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Does Leader–Member Exchange Buffer or Intensify Detrimental Reactions to Psychological  
Contract Breach? The Role of Employees' Career Orientation

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## Abstract

There is an ongoing debate about two contradictory moderating effects of leader–member exchange (LMX) on the relationship between psychological contract breach (PCB) and work outcomes. Whereas some studies demonstrated LMX to be a social support resource capable of buffering the negative effects of PCB, findings from other research suggest that employees show stronger negative reactions to PCB when the quality of relationships with leaders is high. The present study addresses how these contradictory results can be explained by individuals' career orientations. We surveyed a representative random sample of 954 employees from various organizations and occupations to test whether employees with organization-centred versus self-centred career orientations show different interaction effects of PCB and LMX on (a) career satisfaction and (b) counterproductive work behaviour. The results confirmed our hypotheses, demonstrating that for employees with organization-centred career orientations ( $n = 596$ ) high LMX fosters detrimental reactions to PCB, whereas for employees with self-centred career orientations ( $n = 358$ ), high LMX functions as a buffer against negative reactions to PCB. Implications of a more nuanced understanding of how PCB and LMX interact are valuable for research and practice alike.

*Keywords:* Psychological contract breach; leader–member exchange; career orientation; counterproductive work behaviour; career satisfaction

Does Leader–Member Exchange Buffer or Intensify Detrimental Reactions to Psychological Contract Breach? The Role of Employees' Career Orientation

Psychological contracts can be described as mental models that represent an exchange agreement between an employee and his/her employer (Rousseau, 1995). They are comprised of reciprocal obligations on a range of employment terms (e.g., career development, job security) that result from individuals' subjective interpretations of observations and conversations, and therefore, usually do not exist in writing (Rousseau, 1995). A psychological contract is breached (psychological contract breach; PCB) when one party has not fulfilled its obligations (Morrison & Robinson, 1997).

As restructuring and downsizing are daily business practices that most companies engage in to constantly adapt to the global business environment, scholars argue that preventing PCB from occurring within organizations has become extremely difficult (Robinson & Rousseau, 1994). This poses a problem to organizations as negative consequences of PCB on employees' attitudes and behaviours are continuously documented (Coyle-Shapiro & Kessler, 2000; Rigotti, 2009; Robinson & Rousseau, 1994; Zhao, Wayne, Glibkowski, & Bravo, 2007). However, varying effect sizes in the breach–outcome relationship across studies suggest the presence of mitigating or exacerbating factors. Many studies have found leader–member exchange (LMX) to be a potent moderator in the breach–outcome link (e.g., Dulac, Coyle-Shapiro, Henderson, & Wayne, 2008; Griep, Vantilborgh, Baillien, & Pepermans, 2016; Ng, Feldman, & Butts, 2014; Restubog, Zagenczyk, Bordia, Tang, & Krebs, 2010; Suazo, 2011). LMX defines the exchange quality between the employee and his or her supervisor, describing the extent to which leaders develop close and supportive relationships with their subordinates (Graen & Uhl-Bien, 1995).

In recent years, there has been an ongoing debate in the literature about two contradictory

perspectives on the moderating effects of LMX in the breach–outcome link. On the one hand, findings indicate that employees react *more* negatively to PCB (e.g., less work performance, more psychological contract violation) when the quality of the supervisor relationship is high (e.g., Bal, Chiaburu, & Jansen, 2010; Restubog et al., 2010; Suazo, 2011). It is argued that high LMX employees feel betrayed by instances of PCB and therefore react more defiantly. On the other hand, some studies have found that employees with high LMX react *less* negatively to PCB (Dulac et al., 2008; Griep et al., 2016; Zagenczyk, Gibney, Kiewitz, & Restubog, 2009). From the second perspective, a high-quality relationship with supervisors provides employees with support and resources that can help them to better deal with PCB (e.g., Dulac et al., 2008; Griep et al., 2016).

The question arises as to why some employees with high LMX feel supported when facing a PCB while others feel betrayed. Both the social support and betrayal perspective, have been theorized and empirically tested in previous research (Bal et al., 2010; Restubog et al., 2010), however, neither study explained why both frameworks legitimately coexist in the literature. Therefore, the aim of the present study is to address this lack of consensus by providing and testing a possible explanation.

We propose that employees' career orientation might account for this inconsistency. Career orientations are a stable preference regarding career-related opportunities and circumstances and can be described in terms of a traditional, organization-centred career orientation versus a new, self-centred career orientation (Gerber, Wittekind, Grote, & Staffelbach, 2009; Grote & Hall, 2013). Whereas organization-centred careers are thought to evolve within the context of a single organization with linear career stages, self-centred careers are more independent of a specific organization and instead are characterized by frequent job

changes and career self-management (e.g., Arthur & Rousseau, 1996). Based on the literature on betrayal (e.g., Elangovan & Shapiro, 1998), we argue that social exchange relationships have a different meaning to employees depending on how central the organization is to their career. When employees seek longevity of a relationship with an organization, such as employees with an organization-centred career orientation, the employer will continue to play a significant role in the work life of an employee (Elangovan & Shapiro, 1998). Thus, a PCB is assumed to be experienced as a major threat to that relationship creating strong feelings of betrayal. In contrast, if employees view their current employer as a stepping stone to other organizations, as implied by self-centred careers, feelings of betrayal are presumably less likely. Differences in the relationship-oriented benefits of maintaining or breaking trust are marginal and employees may instead seek support and resources to move their career forward despite the PCB.

Our study builds on and extends prior literature in several respects. First and most importantly, the present study provides both theoretical reasoning and empirical evidence that integrate the divergent views on the role of LMX in the PCB–outcome relationship. Taking employees’ career orientations into account we show why the buffer and betrayal framework coexist in the literature, or in other words, why LMX can be both a buffer *and* an intensifier in the breach–outcome relationship. Second, we contribute to LMX theory. An understanding of when high-quality employee–supervisor relationships can buffer or even exacerbate the negative effects of PCB is valuable for HR-management research and practice alike (Dulac et al., 2008). Finally, the present study contributes to a more sophisticated understanding of how social exchange relationships interact with each other in influencing employees’ attitudes and behaviours. Individual differences in career orientations may influence the relationship employees have with their organization and their supervisor in different ways. Whereas an

organization-centred orientation fosters an alignment of how the two relationships are perceived, a self-centred orientation fosters a more differentiated perception and management of these relationships instead.

### **Psychological Contract Breach and Its Impact on Individual-Related and Organization-Related Attitudes and Behaviours**

Within employment relationships, psychological contracts account for implicit exchange agreements on obligations between the employee and his or her organization (Rousseau, 1995). The psychological contract covers a range of employment terms (e.g., training, promotion, and job security) and is considered a subjective rather than formal contract. It may arise from various interactions with organizational agents, for instance, during recruitment interviews or performance appraisals (Rousseau, 1995). A breach of a psychological contract occurs when employees perceive a discrepancy between obligations expected to be delivered and what is actually delivered by their organization (Morrison & Robinson, 1997). Research has produced considerable evidence of negative consequences of PCBs on employees' attitudes and behaviours that affect both the individual and the organization (e.g., Rigotti, 2009; Zhao et al., 2007). In this study, we focus on career satisfaction and counterproductive work behaviour (CWB) as outcomes of a PCB in order to capture the immediate consequences directly linked to employees' careers and to the organization.

Individuals who experience a PCB primarily suffer from its direct effects. The discrepancy between promised and received inducements is likely to lead to feelings of violation (Conway & Briner, 2002a; Tekleab & Taylor, 2003) and, subsequently, to dissatisfaction (Lawler, 1973; Wanous, 1973). Since the discrepancies will also affect inducements related to the development of one's career, we argue that the negative reactions to a PCB may go beyond

the dissatisfaction associated with one's job and organization and also impact the satisfaction of one's entire career. Gattiker and Larwood (1988) defined career satisfaction as the overall affective orientation of the individual towards his or her career. As part of a psychological contract, organizations often promise employees support with their careers. On the one hand, they may offer structured career paths and job stability that are geared more towards employees with organization-centred career orientations. On the other hand, they support employees in developing their individualized careers via trainings, career advice, and professional networks, which might be especially beneficial for employees with self-centred careers. If employees are provided with fewer opportunities to achieve their career goals, then this not only threatens their objective career success (Erdogan, Kraimer, & Liden, 2004; Restubog, Bordia, & Bordia, 2011), but also negatively affect their career satisfaction. Consequently, the following hypothesis is proposed:

*Hypothesis 1:* PCB will be negatively related to career satisfaction.

Dissatisfaction and perceived unfairness as a consequence of a PCB may also lead to organization-related reactions. Employees may want to restore equity by hurting the organization in retaliation for having been hurt. Social exchange theory (Cropanzano & Mitchell, 2005; Gouldner, 1960) and previous research (e.g., Lee & Allen, 2002) suggest that employees engage in that form of reciprocity that targets the source of the violation. As a behavioural reaction, employees are likely to engage in negative behaviour, such as CWB, as a form of revenge (Fox, Spector, & Miles, 2001). CWB means voluntary and intentional action that is aimed at violating organizational norms and harming organizational functioning (Spector & Fox, 2002). In line with previous empirical evidence on the relationship between PCB and CWB (e.g., Chiu, & Peng, 2008; Griep et al., 2016; Jensen, Opland, & Ryan, 2010), we infer our second hypothesis.



*Hypothesis 2:* PCB will be positively related to CWB.

### **LMX as a Moderator: Do Employees Feel Supported or Betrayed following PCB?**

In recent years, the psychological contract literature has moved beyond focusing merely on negative reactions to instances of breach. Recent studies demonstrated that employees do not necessarily adopt a negative or “tit-for-tat” attitude, but can also manage a breach in a constructive manner (Kiazad, Seibert, & Kraimer, 2014; Tomprou, Rousseau, & Hansen, 2015). In fact, varying effect sizes of the breach–outcome relationship point to the presence of moderator variables (Zhao et al., 2007). One notable factor that has been investigated by several scholars is the quality of the relationship with the supervisor or, more precisely, LMX (e.g., Dulac et al., 2008; Griep et al., 2016; Ng et al., 2014).

LMX describes how leaders form qualitatively different dyadic relationships with their followers, which captures the quality of leader–subordinate social exchange relationships (Graen & Uhl-Bien, 1995). The greater the perceived value of support and information exchanged, the higher the perceived quality of the employee–supervisor relationship. LMX is considered an important moderator in the relationship between PCB and its outcomes. However, the literature has produced two divergent findings on the moderating effects of LMX that have been designated as the betrayal and buffer framework. Table 1 provides an overview of these studies.

==== Insert Table 1 about here =====

From the betrayal perspective, a strong leader–member relationship is argued to intensify the negative relationship between PCB and work-related outcomes (e.g., Bal et al., 2010; Restubog et al., 2010). Previous work has conceptualized betrayal as a serious violation of the norms and expectations governing a relationship, such as LMX (Elangovan & Shapiro, 1998; Reina & Reina, 1999). It is argued that employees who have high-quality LMX are inclined to be

more sensitive to contract breach. As high LMX is usually characterized by a series of social exchanges resulting in mutual respect, trust, and obligation (Graen & Uhl-Bien, 1995), a PCB that is not prevented by the supervisor is considered an act of betrayal. As a result, employees engaging in tit-for-tat revenge behaviour and may respond with reduced job performance or organizational deviance (e.g., Bordia, Restubog, & Tang, 2008). The literature argues that employees who are more committed to their organization (Masterson, Lewis, Goldman, & Taylor, 2000) and are less likely to leave the organization (Tekleab, Takeuchi, & Taylor, 2005) are more likely to be affected by PCB within a betrayal framework (e.g., Bal et al., 2010).

Another stream of research suggests LMX acts as a buffer mitigating the impact of a PCB on negative work behaviours (e.g., Restubog et al., 2010). According to the cross-domain stress-buffering hypothesis, support moderates the stress-strain relationship in a way that a weaker stressor-strain relationship is predicted when social support is high (Viswesvaran, Sanchez, & Fisher, 1999). Indeed, a basic premise of LMX theory implies that in high LMX relationships the supervisor provides psychological and career-related resources and support. This support has been found to be capable of diminishing the consequences of negative work experiences (Cohen & Wills, 1985; Kraimer & Liden, 2004). Consequently, employees who experience a PCB may not respond negatively if they feel supported by their supervisor (Griep et al., 2016; Zagenczyk et al., 2009). However, when subordinates experience low LMX, a PCB will have stronger negative effect on employees' attitudes and behaviours.

Both streams of research have theorized that the effect of LMX on the breach-outcome relationship depends on how the employee views or values their social exchange relationships at work. The literature on betrayal, for instance, suggests that particularly the continuity of the relationship between the employee and his or her organization might play a critical role in how

feelings of betrayal are created (Elangovan & Shapiro, 1998). If the employee views the relationship as coming to a natural end in the future, such as because of a job change, then the differences in the relationship-oriented benefits of keeping or breaking trust are much smaller. If, however, the relationship is expected to last longer, then the employer will continue to play a central role in the work life of the employee and feelings of betrayal are more likely to develop. We therefore argue that employees' career orientations, which are central to how employees relate to their organizations, play an important role in understanding the effects of LMX on the breach–outcome relationship.

### **Career Orientation as Explanatory Factor for the Different Effects of LMX in the Breach–Outcome Relationship**

Career orientations are defined as individuals' preferences for particular career-related opportunities, circumstances, and/or career paths (Gerpott, Domsch, & Keller, 1988). They are often seen as an essential driving force in navigating employees through the work landscape as they influence career-related decisions and provide a guide to action (Briscoe, Hall, & Frautschy DeMuth, 2006; Gerber et al., 2009a). One key distinction in the literature is made between traditional or organization-centred and new or self-centred forms of careers (Arnold & Cohen, 2008; Gerber et al., 2009a; Sullivan, 1999). Employees with an organization-centred career orientation focus on loyalty, commitment, and job security in employment relationships. The organization plays a central role in their work lives, takes over most of the responsibility for career management and provides the employee with job security (Gerber et al., 2009a; Millward & Brewerton, 2000). Organization-centred employees seek a long-term and stable relationship with an organization and are less likely to quit. In contrast, the newer types of careers or self-centred careers (e.g., boundaryless and protean careers) involve little loyalty towards the

employer, and are characterized instead by career self-management and transitions across organizational and/or occupational boundaries (Arthur & Rousseau, 1996; Hall, 1996). Self-centred employees have more loyalty to themselves rather than to the organization and prefer to have a career that is independent from the employing organization. Employees holding organization-centred versus self-centred career orientations also hold different perspectives on how they perceive and value social exchange relationships at work (cf. Gerber, Grote, Geiser, & Raeder, 2012; Ng & Feldman, 2015). They differ in how central the organization is to their work life and for how long they invest in a relationship with their organization. Consequently, we argue that employees with organization-centred and self-centred career orientations will be affected differently by social exchange relationships.

We argue that employees with an organization-centred career orientation behave more in line with the betrayal framework. Studies supporting the betrayal framework suggest that employees who are highly committed to their organization and are less likely to leave the organization are mainly affected by feelings of betrayal as opposed to those with a weaker and more transactional exchange relationship (Bal et al., 2009; Restubog et al., 2010). This is in line with research in social psychology that noted that the most significant type of betrayal involves those relationships that are particularly close and important (Couch, Jones, & Moore, 1999; Sias, Heath, Perry, Silva, & Fix, 2004). In fact, LMX and PCB are construed as a form of betrayal especially for those employees who regard their organization and supervisor as a family (i.e., workplace familism) (Restubog, Zagenczyk, Bordia, & Tang, 2013). Experience of breach is contrary to their expectation that the organization and the supervisor, as an organizational agent, will take care of them. Similarly, employees with an organization-centred career orientation are likely to adopt a more relational employment relationship with their employer, put more

emphasis on reciprocal loyalty and are less likely to quit (Gerber et al., 2009a). Therefore, the manner in which the organization treats these employees becomes more important and serious. We argue that the immediate supervisor is most likely seen as an organizational agent. As an organizational agent, the supervisor shares much of the identity with the organization, and therefore, is perceived as personally responsible for a PCB (Tekleab & Taylor, 2003). Failure of the supervisor to prevent a PCB may be considered to be an act of betrayal, which violates employees' expectations of a secure and loyal exchange relationship. As a result, employees may feel their organization-centred career outlook is under threat, which leads to a negative relationship between a PCB and career satisfaction. In addition, they may want to reciprocate the mistreatment by the organization (and the supervisor), and therefore, harm the organization by committing CWB.

Our reasoning is further supported by the fact that evidence for the betrayal hypothesis has mostly been found in 'traditional' settings. Restubog and colleagues (2010), for instance, studied employees in the Philippines, a sample that is characterized by high loyalty, strong interrelationships and hierarchy. Similarly, Bal and colleagues (2010) studied employees in an organization that has been described as a stable organizational environment with a hierarchical internal labour market. It seems that traditional settings "increase the likelihood that employees expect support from their organization [supervisor] and engage in social exchanges to greater extent than in other settings" (Bal et al., 2010, p. 258).

In contrast, we argue that employees with self-centred career orientations behave more in accordance with the stress-buffering hypothesis (Cohen & Wills, 1985). The relationship with their employer is not intended to be enduring, and therefore, what is exchanged has a short-term focus. As a consequence, the current employer becomes less central in the work life of an

employee who is rather independent or disengaged from an organization. Because self-centred employees are generally known (and need) to be more proactive (Seibert, Kraimer, & Crant, 2001), high LMX may serve as psychological and instrumental support, providing the individual with information and career guidance (King, 2004; Law, Wong, Wang, & Wang, 2000). Even if the organization has failed to provide career obligations as part of the psychological contract, the supervisor may still support employees in high LMX relationships with additional responsibilities and career advice. Indeed, recent research has shown that LMX is also beneficial for career outcomes (e.g., higher salaries, more responsibilities in subsequent jobs) beyond the current organization (Raghuram, Gajendran, Liu, & Somaya, 2017). Particularly in an era of self-centred or boundaryless careers, supervisors seem to play a central role in instrumental support and professional development that enhance career prospects with other employers in the job market. Wherever organizations have failed to provide support, supervisors in high LMX relationships may compensate organizational failure and attenuating the adverse effects of a PCB on employees' career satisfaction. Moreover, as a "compensator" they may not stress their identity with the organization and act more on their own and the employees' behalf, thereby preventing employees from engaging in CWB as a reciprocity behaviour. Based on the above argumentation, we hypothesize two three-way interactions.

*Hypothesis 3:* There is a three-way interaction effect of PCB, LMX, and career orientations on career satisfaction. For employees with organization-centred career orientations, PCB will be more negatively associated with career satisfaction under conditions of high, as compared to low LMX. For employees with self-centred career orientations, PCB will be less negatively associated with career satisfaction under conditions of high, as compared to low LMX.

*Hypothesis 4:* There is a three-way interaction effect of PCB, LMX, and career orientations on CWB. For employees with organization-centred career orientations, PCB will be more positively associated with CWB under conditions of high, as compared to low LMX. For employees with self-centred career orientations, PCB will be less positively associated with CWB under conditions of high, as compared to low LMX.

## **Methods**

### **Participants and Procedure**

For our sample the Swiss Federal Statistical Office randomly drew 6,002 addresses from the Swiss population of people between 16 and 65 years of age, irrespective of their employment status. Some individuals were not reachable, distorted or incapable and thus 2,584 individuals responded to the survey invitation. As those who worked less than 40 percent of full-time and those who were self-employed were excluded from the study by a prior screening, we obtained a net sample of 1,428 employees. For the final sample, we included (a) employees who were working in an organization with more than 10 employees, (b) employees below 60 years of age, and (c) those with less than 10 percent of missing values (Bennett, 2001). The first restriction was introduced to avoid conceptual overlap between psychological contracts and LMX, as both exchanges would have been solely associated with the manager. The second restriction was included to ensure that employees still had a career outlook in terms of their career orientation. Our final sample was comprised of 954 employees. As the sample was dispersed over all language regions in Switzerland, the survey was conducted in German ( $n = 675$ ), French ( $n = 207$ ), and Italian ( $n = 72$ ). Professional linguists following a quality-check procedure converted the items from English into German, French, and Italian or if scales existed in German, from German into French and Italian. We applied a mixed-mode approach so participants could

choose to complete the survey either online ( $n = 859$ ) or on paper ( $n = 95$ ). Reminder phone calls were set up two weeks and four weeks after the first contact if there was no response.

Our sample comprised 42.9% women. Twenty-two percent of the respondents were 30 years old or younger, 23% were between 31 and 40 years old, 35% between 41 and 50 years old and 20% were older than 50 years. Mean organizational tenure was 9.16 years ( $SD = 8.84$ ). The highest educational level of the participants was as follows: university degree (28.2%), high school (6.6%), vocational level (37.9%), higher vocational education (20.7%), and compulsory education (3.0%). Participants were employed in a wide variety of industries: health and social services (15.9%), manufacturing (12.5%), public administration (10.1%), construction (8.9%), trade and repairs (8.9%), finance and insurance (8.5%), transport and communication (6.9%), real estate, IT and R&D (6.5%), and other social services (4.8%).

## Measures

**Psychological contract breach.** The psychological contract is very much an individual construction or perception, making its terms idiosyncratic to each individual (Rousseau, 1989; Rousseau & Tijoriwala, 1998). To account for this idiosyncratic character of psychological contracts, perceptions of PCB were assessed by accounting for individuals' expectations and delivered inducements from their employer. We used a seven-item scale developed and validated for the Swiss context by Raeder, Wittekind, Inauen, and Grote (2009). We first asked our participants to rate to what extent they expected the following seven items from 1 (*strongly disagree*) to 5 (*strongly agree*): adequate pay, career development opportunities, loyalty, job security, opportunities for responsibilities in the work task, interesting work content, and application of own skills. Using the same list of items, respondents were further asked to indicate the degree to which their employer had provided each item in practice. Again, responses were



given on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). To form the content of the idiosyncratic psychological contract, we only considered those items to measure PCB, which had been perceived as relevant (*agree/strongly agree* for the measure of expectations). We furthermore calculated the mean score of the actual inducements from the organization and reversed them accordingly to indicate a breach.

**Counterproductive work behaviour.** Bennett and Robinson's (2000) 12-item scale was used to measure CWB. Sample items included "Intentionally work slower than you could have worked" and "Falsified a receipt to get reimbursed for more money than you spent on business expenses". Respondents indicated the frequency with which they engaged in each of these behaviours over the past year on a 7-point Likert scale from 1 (*never*) to 7 (*daily*). The scale yielded a Cronbach's alpha of  $\alpha = .71$ .

**Career satisfaction.** Career satisfaction was captured with an adapted 3-item measure by Greenhaus, Parasuraman, and Wormley (1990). A sample item was "I am satisfied with the success I have achieved in my career". Responses were given on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). We deliberately refrained from specific individual success indicators (e.g., promotion), as they may not be relevant to all respondents. The scale had a Cronbach's alpha of  $\alpha = .91$ .

**Leader-member exchange.** As this study was part of a larger research project, we used an abbreviated measure of the 7-LMX scale by Graen and Uhl-Bien (1995), which was translated into German and validated in a German sample by Schyns (2002). We selected three items from the full measure that cover a work-related rather than loyalty-related aspect of the exchange relationship with the supervisor. Our abbreviated version included the following items from the original scale: Item 1: "The working relationship with my leader is effective", Item 2: "My

leader understands my job problems and needs”, Item 3: “My leader would use his or her power to help me solve my problems at work”. Items were assessed on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Cronbach’s alpha was  $\alpha = .90$ .

As LMX was not operationalized with an abbreviated version of an existing measure, we further conducted a validation study to demonstrate the convergent validity of our 3-LMX subscale with the full 7-item scale by Graen and Uhl-Bien (1995). Using another representative sample of 1276 employees in Switzerland, we concurrently administered the 3-item subscale ( $\alpha = .86$ ) with the 7-item full scale ( $\alpha = .90$ ) of LMX. The correlation between the subscale of LMX and the complete scale was  $r = .96$ . We then calculated correlations for both scales with other variables, including affective commitment (Meyer, Allen, & Smith, 1993), turnover intention (Mowday, Koberg, & McArthur, 1984), job satisfaction (single-item measure) and PCB (Raeder et al., 2009). The two measures had very similar patterns of correlations with these variables. In sum, the evidence shows that the 3-LMX measure possesses adequate reliability and considerable construct validity.

**Career orientation.** To assess organization-centred and self-centred career orientations, we used the career orientation measure by Gerber and colleagues (2009a). Participants were asked to choose between two diametrically opposed statements on the basis of the question “Looking ahead at your work life, which of the following would you choose?” on a 4-point scale. An example of the two statements making up one item was “Managing your own career” versus “Having your organization manage your career for you”. The full list of items can be found in the appendix. In a first version of the measure, Gerber and colleagues (2009a) used a dichotomous scale with a forced choice between the two statements. In the later version, which was used in our study, the measure was extended to a four-point scale to allow respondents some

decision latitude while keeping the underlying forced-choice format by subsequently dichotomizing the responses (Tschopp, Grote, & Köppel, 2016). This is also the procedure we followed.

Originally the items were developed by Guest and Conway (2004) to reflect “the characteristics of the ‘traditional’ as well as the ‘new’ career” (Gerber, Wittekind, Grote, Conway, & Guest, 2009, p. 786). Using exploratory and confirmatory Latent class analysis (LCA), Gerber and colleagues (2009a) found that the responses of the measure clusters four career orientations along the traditional and new career: two traditional career orientations (loyalty- and promotion-focused) and two new career orientations (independent and disengaged).

Using the career orientation measure, we first assigned employees to the four career orientation types identified by Gerber and colleagues (2009a). To estimate the assignment probabilities for each of the four career orientations per individual, we used a *confirmatory* latent class model. We compared the item response patterns of all employees in the present sample to the latent class solution found by Gerber and colleagues (2009a) by constraining parameters to estimate LCA probabilities (Finch & Bronk, 2011). This has been an established procedure in previous research (e.g., Gerber et al., 2012; Tschopp, Grote, & Gerber, 2014). The distribution of career orientations was as follows: 22.5% of the participants showed a preference for an independent career orientation (n = 215); 15% preferred a disengaged career orientation (n = 146); 47.7% showed a preference for a traditional-promotion career orientation (n = 355) and 14.5% for the traditional-loyalty career orientation (n = 139).

In a further step, we merged the four career orientations into two types to reflect their characteristics of being organization-centred versus self-centred as originally intended by Guest and Conway (2004). Therefore, we merged the traditional-promotion and the traditional-loyalty

into a category called *organization-centred career orientations* (62% of participants) and the independent and disengaged types into a category called *self-centred career orientations* (38% of participants). Both individuals with a traditional-promotion and a traditional-loyalty career orientation aim to have a career within a single organization characterized by long-term commitment and organizational career management. Individuals with an independent or disengaged career orientation are instead characterized by seeking employability in a range of organizations and a high degree of career self-management.

To validate our approach, we compared the LCA cluster profiles of probabilities as well as the sample characteristics of each career orientation type. First and similar to Gerber and colleagues (2009a), the independent and disengaged career orientation as well as the two traditional types show similar pattern of probabilities in the boundaryless and protean dimension of this measure (items 1, 2, 3, and 8), which represent the degree to which they have a self-centred versus an organization-centred career orientation. Second, we compared the sample characteristics for each of the career orientations in terms of demographics and work-related attitudes (Table 2). To check the significance of the differences, analysis of variance (ANOVA) with post-hoc Tukey tests ( $p < .05$ ) were conducted on the work attitudes and demographics as dependent variables and the career orientation as the factor variable. Similar to the study by Gerber and colleagues (2009a), we found that independent and disengaged employees have in fact lower tenure, higher employability and higher turnover intention compared to their traditional counterparts, all of which are indicative of a self-centred career orientation.

==== Insert Table 2 about here ====

**Control variables.** We controlled for demographic and work-related variables that were likely to influence the results of the subsequent analyses, such as gender, age, organizational

tenure, percentage of employment, organization size, industry sector and education. Concerning gender, women and men are found to form different relationships at work (Umberson, 1996), and men generally tend to be more reciprocal than women (Dittrich, 2015). In addition, women conceive to have different career paths (Ohlott, Ruderman, & McCauley, 1994) than men do, which might affect both their career satisfaction and their use of CWB as a form of reciprocity. Also, age and tenure may alter the empirical relationship between PCB and its outcomes. Research has shown that older employees are slightly more satisfied with their career (Zacher, 2014) and are less likely to engage in CWB (Gruys & Sackett, 2003). Concerning the influence of tenure on PCB and CWB, the findings in the literature are more ambiguous. On the one hand, Hollinger, Slora, and Terris (1992) demonstrated that employees with less tenure are more likely to engage in CWB. On the other hand, Lewicki, Poland, Minton, and Sheppard, (1997) reported that longer tenure leads to more CWB. In addition, age and tenure were controlled for in an effort to ensure that any effects observed for career orientation are distinct from an employee's age or tenure, as both age and tenure are often used to define career stages (e.g., Conway, 2004; Mirvis & Hall, 1994). Because research has evidenced that low involved individuals may think and react differently to a PCB compared to more highly involved individuals, we controlled for percentage of employment (Conway & Briner, 2002b). We also controlled for educational level and industry sector, as both might have an influence on careers and employees' reactions towards a PCB.

### **Measurement Model Testing**

**Confirmatory factor analyses.** Before we proceed to hypotheses testing, we conducted a series of confirmatory factor analyses (CFA) with maximum likelihood estimation in Amos 22.0 to test the dimensionality of the measures. The measurement model consisted of four factors:

PCB, LMX, CWB and career satisfaction. Due to the methodological approach used to define career orientations (LCA), the items of this measure could not be considered in the CFA.

Compared to alternative models, the results of our four-factor model provided the best fit to the data ( $\chi^2_{[269]} = 717.32, p < .001$ ); fit indices were root-mean-square error of approximation (RMSEA) = .04, comparative fit index (CFI) = .95, and Tucker–Lewis index (TLI) = .94. The three-factor model combines PCB and LMX into one factor, to examine whether respondents were able to distinguish between these two types of social exchanges. Fit indices for the two-factor model ( $\chi^2_{[272]} = 1506.69, p < .001$ ) showed the following results: RMSEA = .07, CFI = .86, and TLI = .83. Fit indices for the one-factor ( $\chi^2_{[275]} = 4036.32, p < .001$ ) model were: RMSEA = .12, CFI = .57, and TLI = .50. We can conclude that the constructs under study show adequate discriminant validity. In addition, factor loadings in the CFA were statistically significant, indicating that all scales in the study had acceptable psychometric properties.

**Common method variance.** As with all self-reported data, there is the potential for common method variance (CMV). We addressed the issue of CMV in two statistical ways. First, our CFA analysis revealed that the four-factor model fit significantly better than the one-factor model, a result indicating no significant CMV according to Harman's single-factor test (Podsakoff & Organ, 1986). Second, CMV was assessed by controlling for the effects of an unmeasured latent method factor recommended by Podsakoff, MacKenzie, Lee, and Podsakoff (2003). Following this procedure, each item was assigned to an indicator not only of its substantive latent factor, but also of an unmeasured latent method factor (e.g., Podsakoff & MacKenzie, 1994; Podsakoff et al., 2003). The results indicated that the method factor accounted for only a small portion (1%) of the total variance. The inclusion of the latent method factor resulted in a model with only a slightly improved fit to the data ( $\Delta\chi^2_{[205]} = 660.31, p < .001$ ,

RMSEA = .04, CFI = .96, and TLI = .95). In line with CMV testing in a study by Elangovan and Xie (2000), the incremental fit index yielded an increase in rho of  $\Delta IFI = 0.007$ , which suggests that method effects are insignificant (Bentler & Bonett, 1980). In sum, the results of both statistical procedures suggested that common method bias was not a problem in this study.

### Results

Table 3 displays means, standard deviations, and correlation coefficients of all variables. In line with Hypothesis 1, PCB showed a strong negative correlation with career satisfaction ( $r = .50, p < .01$ ). PCB also shows a moderate positive relationship with CWB ( $r = .21, p < .01$ ), supporting Hypothesis 2. Testing Hypotheses 3 and 4, moderated regressions were performed and variables were mean-centred before interactions were calculated (Aiken & West, 1991).

==== Insert Table 3 about here =====

The variables were entered into the hierarchical regressions in five steps: a) controls (gender, age, tenure, percentage of employment, organization size, industry, and education); b) independent variable PCB and the first moderator LMX; c) interaction of PCB and LMX and the second-order moderator career orientation simultaneously; d) interaction of PCB and career orientation and the interaction of LMX and career orientation simultaneously; and finally, e) the three-way interaction of PCB, LMX and career orientation. Table 4 displays the results of the regression analyses.

==== Insert Table 4 about here =====

Testing our three-way interaction, we found significant results for both career satisfaction ( $\beta = -.18, p < .001, \Delta R^2 = .01, p < .001$ ) and CWB ( $\beta = .21, p < .001, \Delta R^2 = .01, p < .001$ ). To fully capture the form of these interactions, we applied conventional procedures for plotting simple slopes at one standard deviation above and below the mean of LMX for individuals with

an organization-centred career orientation and for those with a self-centred career orientation.

==== Insert Figure 1 and Figure 2 about here ====

A visual inspection of the simple slopes shows that individuals with organization-centred career orientations have different interaction effects compared to individuals with self-centred career orientation. To test this interpretation statistically, we calculated slope difference test following Dawson and Richter (2006). In line with Hypothesis 3, PCB was more strongly negatively associated with career satisfaction under conditions of high LMX ( $b = -.52, p < .01$ ), compared to low LMX ( $b = -.43, p < .01$ ) for individuals with organization-centred career orientations (Figure 1). The two slopes differed significantly from each other ( $t = -2.43, p = .015$ ). For individuals with self-centred career orientation, PCB was more negatively associated with career satisfaction under conditions of low LMX ( $b = -.65, p < .01$ ), compared to high LMX ( $b = -.36, < .01$ ). These two slopes differed significantly from each other ( $t = 3.07, p = .002$ ).

In line with Hypothesis 4, PCB was positively related to CWB under conditions of high LMX ( $b = .16, p < .01$ ), but not in the case of low LMX ( $b = .05, p = .19$ ) for individuals with organization-centred career orientations (Figure 2). These two slopes differed significantly from each other ( $t = 4.69, p < .001$ ). For individuals with self-centred career orientation, PCB was positively associated with CWB under conditions of low ( $b = .17, p < .01$ ), but not under conditions of high LMX ( $b = .04, p = .41$ ). The difference in these slopes was significant ( $t = -2.11, p = .035$ ). Overall, Hypotheses 3 and 4 were supported.

As part of supplementary analyses, we further tested our model with all four career orientations simultaneously by using a multi-group analyses in Mplus. Our sample was separated into subgroups based on the full four career orientation types found by Gerber and colleagues (2009a) and the moderation effect was estimated in each group. Similar to our main findings, we



found that in the case of independent career orientation LMX is a buffer in the breach–outcome relationship for career satisfaction, but not for CWB. No significant moderation effect of LMX was found for disengaged employees. In line with our hypotheses concerning organization-centred career orientations, we found LMX to be a marginal intensifier in the breach–outcome relationship for the traditional-promotion type. The betrayal effect was even stronger in the breach–CWB relationship. Similarly, we found marginal support for the betrayal hypothesis in the breach–CWB relationship for the traditional-loyalty career orientation. Power restrictions due to small sizes of sub-samples need to be considered when interpreting these results.<sup>1</sup>

### **Discussion**

The purpose of this study was to find an explanation for the co-existence of two competing frameworks of the moderating role of LMX in the PCB–work outcome relationship. Taking individuals’ career orientations into account, we showed why and when LMX buffers or intensifies detrimental reactions to a PCB. More specifically, we looked at the role of LMX and career orientations in attenuating or mitigating negative effects of PCB on career satisfaction and CWB. Testing two three-way interaction models, we found that the pattern of interaction effects between PCB and LMX was different for employees with organization-centred career orientation as compared to employees with self-centred career orientation. For employees with organization-centred career orientations, the relationship between PCB and career satisfaction as well as between PCB and CWB became stronger under conditions of high LMX, which in the literature is referred to as the betrayal framework. For employees with self-centred career orientations, high LMX appears to be perceived as a source of social support that mitigates the negative impact of PCB on career satisfaction and CWB, which in the literature is referred to as the buffer framework.

### **Theoretical Implications and Future Research**

The findings of this study contribute to the literature in four key ways. First, with respect to the seemingly inconsistent findings in the literature, the results from the present study highlight that career orientation is an important moderator to be considered in the interaction of PCB and LMX on work outcomes. While previous studies have conceptualized LMX to be either within the betrayal or the buffer framework, our findings provide novel insights into why both frameworks legitimately coexist in the literature.

Theoretical and empirical work suggest that feelings of betrayal are caused by high loyalty expectations and high prior commitment (Brockner, Tyler, & Cooper-Schneider, 1992). A PCB leads to stronger feelings of violation in relationships in which there is greater trust, high commitment and a long-term orientation towards the exchange relationship (Morrison & Robinson, 1997). Empirical findings support this assumption. The betrayal framework has been found in stable and traditional settings that were characterized by an “internal labor market with clear career paths” (Bal et al., 2009, p. 258) and strong “interpersonal relationships” (Restubog et al., 2010, p. 433). Both characteristics are strongly associated with an organization-centred career orientation (e.g., Gerber et al., 2009a). In line with these studies, we found that employees with organization-centred career orientation are, in fact, concerned by feelings of betrayal. Perception of breach does not fit with their loyalty expectation and the supportive relationship with their supervisor exacerbates the experience of a breach. Consequently, employees with organization-centred career orientation feel lower career satisfaction and reciprocate a PCB with more CWB.

In contrast, LMX has a buffer function for career paths that are developed independently from the employing organization. The findings of our study show clearly that high LMX helps

employees with self-centred career orientations to maintain their career satisfaction even though they perceive their organization has not fulfilled their obligations. These employees benefit from stronger professional support of their supervisors, which can pay off in the form of better career outcomes also on the external job market. Managers may provide advice, input, and sponsorship in social networks (Sparrowe & Liden, 2005) that are particularly useful for so-called boundaryless careers. Our study coincides with research that found LMX to be beneficial beyond organizational boundaries as it also impacts external career outcomes (Raghuram et al., 2017).

Second, we advance the understanding of when LMX acts as a buffering mechanism, protecting employees from negative work experiences such as PCBs, in contrast to when a high-quality LMX acts as an exacerbating mechanism. Whereas both the social support and betrayal perspective have been theorized and empirically tested in previous research (Bal et al., 2010; Restubog et al., 2010), studies either found support for one hypothesis or the other. However, this study is the first to provide a possible explanation for why both frameworks are relevant. It seems that employees consider and react differently to the support of their supervisor, depending on how strong their career is associated with the organization. Therefore, the study contributes to the career and social exchange literature by providing a deeper understanding of social exchange relationships from a career perspective.

Clearly, a more comprehensive model of when LMX buffers or intensifies the PCB–outcome relationship is warranted. Possible approaches for future research can be seen in several ways. We believe that “whom to blame for a breach” might be an interesting outlook for future studies examining the mutual influences of PCB and LMX on work outcomes. For instance, it would be interesting to observe if in case of the betrayal model both, supervisors and organizations will be blamed as the target of the breach (i.e., supervisor-directed and

organization-directed CWB), whereas in the buffer model a PCB is only attributed to the organization (i.e., organization-directed CWB). Future research might also examine if effects of betrayal are even stronger for those supervisors who are perceived to be representatives of their organization (i.e., supervisor's organizational embodiment). If supervisors share much of the identity with their organization, high LMX relationships might exacerbate the negative effects of a PCB, because the perception of an unfavourable exchange relationship with the organization (PCB) may be generalized to the supervisor (LMX). In sum, future research is encouraged to identify which of, and to what extent, these mechanisms also play a role in the betrayal and buffer framework.

Third, we extend existing research on interaction effects between PCB and LMX by adding CWB and career satisfaction to the discussion on how the social relationships interact. Previous studies on this topic have either focused on how PCB decreases positive work behaviours (e.g., work performance) or on how PCB increases negative work behaviours (e.g., CWB). Interestingly, the betrayal hypothesis has mostly been found by investigating positive outcomes (i.e., work performance) (Suazo, 2011, for exception), whereas the buffer framework was primarily found in studies with negative connoted outcomes (i.e., CWB, aggressive voice) (see Table 1). With our study, we address both, a work outcome with positive connotation (i.e., career satisfaction) as well as an outcome with negative connotation (i.e., CWB), which makes methodological biases due to the relation of constructs with the same connotations less likely. However, as previous studies tend to differ by types of analyzed outcomes, future research might systematically explore whether the likelihood for the betrayal and buffer model is different among positive or negative connoted outcomes.

Finally, we address the reliance on drawing inferences from single organizations (or

industries) with rather homogenous samples. In such settings, it is difficult to account for employees' different career orientations, as career mind-sets can be assumed to be distributed differently in samples that represent different industries, labour markets, and/or different stages of career development (Gerber et al., 2009a). In order to capture the full range of career orientations in our study, we examined a representative random sample of employees employed in a variety of industries, who hold diverse educational backgrounds and represent a wide array of occupations and career stages. Consequently, the results of our study allow for high generalizability.

### **Practical Implications**

From a practical point of view, our results show that employees with different career orientations need to be managed differently. Although organization-centred employees perceive their supervisors to be supportive, they feel rather betrayed when psychological contracts are breached. These results may come as a surprise to organizations, which may expect that broken promises will not matter if supervisors generally behave positively towards their subordinates. While organizations should promote high-quality LMX, they must also be mindful that this is likely to create and impose greater expectations held by employees with organization-centred career orientations. Even though few researchers have suggested a decline in the organization-centred career (Hall, 1996), there is still a high endorsement for them among the workforce (e.g., Guest & Conway, 2004; King, 2003). To minimize negative outcomes of PCB, organizations should be aware of the commitments they may unknowingly convey to their employees.

Employees from the millennium generation (born between 1977-1997) are often labelled as job hoppers and assumed to have self-centred career. Ninety-one percent of the millennials expect to stay in a job for less than three years (Meister, 2012) and studies reported that

employees from the 1990 cohort change jobs more frequently than their 1970 counterparts (Chudzikowski, 2012; Lyons, Schweitzer, & Ng, 2015). As they represent the future workforce, reactions of employees with self-centred career orientations may be useful information to employers. Organizational agents such as leaders play a critical role in social support mechanisms to a PCB (Guzzo & Noonan, 1994; Rousseau & Greller, 1994), as they provide employees with career and functional support, attenuating detrimental consequences of a PCB. In a “boundaryless” world, supervisors may have a key function for employees.

### **Limitations**

We acknowledge that the interpretation of our findings is conditional upon some limitations. First, as our data is cross-sectional, inferences of causality cannot be made. Although our conceptualization of the relationship between PCB and CWB, as well as the interaction of PCB and LMX, is consistent with previous literature (Bordia et al., 2008; Chiu & Peng, 2008), we are aware that reverse causality is still possible.

Second, another limitation of this study is the use of self-report measures in a single survey. We applied measures to reduce the risk of common method variance (CMV) and found that CMV was not a critical issue in this study. In fact, research has corroborated that interaction effects are unlikely to cause CMV (Siemsen, Roth, & Oliveira, 2010). Moreover, due to social desirability in self-report measures, respondents may have underreported their CWB in the interest of presenting themselves in a favourable light (Lee, 1993). In fact, the mean level and standard deviation of CWB in this study were quite low. However, previous studies also reported similar means and standard deviations for CWB ( $M = 1.17$ ,  $SD = .22$  in Bordia et al., 2008 and  $M = 1.87$ ,  $SD = .94$  in Lian, Ferris, & Brown, 2012).

Third, another limitation might be caused by the  $R^2$ . Our three-way interaction, even though statistically significant, explains only an additional 1% of the variance. Note, however, that interactions tend to explain rather small amounts of additional variance and yet are meaningful (Aiken & West, 1991). This even applies more to second order interactions. We are confident that the statistically significant effects we found are not trivial.

Fourth, the abbreviated version of the LMX measure is a further potential limitation of our study. The present research was conducted as part of a larger research project. We selected three items out of the original 7-item LMX measure by Graen and Uhl-Bien (1995). However, our validation study ( $N = 1276$ ) demonstrated that the three selected items are reliable and valid indicators of the original 7-item measure by Graen and Uhl-Bien (1995).

Fifth, we acknowledge that the theoretical development of our argumentation was partly based on socio-psychological mechanisms (e.g., attribution process) that we did not explicitly measure. Therefore, our study may be prone to alternative explanations for why organization-centred and self-centred career orientations affect the interaction effect of LMX and PCB differently. Future research is encouraged to take these issues into account and test potential underlying mechanisms on the relationship between PCB and LMX in more detail. In this respect, future research might also consider other potential second-order moderators related to career orientations. Interesting moderators to further disentangle the mixed role LMX plays in the breach–outcome relationship could be organizational and/or supervisor commitment, supervisor social embodiment or proactive behaviours. Employees with organization-centred and self-centred career orientation may differ in several respects. They might have a different understanding on how the supervisor is related to the organization or how they proactively use LMX as resource to better cope with work stressors. Based on our theoretical reasoning and

empirical findings, future research might determine which of, and to what extent related moderators can further help to better understand the role of LMX in the breach–outcome relationship.

### **Conclusion**

Given the high prevalence of PCBs in organizations, it is crucial to understand mechanisms that buffer or intensify negative consequences of PCBs. LMX can be both a buffer and an intensifier in the breach–outcome relationship depending on employees’ career orientation. It seems that employees consider and react differently to the support of their supervisor, depending on how strong their career is associated with the organization. As our findings indicate, individuals’ career orientation should be considered more carefully because they appear to have substantial effects on how employees react to social exchange.



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Table 1

*Studies Investigating the Moderating Role of LMX in the PCB–Outcome Relationship*

Buffer–Hypothesis				Betrayal–Hypothesis			
<i>Study</i>	<i>Sample(s)</i>	<i>Dependent variable(s)</i>	<i>Study setting</i>	<i>Study</i>	<i>Sample(s)</i>	<i>Dependent variable(s)</i>	<i>Study setting</i>
Griep et al. (2016)	N = 247 volunteers from diverse non-profit organizations in Belgium	Counterproductive work behaviour	Volunteers from social enterprises who volunteered on average 1.91 days per week	Restubog et al. (2010)	Three samples from Philippines:  Sample 1: N = 180 manufacturing workers  Sample 2: N = 142 sales personnel  Sample 3: N = 200 MBA students	Work performance (In-role performance, organizational citizenship behaviour)	Philippines sample with relational exchange relationships, described as “heavily grounded interpersonal relationships and community sharing” (p. 433) and characterized by a word of honour “which creates a commitment” (p. 433) between parties.
Ng et al. (2014)	N = 197 employees from Zoomerang.com	Aggressive voice	Sample consisted of first-line supervisors and middle managers in the US	Bal et al. (2010)	N = 266 employees from a service organization	Work performance (In-role performance, organizational citizenship behaviour)	Sample from a traditional and stable organizational environment (e.g., internal labor market with clear career paths for advancement)
Dulac et al. (2008)	N = 152 newcomers from three large Belgian companies	Psychological contract violation	Newcomer sample from one organization each with a tenure of six months	Suazo, (2011)	Sample 1: N = 569 employees at a manufacturing facility  Sample 2: N = 251 employees at a manufacturing facility	Psychological contract violation	Full-time employees in a manufactory
Zagenczyk et al. (2009)	Study 1: N = 220 employees from MarketTools.com  Study 2: N = 274 college / university faculty members	Perceived organizational support	In Study 2 about 50% of the participants had a doctoral degree				

Table 2

*Career Orientation Profiles*

	Organization-centred career orientations		Self-centred career orientations		All respondents (N = 954)
	Traditional- promotion (n = 454)	Traditional- loyalty (n = 139)	Independent (n = 215)	Disengaged (n = 146)	
<i>Demographics</i>					
Age	41.4 years	43.5 years	36.1 years	42.6 years	40.72 years* TP, TL, D > I
Tenure	9.9 years	12.4 years	5.5 years	8.7 years	9.13 years * TP, D, I < TL; TP, TL, D > I
Employment status (per cent)	91.7 %	86.4 %	94.3 %	85.1 %	90.54 %* TP, I < TL, D
<i>Work attitudes</i>					
Commitment <sup>a</sup>	3.44	3.43	3.24	3.07	3.34* TP, TL > D, I
Turnover intention <sup>a</sup>	2.19	1.91	2.65	2.41	2.29* TP, TL > I; TL > D
Employability <sup>a</sup>	3.51	3.31	3.85	3.57	3.57* TP, TL, D < I
Expectation of job security as part of the PC <sup>a</sup>	4.45	4.50	4.30	4.20	4.39* TP, TL > D

Note: N = 954.

<sup>a</sup> Mean scores measured on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

\**p* F(ANOVA) < .05.

“PC” refers to psychological contract, “I” to independent, “D” to disengaged, “TP” to traditional-promotion and “TL” to traditional-loyalty.

Table 3

*Descriptive Statistics and Bivariate Correlations*

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11
1 Gender <sup>a</sup>	0.43	0.50											
2 Age	40.72	10.40	-.03										
3 Tenure	9.13	8.83	-.08*	.53**									
4 Employment percentage	90.55	16.69	-.45**	-.13**	.02								
5 Organizational size <sup>b</sup>	0.88	0.41	-.04	.10**	.12**	.06							
6 Education <sup>c</sup>	0.28	0.44	-.06*	-.07*	-.14**	-.05	.08*						
7 Sector <sup>d</sup>	0.12	0.33	-.13**	.03	-.02	.11**	.00	.01					
8 Psychological contract breach	2.26	0.76	-.03	-.05	-.04	.10**	.10**	-.01	.11**				
9 Leader–member exchange	3.65	0.99	-.01	.03	-.03	-.04	.00	-.00	-.06	-.61***			
10 Career satisfaction	3.89	0.83	.07*	.13**	.10**	-.01	-.04	-.00	-.08*	-.50**	.36**		
11 Counterproductive work behaviour	1.48	0.44	-.03	-.20**	-.07*	.00	.02	.02	-.01	.21**	-.17**	-.20**	
12 Career orientation <sup>e</sup>	0.62	0.48	.02	.15**	.20**	-.00	.00	-.14**	.03	-.04	.04	.03	-.09**

*Note:* *N* = 882-954.

<sup>a</sup>0 = male, 1 = female. <sup>b</sup>0 = 10-250 employees, 1 = more than 250 employees, <sup>c</sup>0 = up to secondary education, 1 = university degree, <sup>d</sup>0=service, 1= production, <sup>e</sup>0= self-centred career orientation, 1= organization-centred career orientation.

\*  $p < .05$ . \*\*  $p < .01$ .

Table 4

*Hierarchical Moderated Regression for Counterproductive Work Behaviour (CWB) and Career Satisfaction*

Model	CWB			Career satisfaction		
	$\beta$	$t$	$\Delta R^2$	$\beta$	$t$	$\Delta R^2$
<i>Step 1</i>			.05***			.04***
Gender <sup>a</sup>	-.05	-1.38		.10	3.20***	
Age	-.22	-5.77***		.11	3.18**	
Tenure	.07	1.76		.05	1.33	
Employment percentage	-.08	-2.18*		.07	2.03*	
Organizational size <sup>b</sup>	.03	0.76		.00	-0.23	
Education <sup>c</sup>	.02	0.59		.00	0.13	
Sector <sup>d</sup>	-.02	-0.69		-.03	-1.15	
<i>Step 2</i>			.04***			.23***
PCB	.18	2.83**		-.47	-8.37***	
LMX	.03	0.45		-.01	-0.23	
<i>Step 3</i>			>.00			>.00
PCB × LMX	-.14	-2.31*		.17	3.12**	
Career orientation <sup>e</sup> (CO)	.00	0.07		-.08	-2.36*	
<i>Step 4</i>			>.00			>.00
PCB × CO	.00	0.05		.02	0.38	
LMX × CO	-.11	-1.66		.07	1.20	
<i>Step 5</i>			.01***			.01***
PCB × LMX × CO	.21	3.44***		-.18	-3.25***	

Note:  $N = 954$ .

PCB = Psychological contract breach; LMX = Leader-member exchange

<sup>a</sup>0 = male, 1 = female. <sup>b</sup>0 = 10-250 employees, 1 = more than 250 employees, <sup>c</sup>0 = up to secondary education, 1 = university degree, <sup>d</sup>0 = service, 1 = production, <sup>e</sup>0 = self-centred career orientation, 1 = organization-centred career orientation.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$



Figures

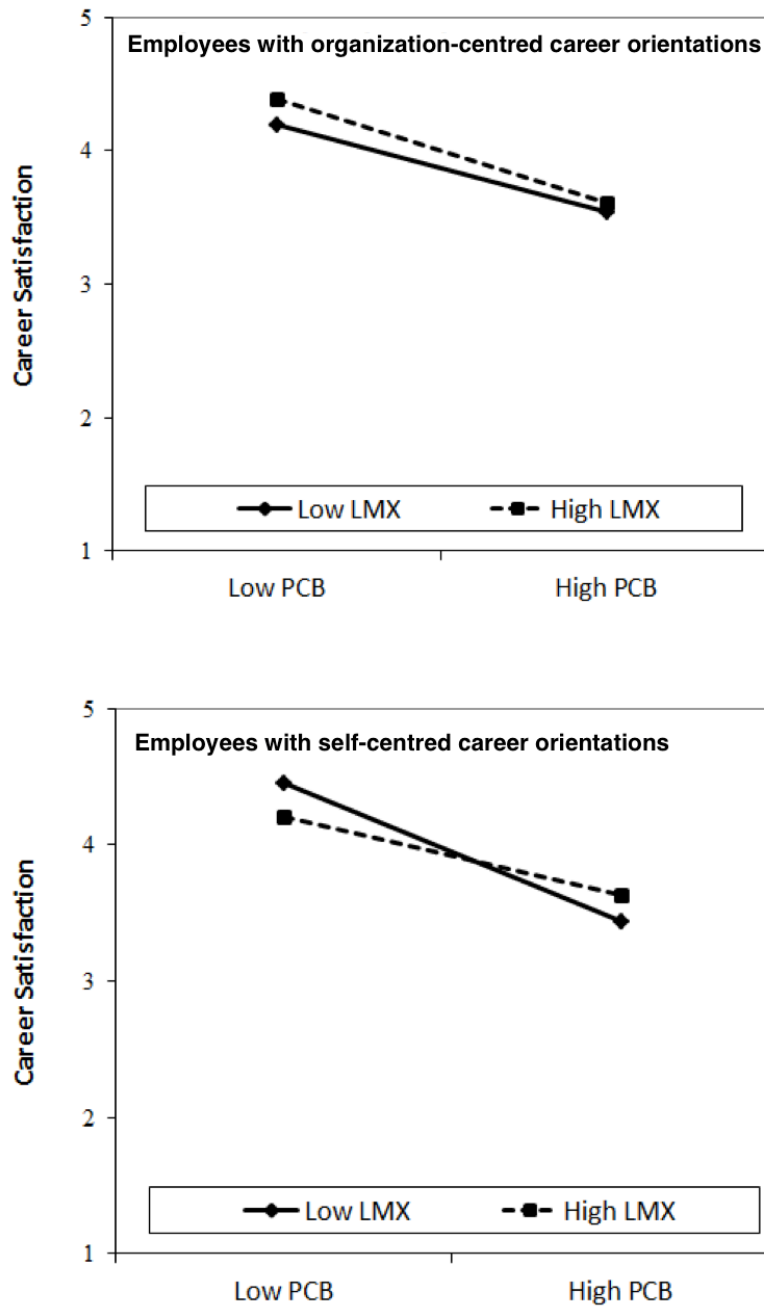


Figure 1. Moderating effect of leader–member exchange (LMX) and psychological contract breach (PCB) on career satisfaction for employees with organization-centred and self-centred career orientations (plotted for +/- 1 SD).

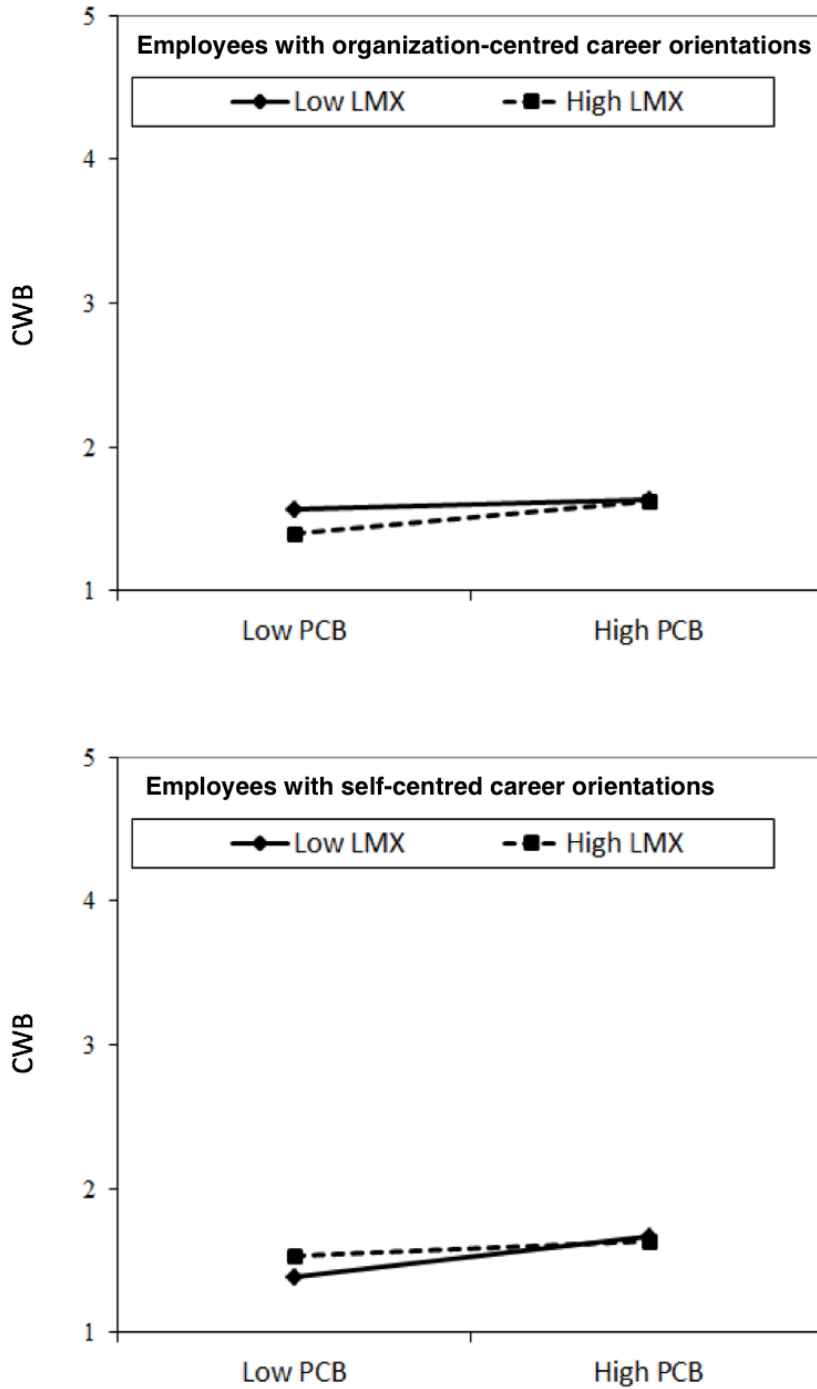


Figure 2. Moderating effect of leader–member exchange (LMX) and psychological contract breach (PCB) on counterproductive work behaviour (CWB) for employees with organization-centred and self-centred career orientations (plotted for +/- 1 SD).

Footnote

<sup>1</sup> Detailed information on the supplemental analyses can be obtained from the authors upon request.

Appendix A.

Measure career orientation (Gerber et al., 2009a)

1	Being employable in a range of jobs	○ ○ ○ ○	Having job security
2	Managing your own career	○ ○ ○ ○	Having your organization manage your career for you
3	A short time in lots of organizations	○ ○ ○ ○	A long time with one organization
4	A series of jobs at the same kind of level	○ ○ ○ ○	Striving for promotion
5	Living for the present	○ ○ ○ ○	Planning for the future
6	Work as marginal to your life	○ ○ ○ ○	Work as central to your life
7	A career is not important to you	○ ○ ○ ○	Career success is very important to you
8	Commitment to yourself and your career	○ ○ ○ ○	Commitment to the organization
9	Spend what you've got and enjoy it	○ ○ ○ ○	Save for the future