Short research note

Let’s get cynical about this! Recursive relationships between psychological contract breach and counterproductive work behaviour

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Although counterproductive work behaviour towards the organization (CWB-O) or supervisors (CWB-S) is commonly treated as a reaction to psychological contract breach (PCB), we propose that the PCB-CWB relationship is recursive and that CWB may increase the likelihood to perceive PCB through its effects on self-esteem and subsequently on organizational cynicism. By estimating a two-level time-lagged mediation model on daily data from 103 US employees (904 observations), we found evidence for this hypothesized chain of events. These findings demonstrate that PCB and CWB happen with reference to past perceptions of PCB and/or CWB and future anticipations of PCB and/or CWB. We discuss suggestions for future research and novel practical implications in preventing further escalation.

Practitioner points

- When employees perceive that their organization has breached its obligations, employees are likely to retaliate by engaging in acts of CWB-O and CWB-S.
- Employees are likely to suffer from reduced self-esteem and increased cynicism when they have engaged in CWB-S following a PC breach.
- When employees become more cynical, they are more likely to perceive future PC breaches.
- Based on the reciprocal nature of our findings, this study highlights the need to update existing theories, as well as indicates the need for swift interventions in the aftermath of PC breach and enactment of CWB.

The psychological contract (PC) is defined as a continuous employee–employer exchange of reciprocal obligations (Rousseau, 2001). Employees who perceive that their employer does not meet its obligations – termed PC breach (PCB) – may develop a strong emotional reaction – termed violation feelings (Morrison & Robinson, 1997), which in turn triggers negative attitudinal/behavioural reactions (for a meta-analysis, see Zhao, Wayne, Glibkowski, & Bravo, 2007). One such detrimental behavioural outcome is counterproductive work behaviour, defined as behaviour that intentionally violates organizational norms, is contrary to the legitimate interests, and threatens the well-being of the
organization (CWB-O), its members (CWB-I), or supervisors (CWB-S) (Fox & Spector, 1999).  

Although substantial empirical progress was made in understanding the PCB-CWB relationship, most empirical work overlooked the dynamic nature of the theoretical tenets underlying PC Theory. In doing so, we (1) fail to account for how time can define the way employees perceive PCB and adjust their CWB accordingly (Kozlowski, 2009; Hansen & Griep, 2016) and (2) have generated the false, yet widely held, assumption that CWB holds the same relationship with PCB at any point in time (for an elaborate critique, see Hansen & Griep, 2016).

In this paper, we therefore extend the unilateral vision on the PCB-CWB relationship by integrating PC and Self-Consistency Theory (Korman, 1970) when arguing that reduced self-esteem and increased organizational cynicism are the key mechanisms that links current enactment of CWB to future perceptions of PCB.

Reciprocal relationship between PCB and CWB: the role of organizational cynicism

Drawing upon Social Exchange Theory (Blau, 1964) and the norm of reciprocity (Gouldner, 1960), empirical and meta-analytical evidence indicates that the positive PCB-CWB relationship is mediated by violation feelings (Griep et al., 2016; Zhao et al., 2007). We start by aiming to replicate this finding.

Hypothesis 1: Violation feelings mediate the positive relationship between PCB and (a) CWB-O and (b) CWB-S over time.

However, by only focusing on this unilateral vision on the PCB-CWB relationship, we are not doing justice to Social Exchange Theory (Blau, 1964) and the norm of reciprocity (Gouldner, 1960) because these frameworks include retrospections of the past and anticipations of the future to determine the nature of the mutual exchange relationship (Hansen & Griep, 2016). We propose that engaging in CWB may increase the likelihood of perceiving future PCBs through a decrease in self-esteem and an increase in organizational cynicism. Specifically, we propose that employees who have engaged in CWB may experience a drop in self-esteem, in line with Spector and Fox’s (2002) proposition that enactment of CWB may elicit guilt and negatively impact one’s self-view. However, because Self-Consistency Theory (Korman, 1970) proposes that employees have a strong desire to maintain a positive self-view, we argue that this reduction in self-esteem may lead them to develop a cynical attitude towards their organization. By becoming more cynical towards their organization, employees are able to strengthen their belief that their acts of CWB were justified as a reaction to PCBs, and thus maintain a positive self-view (Olson & Zanna, 1993). In turn, cynicism may increase the likelihood of perceiving new PCBs because cynical employees believe that their organization lacks integrity and feel negative affect towards their organization (Dean, Brandes, & Dharwadkar, 1998). This lack of integrity means that the organization is viewed as less trustworthy when it comes to the fulfillment of its obligations and may result in vigilant monitoring for new PCBs (Morrison & Robinson, 1997), while the negative affect associated with cynicism may be used as a heuristic to evaluate new information (see Forgas, 1995), thus increasing the likelihood of

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1 Because one’s colleagues cannot be held responsible for upholding the PC between an employee and his or her employer, CWB-I is an unlikely outcome in the aftermath of PCB (Griep, Vantilborgh, Baillien, & Pepermans, 2016). Hence, I only focused on CWB-O and CWB-S throughout the remainder of this paper.
interpreting unmet obligations as PCBs (Vantilborgh, Bidee, Pepermans, Griep, & Hofmans, 2016).

Hypothesis 2: Self-esteem and organizational cynicism mediate the positive relationship between (a) CWB-O and (b) CWB-S and PCB over time.

Method

Procedure
We conducted this study among US employees, working in the (1) finance, (2) retail, and (3) service department of a manufacturing company. We contacted respondents via email and asked them to complete a general demographic survey prior to completing ten short daily surveys. We chose this design because (1) several scholars have demonstrated the short-term volatile nature of our concepts under study (e.g., Dalal, Lam, Weiss, Welch, & Hulin, 2009; Griep et al., 2016; Johnson & O’Leary-Kelly, 2003), (2) recall errors are far less likely to occur with shorter time intervals (e.g., Mitchell & James, 2001), and (3) a 2-week record-keeping period represents a stable and generalizable estimate of life (Wheeler & Reis, 1991). We sent daily surveys at 4 PM and gave respondents until midnight to complete the survey. We coded responses as missing data when respondents failed to complete the survey. We rewarded respondents with a $1 Amazon gift certificate for each completed survey.

Participants
We contacted 176 respondents, of whom 135 completed the general survey (response rate = 76.70%) and 103 completed daily surveys (response rate = 58.52%). The unit of analysis is ‘daily surveys’ rather than ‘respondents’, resulting in an effective sample size of 904 observations. Respondents were, on average, 48.63 years old (SD = 11.25), 40.80% were female, 72.20% obtained a higher educational degree, 25.80% had managerial responsibilities, and the average tenure was 11.46 years (SD = 8.65). None of the demographics or the variables under study explained dropout between the general survey and the daily surveys, or during the daily surveys.

Measures
Consistent with similar PC diary studies (e.g., Griep et al., 2016), we used short scales to ensure a reasonable length. We counterbalanced scales to rule out potential order effects and we reworded all items to include ‘during the past day’.

PCB was measured using five items by Robinson and Morrison (2000). An example item is as follows: ‘I did not receive everything promised to me in return for my contributions’. Respondents rated these items on a 5-point Likert scale ranging from (1) ‘totally disagree’ to (5) ‘totally agree’. The level-specific within-person omega reliability was satisfactory (ω = .91).

Violation feelings were measured using four items by Robinson and Morrison (2000). An example item is as follows: ‘I felt betrayed by my organization’. Respondents rated these items on a 7-point Likert scale ranging from (1) ‘totally disagree’ to (7) ‘totally agree’ (ω = .82).

CWB-O and CWB-S were measured with six items each (Dalal et al., 2009). An example item of CWB-O and CWB-S is as follows: ‘I purposefully spent time on tasks unrelated to work’ and ‘I purposefully tried to harm my superior(s)’. Respondents rated
these items on a 7-point Likert scale ranging from (1) ‘minimally or not at all’ to (7) ‘to a very great extent’ (ω = .86 and ω = .88, respectively).

Self-esteem was measured with 10 items (Rosenberg, 1965). An example item is as follows: ‘I am satisfied with myself’. Respondents rated these items on a 7-point Likert scale ranging from (1) ‘totally disagree’ to (7) ‘totally agree’ (ω = .74).

Organizational cynicism was measured with 13 items (Dean et al., 1998). An example item is as follows: ‘When my organization said it was going to do something, I wondered if it would really happen’. Respondents rated these items on a 7-point Likert scale ranging from (1) ‘strongly disagree’ to (7) ‘strongly agree’ (ω = .91).

A time-lagged variable was created to control for the cross-correlation of a variable with itself between two subsequent measurement moments, to control for stability within a concept, and to test our temporal hypotheses.

Analysis
Because our data had a nested structure, we estimated ICC values for PCB, violation feelings, CWB-O, CWB-S, self-esteem, and cynicism. ICC values (.18, .21, .34, .35, .38, and .26, respectively) indicated that the largest proportion of variance could be attributed to within-person differences. Hence, we estimated a two-level time-lagged mediation model (i.e., mediation model in which independent, mediator, and dependent variables are all separate by a time lag of 1 day) that partitions within- and between-subject variance in Mplus version 7.1 (Muthén & Muthén, 2013). It is important to note that by controlling for the cross-correlations, our results indicate change in each variable. The hypothesized mediation was tested via product-of-coefficients and its significance was scrutinized via 95% Monte Carlo confidence intervals (95%CI).

Results
Multilevel confirmatory factor analysis
We assessed model fit and compared competing multilevel confirmatory factor analysis (MCFA) models using loglikelihood ratio tests (Table 1). Alternative model A, Δχ²(5) = 745.67, p < .001, B, Δχ²(5) = 61.10, p < .001, C, Δχ²(9) = 829.92, p < .001, D, Δχ²(9) = 2154.40, p < .001, E, Δχ²(11) = 4511.06, p < .001 and F, Δχ²(15) = 6056.72, p < .001, fit significantly worse to the data than the theoretical six-factor model (RMSEA = .07, CFI = .93, TLI = .91, SRMRwithin = .09).

Descriptive results
Table 2 provides an overview of the means, standard deviations, between- and within-person correlations.

Alternative models
A two-level time-lagged partial mediation model, which also included a time-lagged direct effect of PCB to CWB-O/CWB-S and a time-lagged direct effect of violation feelings to self-esteem, fits the data best (BIC = 9547.30; RMSEA = .07, CFI = .96, TLI = .90, SRMRwithin = .04; Figure 1) compared to four different two-level time-lagged partial and
Before presenting our results, we would like test three alternative models to account for the possibility that (1) organizational cynicism precedes CWB (see Johnson & O’Leary-Kelly, 2003 for how cynicism is an antecedent of CWB) instead of follows CWB, (2) the long average organizational tenure of our sample ($M = 11.46$ years) exerted an influence on the proposed model, and (3) self-esteem operates as a moderator of the CWB-cynicism relationship rather than as a mediator of that relationship (see Wiesenfeld, Swann Jr., Brockner, & Bartel, 2007 for how high versus low self-esteem may differently impact employee attitudes and behaviours).

Alternative model 1 (RMSEA = .16, CFI = .93, TLI = .91, SRMR$_{within}$ = .09), alternative model 2 (RMSEA = .42, CFI = .79, TLI = .77, SRMR$_{within}$ = .11), and alternative model 3 (RMSEA = .10, CFI = .82, TLI = .81, SRMR$_{within}$ = .09) fit the data worse and fit statistics did not reach their cut-offs, implying that these models do not fit the data.

### Table 1. Results from multilevel confirmatory factor analyses

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$ (df)</th>
<th>RMSEA</th>
<th>CFI</th>
<th>TLI</th>
<th>SRMR$_{within}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical model</td>
<td>4238.37 (845)</td>
<td>0.07</td>
<td>0.93</td>
<td>0.91</td>
<td>0.09</td>
</tr>
<tr>
<td>Alternative model A</td>
<td>4984.04 (850)</td>
<td>0.07</td>
<td>0.79</td>
<td>0.77</td>
<td>0.11</td>
</tr>
<tr>
<td>Alternative model B</td>
<td>4299.47 (850)</td>
<td>0.07</td>
<td>0.82</td>
<td>0.81</td>
<td>0.09</td>
</tr>
<tr>
<td>Alternative model C</td>
<td>5068.29 (854)</td>
<td>0.07</td>
<td>0.78</td>
<td>0.77</td>
<td>0.11</td>
</tr>
<tr>
<td>Alternative model D</td>
<td>6392.77 (854)</td>
<td>0.08</td>
<td>0.72</td>
<td>0.70</td>
<td>0.11</td>
</tr>
<tr>
<td>Alternative model E</td>
<td>8749.43 (857)</td>
<td>0.10</td>
<td>0.59</td>
<td>0.57</td>
<td>0.13</td>
</tr>
<tr>
<td>Alternative model F</td>
<td>10295.09 (860)</td>
<td>0.11</td>
<td>0.52</td>
<td>0.49</td>
<td>0.13</td>
</tr>
</tbody>
</table>

Notes. $N_{within} = 904$. *Multilevel CFA theoretical model*: PCB, violation feelings, CWB-O, CWB-S, self-esteem, and organizational cynicism each load onto a separate latent factor; *Alternative model A*: PCB and violation feelings load onto one latent factor; CWB-O, CWB-S, self-esteem, and organizational cynicism each load onto a separate latent factor; *Alternative model B*: CWB-O and CWB-S load onto one latent factor; PCB, violation feelings, self-esteem, and organizational cynicism each load onto a separate latent factor; *Alternative model C*: PCB and violation feelings load onto one latent factor, CWB-O and CWB-S load onto one latent factor, self-esteem, and organizational cynicism loads onto a latent factor; *Alternative model D*: PCB, violation feelings, and organizational cynicism load onto one latent factor; CWB-O, CWB-S, and self-esteem each load onto a separate latent factor; *Alternative model E*: CWB-O, CWB-S, self-esteem, and organizational cynicism load onto one latent factor; PCB and violation feelings each load onto a separate latent factor; *Alternative model F*: PCB, violation feelings, CWB-O, CWB-S, self-esteem, and organizational cynicism load onto a single latent factor.

Our results indicated a positive time-lagged relationship between PCB and violation feelings, and CWB-O/CWB-S, as well as a time-lagged indirect effect of PCB on CWB-O (95%CI = 0.01; 0.08) and CWB-S (95%CI = 0.01; 0.06) via violation feelings, supporting H1a and 1b. Moreover, our results indicated a negative time-lagged relationship between violation feelings and self-esteem, a negative time-lagged relationship between CWB-S and self-esteem, a negative time-lagged relationship between self-esteem and cynicism, a positive time-lagged relationship between cynicism and PCB, as well as a time-lagged indirect effect (95%CI = 0.01; 0.03) of CWB-S on PCB via self-esteem and cynicism; supporting H2b, while not supporting H2a.
Discussion

The current study builds on, and extends, the research on harmful consequences of PCB in two important ways. First, although one could argue that cynical employees have a lower likelihood of perceiving new PCBs due to the fact that cynicism is associated with apathy, resignation, and sometimes withdrawal from a situation or relationship (Naus, Van Iterson, & Roe, 2007), our findings provide empirical support for the notion that reduced self-esteem and increased cynicism increase the likelihood to perceive future PCBs. It thus seems that cynical employees do not become disinvested in their exchange relationship, but in contrast they seem to use the felt cynicism towards their organization as a heuristic to evaluate new information (see Forgas, 1995), thus increasing the likelihood that they will engage in vigilant monitoring and interpret unmet obligations as PCBs (Vantilborgh et al., 2016). These findings underline the need to update traditional PC Theory (i.e., behavioural reactions to PCB) to recognize the mutually intensifying exchange of antisocial behaviours (CWB-O/CWB-S) and counteracts (future PCBs) as outcomes and antecedents (i.e., feedback loops). We would like to note that PCBs following CWB could

Table 2. Means, standard deviations, and zero-order and person-centred correlations

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Psychological contract breach</td>
<td>2.24/2.21</td>
<td>1.54/1.67</td>
<td>–</td>
<td>.78****</td>
<td>.61****</td>
<td>.61****</td>
<td>–.34****</td>
<td>.88****</td>
</tr>
<tr>
<td>2. Violation feelings</td>
<td>1.78/1.75</td>
<td>1.06/1.16</td>
<td>.67****</td>
<td>–</td>
<td>.70****</td>
<td>.72****</td>
<td>–.38****</td>
<td>.76****</td>
</tr>
<tr>
<td>3. Frequency of CWB-O</td>
<td>1.75/1.75</td>
<td>1.03/1.23</td>
<td>.48****</td>
<td>.53****</td>
<td>–</td>
<td>.89****</td>
<td>–.43****</td>
<td>.65****</td>
</tr>
<tr>
<td>4. Frequency of CWB-S</td>
<td>1.52/1.51</td>
<td>0.94/1.10</td>
<td>.47****</td>
<td>.52****</td>
<td>.87****</td>
<td>–</td>
<td>–.40****</td>
<td>.64****</td>
</tr>
<tr>
<td>5. Self-esteem</td>
<td>3.86/3.85</td>
<td>0.43/0.72</td>
<td>–.20****</td>
<td>–.22****</td>
<td>–.22****</td>
<td>–.20****</td>
<td>–</td>
<td>–.39****</td>
</tr>
<tr>
<td>6. Organizational cynicism</td>
<td>2.68/2.67</td>
<td>1.37/1.57</td>
<td>.76****</td>
<td>.63****</td>
<td>.48****</td>
<td>.46****</td>
<td>–.21****</td>
<td>–</td>
</tr>
</tbody>
</table>

Notes. The first presented means and standard deviations are at the between-person level, while the latter are at the within-person level. Zero-order (between-person; N = 103) correlations are presented above the diagonal, whereas person-centred (within-person; N = 904) correlations are presented below the diagonal. Although some of these correlations, especially at the between-person level, may appear high, controlling for unreliability did not substantially affect the correlations. Furthermore, MCFA analyses revealed that even the highly correlated scales measured distinct constructs.

*** p < .001.

Figure 1. Standardized estimated paths in the two-level time-lagged partial mediation model. Notes. * p < .05. ** p < .01. *** p < .001. Dotted lines indicate non-significant relationships. Double arrowed lines indicate correlations.
either be the results of (1) an accumulation of PCBs over time (i.e., a snowball mechanism in which one PCB triggers more and new PCBs; Griep & Vantilborgh, 2018; Vantilborgh et al., 2016) or (2) rumination over initial PCB events, without necessarily experiencing new PCBs (i.e., the same PCB may adversely impact employees for 2.13 weeks; Solinger, Hofmans, Bal, & Jansen, 2016).

Second, although CWB pioneers (Fox & Spector, 1999) hinted towards the option that CWB does not happen in isolation but in contrast influences other attitudes/behaviours, empirical scrutiny of CWB as a precursor of attitudes/behaviours remains scant in the CWB literature. Based on this study, scholars should recognize that CWB is both a behavioural reaction and antecedent, depending on how employees contextualize (i.e., increased cynicism) their acts of CWB.

Limitations
As a first limitation, there might be concerns with common method variance (Podsakoff, MacKenzie, & Podsakoff, 2012). However, in line with procedural/statistical recommendations by Podsakoff et al. (2012), we counterbalanced the order of all items and scales, ensured anonymity, and temporally separated the concepts under study. Second, there might be concerns with the use of self-reports. However, self-reports are the conventional method for collecting data on PCB, cynicism, and CWBs due to their highly subjective nature. Nonetheless, CWB-O/CWB-S might be particularly susceptible to social desirability. However, meta-analytical research (Berry, Carpenter, & Barratt, 2012) indicates that self-reports of CWB are more reliable and valid compared to observer-reports.

Future research suggestions
Future research could try to increase our knowledge about employees’ willingness to exchange specific contributions for organizational obligations or delivered inducements. By doing so, we would be able to make more accurate predictions about the influence of PCB of a specific organizational obligation on employee attitudes/behaviours. Therefore, we suggest that future research could (1) model PCs as a dynamic network in which different nodes (central or peripheral to the PC) represent mutual obligations, and the links between these nodes capture reciprocity (strong or weak) and (2) investigate whether breaching central or highly linked nodes has a more profound impact on employee reactions than breaching peripheral or weakly linked nodes.

Practical implications
The reciprocal nature of our results suggests the importance of intervening as soon as organizations notice that employees have perceived a PCB. Doing so will likely faster restore the exchange relationship. Moreover, although managers traditionally believe that cynical employees form a ‘bunch of rotten apples’, the true problem is that management ‘spoiled the fruit’ by breaching the PC. A heavy responsibility thus rests with managers to prevent cynicism from translating into PCB. In this respect, Hodson and Roscigno (2004) suggested that managers need to adhere to principles of truth and fair dealing in interaction with their employees, as well as recognizing and justifying PCBs. By doing so, they create an atmosphere in which cynicism is unlikely to prosper and trigger future perceptions of PCB.
References


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