology Nursing Forum, 41*(5), 545–547.
- Hennink, M. M., Kaiser, B. N., & Marconi, V. C. (2017). Code saturation versus meaning saturation: How many interviews are enough? *Qualitative Health Research, 27*(4), 591–608. <https://doi.org/10.1177/1049732316665344>
- Pratt, M. G. (2009). From the editors: For the lack of a boilerplate: Tips on writing up (and reviewing) qualitative research. *Academy of Management Journal, 52*(5), 856–862. <https://doi.org/10.5465/amj.2009.44632557>
- Robinson, S. L., & Rousseau, D. M. (1994). Violating the psychological contract: Not the exception but the norm. *Journal of Organizational Behavior, 15*(3), 245–259. <https://doi.org/10.1002/job.4030150306>

Yannick Griep is an Associate Professor at the Behavioural Science Institute at Radboud University, the Netherlands and an affiliated faculty member at the Stress Research Institute at Stockholm University, Sweden. In his spare time, Yannick enjoys organize the piles of new articles that are living in his office in the following order: (1) those that I have never read, (2) those that I will never read, and (3) those that I never will have read. Seriously, why does he keep printing these articles? I am afraid this tactic may contribute not so much towards his, and by extension the field's, advancement as much as toward its eventual demise.

Johannes M. Kraak is an Associate Professor in Human Resource Management and Organizational Behavior and the director of the Center of Excellence for Sustainability at Kedge Business School. His primary research area focuses on the exchanges between employers and employees in the employment relationship. His previous projects have included expatriates, military personnel, older workers and service employees.

Jesse Fenneman is a post-doc at the Behavioural Science Institute at Radboud University, the Netherlands. When he is not busy unsuccessfully dodging questions about power analyses, he studies impulsive behaviour in harsh and unpredictable environments. Because his mother always told him that it is good to make friends, he uses formal modelling to simulate agents living in harsh and unpredictable environments. Using these simulations, he asks whether impulsive behaviours can have an adaptive response to living in such environments – spoilers, the answer is that it depends; impulsive behaviours can be adaptive or maladaptive, depending on specific environments.

Alfredo Jiménez is a Professor at Kedge Business School. His research areas revolve around the process and success factors in the strategy of internationalization of companies. Alfredo also works on the management of virtual and multicultural teams.

Xander D. Lub is a Professor of Organizations in Digital Transition at the Research Centre Digital Business & Media at Utrecht University of Applied Sciences, a Visiting Fellow at Center for Strategy, Organization and Leadership at Nyenrode Business University, and a Visiting Fellow at the School of Business and Economics at the VU University Amsterdam, The Netherlands. His research areas revolve around psychological contracts, employee-employer relationships, organizational change and digital transformation.