Do individuals combine different coping strategies to manage their stress in the aftermath of psychological contract breach over time? A longitudinal study

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Acknowledgements

This research was financially supported by Research Foundation Flanders

[grant number: FWOSB13]

Abstract

This study examines the dynamic interaction between perceptions of psychological contract breach (PCB), negative emotions, and stress over time. Additionally, we determine if individuals could be differentiated based on coping profiles, and further assessed whether emotional and stress reactions to PCB over time varied as a function of these profiles. Using a longitudinal design, a sample of 1077 employees working in various industries completed a monthly questionnaire for six consecutive months reporting their perceptions of PCB, negative emotions, stress reactions, and ensuing coping mechanisms. Results from the latent growth analysis revealed that individuals confronted with increasing levels of PCB over time reported growing stress following their escalating negative emotions. Moreover, the latent profile analysis of coping performed in two randomly selected subgroups revealed that there were three coping profiles within our sample (i.e., low copers, average-problem-focused copers, high-problem-and-emotion-focused copers). We found evidence for different trajectories of negative emotional and stress reactions to PCB over time depending on the different coping profiles. As such, individuals endorsing high levels on all three types of coping but relatively higher levels on emotion-focused and problem-focused coping compared to avoidance coping were associated with the most favorable psychological functioning over time (i.e., no escalation in emotional and stress reactions to PCB over time). In contrast, individuals endorsing low levels on all three types of coping reported less favorable psychological functioning in the long term. We discuss theoretical and practical implications of our findings and offer recommendations for future research.

Introduction

There has been growing interest in the past three decades regarding the different ways in which employees are responding when they perceive that their employer has failed to fulfill its obligations and promises that were established in a social exchange relationship. (Colquitt et al., 2013). This whole set of perceived reciprocal implicit or explicit promises and obligations create what is called the psychological contract (PC) (Rousseau, 1995; Morrison & Robinson, 1997). Different meta-analyses have uncovered the importance of PCs in understanding employment relationships, employee emotions, attitudes and behaviors (Bal et al., 2008; Li et al., 2006; Cantisano et al., 2008; Zhao et al., 2007). It is even more critical since employees who perceive that their employer does not meet its obligations—called PC breach (PCB)—may develop a strong emotional and affective reaction—termed feelings of violation (Morrison & Robinson, 1997). These affective reactions to PCB produce a wide range of organizationally undesirable outcomes such as turnover intentions, counterproductive work behavior, lower commitment or reduced performance (Zhao et al., 2007). In addition to these negative work-related outcomes, PCB can harm employees' wellbeing by provoking stress, strain, anxiety, depression, and burnout (Achnak et al., 2018; Conway & Briner, 2002; Gakovic & Tetrick, 2003; Jones & Griep, 2018; Robbins et al., 2012).

The existing PC literature offers a solid theoretical and empirical foundation to understand the relationship between perceptions of PCB and employee reactions. However, our knowledge about the dynamic nature of such post-breach reactions remains rather limited. There is a dearth of process research on how individuals' reactions to PCB evolve over time and how these temporal patterns relate to changes in perceptions of PCB, despite the fact that multiple calls urge scholars to engage in more temporal research by studying PCs and its related concepts as a process unfolding over time (e.g., Achnak & Hansen, 2019; Bankins, 2015; Hansen & Griep, 2016; Schalk & Roe, 2007). The adoption of such a temporal lens is important

as it truly captures the relationships between concepts that are inherently dynamic such as cognitive schemas, individuals' reactions and adaptation efforts to changes within those schemas (Rousseau et al., 2018).

We address this temporal issue and answer the call for more time-sensitive PC research by moving beyond the examination of immediate reactions associated with perceptions of PCB and investigating how these perceptions can impact employees' wellbeing in the long term. More specifically, we will draw on Hobfoll's (1989) Conservation of Resources (COR) theory to investigate how stress responses unfold over time in reaction to escalating trajectories of negative emotions following perceptions of PCB. Examining the unfolding nature of stress trajectories in the aftermath of PCB is important for the two following reasons.

First, while perceptions of PCB may trigger an immediate increase in stress levels (Achnak et al., 2018; 2021), it is unlikely that stress will perpetually remain at this elevated level. Indeed, the recent Post-Violation Model (PVM; Tomprou et al., 2015) suggests that responses to PCB and violation fluctuate over time. More specifically, the PVM states that victims of that violation use self-regulation processes in an attempt to manage PCB through resolution efforts. Ultimately, four possible PC outcomes can result from such efforts, ranging from highly functional (i.e., PC thriving) to highly dysfunctional PCs (i.e., PC dissolution). Second, exploring how stress unfolds over time—as opposed to examining a one-time snapshot of stress—allows for a better understanding of the differences between a short-lived increased experience of stress and a prolonged chronic experience of high stress levels (Miller et al., 2007). Further differentiating these reactions is important because people who experience chronic stress are more likely to become clinically depressed, develop chronic diseases, or experience symptoms of infection diseases or allergic reactions (Miller et al., 2007).

To fully grasp the complexity of employees' unfolding emotions and stress responses, we also study the role of employees' coping processes in the aftermath of PCB. Coping refers

to ways in which individuals manage events under stressful circumstances (Latack & Havlovic, 1992). Coping involves cognitive, emotional, and behavioral efforts to face environmental as well as psychological demands (Carver et al., 1989). Most studies on coping viewed coping styles as orthogonal variables which indicate that individuals tend to use one type of coping over another (Eisenbarth, 2012). However, such an approach overlooks the multidimensional nature of coping and neglects the possibility that an individual may use more than one coping strategy when confronted with a stressful event (Sideridis, 2006). It has therefore been argued that coping strategies should not be examined in isolation from another, but rather as patterns of coping strategies (i.e., coping profiles) which simultaneously consider the different types of coping strategies (Eisenbarth, 2012). Accordingly, by examining coping in terms of ‘profiles’ (i.e., combinations of coping strategies; Eisenbarth, 2012) and their long-term association with individuals’ psychological functioning, this research provides assistance to professionals involved in the prevention and intervention of various health problems as it identifies risk groups that might show maladaptive profiles of coping (Doron et al., 2014; Kaluza, 2000).

Our study makes different contributions to the literature. First, by seeking to understand within-person processes and fluctuations, we participate in the development of dynamic research in the PC and stress literature. This inclusion of a temporal aspect in PCB processes is a response to recent calls for more time-sensitive and dynamic research in the PC literature (Achnak & Hansen, 2019; Rousseau et al., 2018; Tomprou et al., 2015; Schalk & Roe, 2007). Moreover, our research further extends the PVM (Tomprou et al., 2015) as it goes beyond examining the end states of PCs and investigates the stress recovery process, which stretches out over a period of time. As such, this incorporation of time in theory and research design and the focus on processes, rather than static snapshots, enables us to better explain individuals’ emotional, attitudinal, and behavioral outcomes in their full complexity.

Second, the existing literature on coping is limited by a lack of consistency in the classifications of coping strategies, as well as a dearth of knowledge about long-term associations between coping and psychological distress (Nielsen & Knardhal, 2014). Temporal research on coping is therefore needed to shed light on how coping strategies and individual wellbeing are related to each other over time (Carver & Connor-Smith, 2010). By employing a longitudinal study design in a large-scale sample of employees, the current study extends previous knowledge by adding to the understanding of the profile patterns and long-term correlates of coping strategies. Using a latent profile analysis, we start by exploring whether different subcategories of individuals exist, characterized by specific patterns in their use of coping strategies. We will then assess longitudinal associations between coping profiles and emotional and stress trajectories over time.

Third, by integrating the COR theory into the PVM, we provide further insights into how individual resources play a role in different post-violation outcomes. That is, taking a resource-based perspective and addressing the strategic nature of resource investment in the study of PCB and coping processes allows us to expand on the PVM by not only focusing on single coping strategies as proposed by the model, but rather by investigating an individuals' distinct coping profiles and their differential association with unfolding emotional and stress reactions to PCB perceptions over time.

In what follows, we will first focus on understanding the temporal nature of our focal constructs (PCB, negative emotions, and stress) and aim to theoretically explain why changes in those variables will occur over time. Next, we will hypothesize how PCB, negative emotions and stress dynamically interact across time. Finally, we will illustrate how our focal constructs may unfold differently across different coping profiles.

Dynamic nature of psychological contract breach, negative emotions, and stress

Temporal research begins with an understanding of the role of time (George & Jones, 2000). It is therefore necessary to first conceptualize the dynamic nature of the substantive variables of interest before explaining the predictors of change in those variables (Ployhart & Vandenberg, 2010). Following this recommendation, we start by theorizing about the substantive meaning of time among our focal constructs, i.e., stress, PCB and (negative) emotions. For this, we will draw on different theories, depending on the construct of interest. First, we build on Hobfoll's (1989) COR theory to understand the expected intra-individual variability of stress over time as well as the dynamic nature of PCB. Second, we employ the appraisal theories of emotion (Scherer et al., 2001) and emotion regulation theory (Gross, 1999) to theorize about within-person changes in emotions. Finally, COR theory will also be used to support our hypothesis regarding the dynamic interactions between our three focal constructs over time and our multivariate perspective on coping.

Dynamic nature of stress

We build on COR theory (Hobfoll, 1989) to understand the expected intra-individual variability of stress over time. COR theory begins with the tenet that individuals strive to obtain, retain, foster, and protect those things they value (i.e., resources). Following this, COR theory postulates that stress occurs in any circumstance where (a) valued resources are threatened with loss, (b) valued resources are actually lost, or (c) where there is a failure to gain valued resources after considerable effort. In line with Halbesleben and colleagues (2014) we define resources as anything perceived by the individual to help attain their goals. Loss aversion that leads to resource conservation and the motivation to acquire new resources to achieve goals are the two key processes in COR theory (Hobfoll, 1989; 2001). Individuals will therefore engage in self-regulation processes and invest resources to protect against potential resource loss, to recover from losses, and to gain resources (Baumeister et al., 1998; Vohs & Baumeister,

2004). In view of this dynamic nature of resources, Halbesleben and colleagues (2014) outlined a series of potential resource trajectories over time. According to these authors, depending on the operating resource process (i.e., protecting, gaining, preserving resources), resources will fluctuate over time starting from an individual baseline level. Following the basic principle of COR, resources change over time and so does stress. For example, one of the proposed trajectories depicts a situation in which recovery does not sufficiently replenish resources or the investment of resources does not generate the expected benefits. This situation might lead to employee burnout (Hobfoll & Freedy, 1993). In contrast, a resource trajectory that illustrates an upward trend in resources over time means that the employee is going through a period of tranquility (i.e., low stress) in which resource conservation and acquisition are possible (Halbesleben et al., 2014). Such spirals of resource gain in the form of periods of rest or relief become increasingly important when they follow a stressful episode characterized by resource loss (Hobfoll & Shirom, 1993).

Based on the above, we expect that within-person stress levels will change as resources fluctuate over time. In particular, in line with the resource trajectories outlined by Halbesleben and colleagues (2014), we argue that changes in stress levels over time depend on, among other variables, the operating resource processes. For example, loss cycles leading to a state of depletion (i.e., chronic stress) will be characterized by an increased stress trajectory over time. Conversely, a basic fluctuation in resources (i.e., loss followed by gain through resource acquisition) will display a short-lived increase in stress.

Dynamic nature of psychological contract breach

PCB has taken center stage in PC research because it offers a sound explanation of how PCs shape employees' feelings, attitudes, and behaviors (Conway & Peckan, 2019). In their meta-analysis, Zhao and colleagues (2007) distinguish between two approaches when studying PCB: the first using composite and the second using global measures. Both differ in the degree of

content specification when breach or fulfillment is examined. With composite measures, PCB or PC fulfillment is evaluated by examining the specific inducements within the PC, whereas the focus of global measures lies on employees' overall perceptions of how much the organization has fulfilled or failed to fulfill its obligations. Thus, this research adopts a composite approach when studying the dynamic nature of PCB. More specifically, we examine within-person fluctuations in perceptions of promised and delivered inducements over time. These fluctuations can theoretically result from any of three different scenarios (Hofmans & Vantilborgh, 2019). In a first scenario, perceptions of delivered inducements change over time and may subsequently induce PCB, whereas the perceptions of promised inducements stay constant. This represents Robinson & Morrison's (2000) idea that the PCs are formed upon hiring and remain relatively stable across time. The second scenario occurs when, for example, someone is given more responsibilities and subsequently expects more rewards, but the organization fails to offer these. In this scenario perceptions of delivered inducements remain the same, while perceptions of promised inducements change. Finally, in the third scenario, both perceptions of delivered and promised inducements change, which happens when an employee constantly revises their expectations depending on their day-to-day experiences and additionally perceives changing delivered inducements over time (Hofmans & Vantilborgh, 2019). Recent empirical research (Yang et al., 2020) on the temporal changes in promised and delivered inducements offered evidence for their dynamic nature as well as their dynamic interaction, influencing each other over time.

These fluctuations of promised and delivered inducements can also be understood along COR theory. For instance, the loss of certain resources (e.g., a promotion) might deplete more resources and in return employees might expect greater inducements from their organization to recover those resources. From a COR perspective, these dynamic resources processes could induce fluctuations in PCB over time.

Dynamic nature of emotions

Previous research has shown that emotions vary substantially within people over time (e.g., Fisher & Noble, 2004; Judge et al., 2006). We draw on the appraisal theories of emotion (Scherer et al., 2001) to argue that temporary emotions are mainly caused by one's appraisals of aspects of concurrent events. Appraisal theories suggest that the interpretation individuals make of events will give rise to their emotions (Roseman et al., 1990; Scherer et al. 2001; Siemer et al., 2007; Smith & Lazarus, 1993). As appraisals intervene between situations and an emotional response, different appraisals can account for differences in emotional reactions. In other words, the same person may use different appraisal mechanisms when facing the same (work) event, which subsequently leads to different emotional reactions over time (Nezlek et al., 2008; Roseman & Smith, 2001). Moreover, once an event generates this primary emotional reaction, individuals can engage in emotion regulation to adaptively respond to a given situation. Emotion regulation is a dynamic and time-related process (Cole et al., 2004) and includes all of the conscious and non-conscious strategies an individual uses to increase, maintain, or decrease one or more components of an emotional response (Gross, 1999). The primary aim is to account for our within-person approach of emotions and theorize about *why* this construct can be expected to change over time. A full range of relevant literature on emotion-regulation is outside the scope of this research. For a more integrative review on emotion regulation, we refer to Koole (2009).

In the context of PCs, it can be argued that a disruptive event such as a large discrepancy between perceived obligations and inducements will trigger a strong positive or negative emotional reaction (Morrison & Robinson, 1997). The valence is a function of how the disruption impacts one's goal attainment. Disruptions of the PC that are appraised as being goal consistent will generate positive emotions, whereas those that impede employees' goals trigger negative emotions (Rousseau et al., 2018). In line with this, one can expect that depending on

the context, fluctuations in perceptions of PCB will lead to fluctuations in ensuing emotions over time.

Dynamic interaction between PCB, negative emotions, and stress over time

We draw on COR literature to hypothesize about the dynamic interaction between our focal constructs across time. From a COR perspective, it could be argued that employees evaluate their perceptions of PCB by assessing whether the resources threatened by the PCB are important or not (Hobfoll, 2001). When the outcome of this evaluation points toward a threat of valued resources, employees tend to experience a strong negative emotional reaction (Zhao et al., 2007). For example, if the organization fails to provide reasonable guarantees of short-term employment (i.e., PCB), employees' resources, and potentially their ability to preserve their current personal lifestyle, may be threatened (Restubog et al., 2013). Following COR theory (Hobfoll, 1989; 2001), the negative emotions resulting from this uncertainty will inherently lead employees to experience higher stress levels. Put differently, PCs may be considered as an obligation to exchange resources between two parties (e.g., career development opportunities in exchange for loyalty) and perceiving a PCB implies a threat to or loss of resources since the individual is no longer capable of acquiring or maintaining valued resources. Over time, one can expect that increasing perceptions of PCB will trigger a resource loss process that will be associated with escalating negative emotions. If employees do not allocate their remaining resources towards recovery activities to adequately replenish resources, they will experience accelerated accumulation effects of emotional exhaustion (Halbesleben et al., 2014), which would lead to an increasing stress trajectory over time (Hobfoll & Freedy, 1993).

Hypothesis 1: Changes in perceptions of PCB positively predict changes in stress levels. This relationship is mediated by changes in negative emotions.

Distinct coping strategies in the aftermath of PCB

COR theory proposes that as individuals lose resources, they become more defensive in how they invest future resources, suggesting that they will take steps to ensure the protection of their remaining resources (e.g., Benight et al., 1999; Halbesleben & Bowler, 2007). Research on this principle of strategic resource investment has typically been conducted in the context of coping, suggesting that coping is associated with an investment of resources to stem future resource losses (e.g., Vinokur & Schul, 2002). Different coping strategies can be distinguished depending on the degree in which the stressor (i.e., PCB) is approached or avoided (Carver et al., 1989; Carver & Connor-Smith, 2010). Approach-oriented strategies are characterized by the investment of resources and consist of problem-focused and emotion-focused coping. Problem-focused coping refers to efforts to remove the stressor or diminish its impact and manifests in behaviors like speaking up, seeking information, planning or taking action (Lazarus & Folkman, 1984). In such cases, employees confronted with PCB might speak up and ask their employer to justify the perceived discrepancy and take corrective actions (Parzefall & Coyle-Shapiro, 2011). Emotion-focused coping includes attempts to regulate the emotional distress associated with the loss and involves seeking emotional support and positive reappraisal of the situation (Elfering et al., 2005; Penley et al., 2002). In the case of PCB, employees may communicate their feelings by expressing their disappointment to their supervisor or peers, without necessarily resolving the perceived discrepancy (Boyd et al., 2009; Tomprou et al., 2015).

In contrast to approach-oriented strategies, avoidance strategies allow the individual to avoid the stressor and the related negative emotions and include mental and behavioral withdrawal, consequently conserving resources and/or minimizing future loss (Folkman & Lazarus, 1980; Howard & Cordes, 2010). For example, employees who perceive inequity or unfairness in the workplace might engage in a wide array of withdrawal behavioral responses such as withholding effort or work quality, absenteeism or eventually leaving the organization

(Adams, 1965; DeBoer et al., 2002). Mental disengagement minimizes the seriousness or salience of the perceived discrepancy and involves lowering one's commitment, psychologically escaping the situation, and thinking of leaving the organization altogether (Blalock & Joiner, 2000; Schmitt & Dörfel, 1999; Zhao et al., 2007).

Since problem-focused coping strategies aim at solving the problem and improving the situation directly, it is often considered the most effective form of coping. Research has linked this type of coping to increased wellbeing, lower stress and improved performance (Brown et al. 2005; Gaudreau & Blondin 2004; Shimazu & Schaufeli, 2007), whereas emotion-focused, or avoidant coping tends to be associated with increased distress and other negative consequences (e.g., Compas et al. 2001). An explanation for the ineffectiveness of these strategies in reducing stress is that they only change the negative feelings but do not change the threat's existence nor its impact (Aldwin & Revenson, 1987; Carver & Connor-Smith, 2010). Despite their empirical advancements, these studies mainly explore the relationships between one coping strategy and ensuing individuals' health-related outcomes. However, this approach reflects that individuals are prone to one type of coping over another and neglects the multidimensional nature of coping and thus the possibility that people may and typically do use more than one coping strategy when confronted with stressful events (Doron et al., 2014; Sideridis, 2006). As framed by Eisenbarth (2012), *'Coping strategies likely operate in conjunction with one another and it may be valuable to consider the profile or combination of strategies endorsed by individuals rather than simply examining coping strategies discretely or in isolation of one another'* (p. 485). This tendency to use multiple coping strategies can also be understood along COR theory. As mentioned above, as individuals lose resources, they become more defensive in how they invest future resources. To protect remaining resources, they will invest in behaviors that are more strategic in their use of resources (Halbesleben, 2010; Halbesleben et al., 2014). One way of realizing this is to combine different coping

strategies to manage the resource loss process induced by PCB. Based on this and in line with previous research examining multiple coping strategies (e.g., Gaudreau and Blondin, 2004; Wijndaele et al., 2007; Eisenbarth, 2012; Doron et al., 2014), we propose a multivariate perspective on coping by studying coping strategies in terms of ‘profiles’.

Profiles of coping and trajectories of negative emotional and stress reactions to PCB

Our first aim is to identify different coping profiles based on the different combinations of coping strategies. Although this analytic technique is by nature exploratory and descriptive, we expect to find profiles similar to those reported by Steele and colleagues (2008), that is, “high copers” (i.e., high levels of all three types of coping), “active copers” (i.e., high levels of emotion- and problem-focused coping, but low levels of avoidance coping), “indiscriminant copers” (i.e., moderate levels of all the types of coping), and “low copers” (i.e., low levels of all three types of coping).

Second, we intend to examine how different coping profiles are associated with different emotional and stress trajectories over time. Previous research on coping profiles has indicated that a combination of approach-oriented coping strategies (i.e., problem- and emotion-focused coping) may be more beneficial than a combination of approach and avoidant coping strategies. For example, Steele et al.’s “active copers” reported the fewest symptoms of distress and highest levels of prosocial competencies. Likewise, Doron et al. (2014) identified three different coping profiles and investigated their relations to state-anxiety and depression. All three profiles were associated differently with psychological adjustment and health outcomes, with the most favorable outcomes experienced by “adaptive copers” (i.e., high levels of positive reappraisal, positive refocusing and perspective taking). These studies show that distinctive coping profiles were associated differently with psychological adjustment and health outcomes.

Research question 1: Different coping profiles can be distinguished depending on the different combinations of coping strategies.

Research question 2: Different coping profiles are associated differently with individuals' unfolding negative emotional and stress reactions to PCB over time.

Method

Ethics approval

This study was approved by the human sciences ethics committee (ECHW2015-16) of the first author's university. All participants signed a written informed consent prior to participation.

Participants

We used a combination of two different samples: (1) a sample of Dutch-speaking employees working in various companies using a convenience sampling technique and (2) an online paid sample of English-speaking employees from diverse organizations recruited by Qualtrics. Both samples were contacted via the online survey software Qualtrics, asking them to fill out a general questionnaire including demographic variables. Because a potential limitation of recruiting participants through an online paid panel is that participants would be more motivated by money than giving quality responses, we included instructed response items (e.g., for this item, please indicate “totally agree”) throughout each survey so that respondents who failed to correctly fill out at least five of these check-items were removed. Our final sample contained 1077 participants, of whom 47.16% were female. The average age of participants was 45.20 years ($SD = 11.77$) and participants had an average of 11.09 years of job experience ($SD = 9.77$). Most participants had a secondary school degree (36.65%) or a bachelor's degree (34.79%), followed by master's degrees (16.19%), primary school degrees (8.37%), PhDs (3.34%), and bachelor-after-bachelor degrees (0.51%). Because we collected longitudinal data, we assessed the presence of non-random attrition over time following guidelines of Goodman and Blum (1996). Results suggested that none of the longitudinally measured variables in our

model (i.e., breach perceptions, negative emotions, pressure, and threat) were significantly related to attrition. As such, we can be reasonably confident that attrition will not influence the results of the latent growth models.

Procedure

The present study employed a longitudinal design because this captures within-person patterns of change and makes it possible to determine the directions of relationships, thus allowing for a better understanding of the causal processes over time (de Lange et al. 2003). First, participants received an online general questionnaire to collect information about their personal and professional situation. After this and for six consecutive months, employees were asked to complete an online questionnaire at the end of each month assessing their perceptions of PCB, negative emotions, stress levels and corresponding coping strategies. We chose for a 1-month time lag to supplement existing dynamic PCB research that used rather short time-intervals such as daily (e.g., Achnak et al., 2018; Conway & Briner, 2002) or weekly questionnaires (e.g., Griep et al., 2016; Solinger et al., 2015) and to further extend our empirical knowledge on the duration of effects of the focal variables. We believe that by exploring the implications of a longer time-lag, we contribute to the sharpening of the temporal lens within PC and stress research to answer important questions such as when, for how long, and how often to measure (key) variables (Mitchell & James. 2001).

Participants were contacted on the last Monday of the month and were required to complete the questionnaire before the Sunday of the same week. Only employees who had been actively involved in organizational activities during that month were required to fill out the surveys. All other employees were directed to the end of the survey. Depending on their mother tongue, participants received a Dutch or an English questionnaire. We used a translation and back-translation process for the Dutch surveys after which inconsistencies were discussed and

resolved. Moreover, all items and scales were counterbalanced to rule out potential order effects (Fisher & To, 2012). All data were fully anonymized prior to analyses.

Measures

Psychological contract breach was measured using a direct comparison approach (Turnley & Feldman, 1999; Montes & Irving, 2008). We presented respondents with 13 commonly studied PC items (e.g., “Providing a reasonable workload”; PSYCONES, 2005) and asked them to indicate to what extent they actually received each of these inducements since the beginning of the month compared to the extent to which each of these inducements was previously promised to them, on a five-point Likert scale ranging from 1 (received much less than promised) to 5 (received much more than promised). As we have nested data, we calculated within- and between-person ω values to estimate reliability. We found that reliability of the breach scale was excellent at both the within- and between-person level ($\omega_{\text{within}}=.88$; $\omega_{\text{between}}=.96$).

Negative emotions were operationalized using the 20-item job-related affective well-being scale (JAWS; Van Katwyk et al., 2000). Respondents rated the extent to which they felt each of the emotions (e.g., anger, frustration, excitement, anxiety) since the beginning of the month on a seven-point Likert scale, ranging from 1 (minimally to not at all) to 7 (to a very great extent). Positively worded items were reverse-coded. We found that reliability of the negative emotions scale was excellent at both the within- and between-person level ($\omega_{\text{within}}=.89$; $\omega_{\text{between}}=.96$).

Stress was measured using the 15-item Stress-in-General Scale (Stanton et al., 2001). This questionnaire consists of two subscales: pressure (seven items) reflects job stress resulting from typical daily stressors, whereas threat (eight items) reflects a high or overwhelming degree of stress. Respondents indicated the extent to which their experience of stress since the beginning of the month reflected pressure-related (e.g., demanding, pushed, hectic) and threat-

related adjectives (e.g., overwhelming, irritating, nerve-wrecking) on a nine-point Likert scale ranging from 1 (not at all) to 9 (definitely). Positively worded items were reverse-coded. We found that reliability of the pressure scale was excellent at both the within- and between-person level ($\omega_{\text{within}}=.89$; $\omega_{\text{between}}=.95$). Likewise, the reliability of the threat scale was excellent at both the within- and between-person level ($\omega_{\text{within}}=.90$; $\omega_{\text{between}}=.93$).

Coping strategies were measured using a shortened version (12-items) of the Brief COPE scale (Carver, 1997) and were rated by a four-point Likert scale, ranging from 1 (“I haven’t been doing this at all”) to 4 (“I have been doing this a lot”). The scale consisted of three subscales (each comprising four items) assessing problem-focused coping (e.g., “I’ve been concentrating my efforts on doing something about the situation I’m in”), emotion-focused coping (e.g., “I’ve been getting emotional support from others”), and avoidance-oriented coping (e.g., “I’ve been turning to work or other activities to take my mind off things”). The reliability estimates of the problem-focused coping scale ($\omega_{\text{within}}=.84$; $\omega_{\text{between}}=.98$), the emotion-focused coping scale ($\omega_{\text{within}}=.74$; $\omega_{\text{between}}=.99$), and the avoidance-oriented coping scale ($\omega_{\text{within}}=.73$; $\omega_{\text{between}}=.75$) were excellent.

Analyses

All analyses were performed in R version 3.6.1 (R Core Team, 2019) and Mplus version 8 (Muthén & Muthén, 1998-2017). We examined longitudinal measurement invariance prior to testing our hypotheses and found evidence for strong (i.e., metric) invariance for the breach perceptions, negative emotions, and stress (threat and pressure) subscales¹. To test Hypothesis 1, we ran latent growth models with an intercept and a linear slope for PCB, negative emotions,

¹ We estimated three models for each variable (M1: configural invariance with correlated uniqueness, M2: weak invariance [i.e., metric invariance], and M4: strong invariance [i.e., scalar invariance]). Models were compared using CFI ($\Delta\text{CFI} > .01$ indicates non-invariance) (Cheung & Rensvold, 2002). CFI values for breach perceptions (M1: CFI = 1.00; M2: CFI = 1.00; M3: CFI = 1.00), negative emotions (M1: CFI = .996; M2: CFI = .996; M3: CFI = .997), stress-pressure (M1: CFI = .994; M2: CFI = .992; M3: CFI = .992), stress-threat (M1: CFI = .992; M2: CFI = .993; M3: CFI = .993) indicated that there was evidence for strong longitudinal measurement invariance.

and stress. Given that our stress measure contains two distinct subscales, we estimated separate models for each subdimension—pressure and threat. To test for mediation effects, we used the product-of-coefficients approach, testing the indirect effect of the intercept of PCB on the intercept of the stress subdimension via the intercept of negative emotions and the indirect effect of linear change in PCB on linear change in the stress subdimension via linear change in negative emotions. To test research question 1, we performed a latent profile analysis (LPA) in Mplus. To assess the robustness of the latent profiles, we randomly divided our sample into two subsamples, running LPA in each subsample and comparing the solutions. The LPA used the aggregate scores for problem-focused coping, emotion-focused coping, and avoidance coping across the six measurement moments. To select the number of latent classes, we inspected the BIC, ABIC, CAIC, bootstrapped loglikelihood ratio test, VLMR test, and entropy (Nylund-Gibson & Choi, 2018). Class membership of the selected solution was saved in the original dataset for further analyses. To test research question 2, we used mixture latent growth analysis. Essentially, this means that we reran the latent growth models used to test Hypothesis 1, but this time adding class membership obtained from the latent profile analysis as a known grouping factor. Mediation effects were tested in each latent class using the product-of-coefficients approach.

Results

Descriptive statistics

Means, standard deviations, intraclass correlation coefficients (ICC), within-person correlations and between-person correlations can be consulted in Table 1. The ICC values suggest that there is a substantial amount of within-person variance over time for each variable.

Table 1.

Means, standard deviations, intraclass correlation coefficients, and sample-size weighted within- and between-person correlation coefficients.

Variable	1.	2.	3.	4.	5.	6.	7.
1. Breach	1	.40	.50	.35	.18	.03	.04
2. Negative emotions	.25	1	.71	.54	.59	.40	.36
3. Threat	.28	.59	1	.83	.46	.33	.33
4. Pressure	.16	.43	.78	1	.34	.31	.34
5. Avoidance-focused coping	.05	.45	.32	.23	1	.62	.56
6. Emotion-focused coping	-.06	.37	.23	.18	.55	1	.68
7. Problem-focused coping	-.02	.36	.29	.30	.51	.55	1
<i>M</i>	-.06	2.33	2.82	3.20	3.89	4.14	4.60
<i>SD</i>	.62	.85	.80	.83	1.41	1.61	1.68
ICC	.40	.47	.42	.42	.34	.46	.37

Notes. Correlations above diagonal are sample-size weighted between-person correlations.

Correlations below diagonal are sample-size weighted within-person correlations.

Latent growth models

Figure 1. Parameter estimates for the latent growth model of threat (left panel) and pressure (right panel). Standard estimates between parentheses. *: $p < .05$, **: $p < .01$, ***: $p < .001$.

Figure 1 shows the parameter estimates of the latent growth models for pressure and threat. As can be seen, in both models the intercept of breach related positively and significantly with the intercept of negative emotions, which in turn related positively and significantly with the intercept of pressure and threat respectively. Likewise, the slope of breach was positively and significantly related to the slope of negative emotions, which in turn was positively and significantly related to the slope of pressure and threat. In the model with pressure, we found that there was a significant positive indirect effect of the breach intercept on the pressure intercept, via the intercept of negative emotions ($est. = .51, se = .08, p < .001$) and a significant positive indirect effect of the breach slope on the pressure slope, via the slope of negative emotions ($est. = .62, se = .26, p = .017$). Hereby confirming Hypothesis 1.

Latent profile analysis of coping

Table 2.

Fit indices of latent profile analysis models for the first and second randomly drawn subsample.

K	LL	BIC	ABIC	CAIC	BLRT	VLMRT	entropy
2	-2275.778	4613.210	4581.471	4572.029	0	0.0022	0.675
3	-2199.855	4486.026	4441.592	4428.621	0	0.0014	0.776
4	-2167.447	4445.871	4388.742	4372.391	0	0.5106	0.831
5	-2142.644	4420.927	4351.102	4331.522	0	0.8847	0.856
2	-2331.747	4725.799	4694.057	4683.937	0	0.0000	0.733
3	-2252.919	4593.065	4548.627	4534.690	0	0.0408	0.756
4	-2220.728	4553.604	4496.470	4478.855	0	0.5181	0.782
5	-2203.621	4544.313	4474.482	4453.329	0	0.1833	0.766

Notes. LL = Loglikelihood. BIC = Bayesian Information Criterion. ABIC = Sample-size adjusted

Bayesian Information Criterion. CAIC = Consistent Akaike Information Criterion. BLRT = Bootstrap likelihood ratio test p-value. VLMRT = Vuong-Lo-Mendell-Rubin likelihood ratio test p-value.

We performed LPA on the three coping dimensions (problem-focused coping, emotion-focused coping, and avoidance coping) in two randomly drawn subsamples. In each subsample, we estimated and compared a two-, three-, four-, and five-class solution to each other. Table 2 shows the fit indices of each solution in both subsamples. We first inspect the information criteria (BIC, ABIC, CAIC) and pick the model where there is a diminishing decrement in value for each added class (Nylund-Gibson & Choi, 2018). In both samples, we notice that the information criteria values drop sharply when comparing a 2-class to a 3-class solution, but the decreases slow down considerably when moving further to 4- and 5-class solutions. Next, we inspect the relative fit indices (BLRT and VLMRT) which offer p -values comparing a model with k classes to a model with $k - 1$ classes. A significant p -value suggests that the model with k classes offers a better fit than the model with $k - 1$ classes. In both samples, we notice that the BLRT suggests that a model with 5 classes is optimal, while the VLMRT suggests that a model with 3 classes is optimal. Overall, these indicators suggest that a 3-class solution appears best in both subsamples. The entropy value can be used to assess the quality of classification of individual cases into classes for the 3-class solution, with values $> .80$ indicating a good classification (Nylund-Gibson & Choi, 2018). We notice that the 3-class solutions fall just short of this .80 recommendation. To interpret the 3-class solution, we plot the estimated mean values for the three types of coping in both subsamples (see Figure 2). It is clear that the 3-class solution leads to similar results in both subsamples. Class A, which we label “Low copers”, consists of individuals who score low on all three coping types. Class B, which we label “Average-problem-focused copers”, consists of individuals who score average on avoidance and emotion-focused coping, and who score somewhat higher on problem-focused coping. Class C, which we label “High-problem-and-emotion-focused copers”, score high on all three coping types, but score relatively higher on problem- and emotion-focused coping than on avoidance coping.

Figure 2. Mean scores on three coping types for the 3-class solutions of the LPA in subsample 1 and subsample 2.

Mixture latent growth models

Next, we added a mixture component to the latent growth models by adding the 3-class membership obtained in the LPA as a known group factor. Figure 3 shows the latent growth model parameters for each class, while Table 3 shows the estimated indirect effects for each class and each subdimension of stress. As can be seen in this table, we find low copers (class A) have indirect effects of breach on threat, via negative emotions. These indirect effects manifest themselves both when looking at the intercepts and at the slopes. For average-problem-focused copers (class B), we find an indirect effect of the slope of breach on the slope of pressure, via the slope of negative emotions. Finally, for high-problem-and-emotion-focused

copers (class C), we find indirect effects of breach on pressure and threat, via negative emotions, but each time only via the intercepts of these variables.

Table 3.

Indirect effects based on mixture latent growth models.

Class	Indirect effect	Estimate
A	Breach intercept → Negative emotions intercept → Pressure intercept	2.05 (1.16)
	Breach slope → Negative emotions slope → Pressure slope	1.19 (1.04)
	Breach intercept → Negative emotions intercept → Threat intercept	.03 (.01) ***
	Breach slope → Negative emotions slope → Threat slope	.81 (.33) *
B	Breach intercept → Negative emotions intercept → Pressure intercept	1.39 (.93)
	Breach slope → Negative emotions slope → Pressure slope	1.06 (.51) *
	Breach intercept → Negative emotions intercept → Threat intercept	.52 (.46)
	Breach slope → Negative emotions slope → Threat slope	1.43 (1.13)
C	Breach intercept → Negative emotions intercept → Pressure intercept	.42 (.17) *
	Breach slope → Negative emotions slope → Pressure slope	.01 (.01)
	Breach intercept → Negative emotions intercept → Threat intercept	.34 (.17) *
	Breach slope → Negative emotions slope → Threat slope	.08 (.11)

Notes. Class A = Low Copers, Class B = Average-problem-focused copers, Class C = High-problem-and-emotion-focused copers.

Discussion

In the present work, we explored the dynamic interaction between unfolding trajectories of PCB, negative emotions and stress. More specifically, we proposed that changes in employees' PCB over time would predict changes in negative emotions and, in turn, changes in stress reactions over time. Additionally, the present study aimed to determine whether individuals could be differentiated based on coping profiles, and further assessed whether emotional and stress reactions to PCB over time varied as a function of these profiles.

Figure 3. Parameter estimates of mixture latent growth models for pressure and threat subdimensions of stress for each

Our results provided evidence for a dynamic interaction between employees' unfolding PCB, negative emotions and stress. Moreover, we found empirical evidence to support the proposition that individuals combined various coping strategies differently (i.e., different coping profiles) when dealing with stressful events. Further, our findings demonstrated that different profiles of coping were associated with different emotional and stress reactions to PCB over time.

Theoretical implications

Our findings make several important theoretical contributions to the dynamic PC and coping literature. According to Ployhart and Vandenberg (2010), developing a complete theory of change requires that researchers explain the form of change (e.g., linear, nonlinear), the predictors of change, the level of change (e.g., intra-unit, inter-unit), and why the change occurs. In the present study, we were able to contribute to three of these goals, namely, the reason behind change, the predictors of change and the level of change. More specifically, our results indicated that PCB, negative emotions and stress vary substantially within-person over time. Although prior research had already demonstrated the dynamic nature of negative emotions and stress (e.g., Mayne & Ramsey, 2001; Fuller et al., 2003), time-sensitive research on PCB fluctuations and its relation to unfolding reactions over time is still in its infancy. We believe this is an important contribution to the temporal PC literature as studying within-person processes is considered as one of the major challenges for contemporary PC research (Conway & Briner, 2009; Rousseau et al., 2018). Furthermore, we found that when confronted with increasing levels of PCB over time, individuals report growing threat and pressure on the job due to their escalating negative emotions over time. These findings suggest that beyond immediate stress reactions to PCB (Achnak et al., 2018), individuals might experience an escalation of negative reactions over time. Differentiating immediate and long term reactions

is important since chronic stress severely impacts individual's wellbeing (i.e., depressed, chronic diseases, symptoms of infection diseases or allergic reactions; Miller et al., 2007).

Regarding coping strategies, the latent profile analysis of coping in two randomly selected subgroups revealed the existence of three coping profiles within our sample (i.e., low copers, average-problem-focused copers, high-problem-and-emotion-focused copers). By demonstrating that individuals use a combination of different coping strategies, these results complement existing coping literature and reinforce studies that have studied coping in terms of 'profiles' (e.g., Doron et al., 2014; Eisenbarth, 2012; Gaudreau and Blondin, 2004; Sideridis, 2006). Although Steele and colleagues (2008) found four coping profiles within their sample, their results share common threads with our profiles. Namely, Steele and colleagues' low copers were analogous to our namesake subgroup in that they used relatively few of the available coping strategies. Next, Steele and colleagues' high copers were similar to our high-problem-and-emotion-focused copers as they endorsed high levels of all three coping types, but relatively higher on emotion- and problem-focused strategies compared to avoidance coping. Further, the distinguishing factor between our "average-problem-focused copers" and Steele et al.'s indiscriminate copers was that the former used higher levels of problem-focused strategies than the latter.

Beyond identifying different coping profiles, this study examined whether these subgroups differed significantly for individuals' unfolding negative emotional and stress reactions to PCB over time. Our results indeed support the idea of differential trajectories depending on coping profiles. As such, high-problem-and-emotion-focused copers reported better psychological functioning in terms of absence of growing negative emotions and stress patterns over time. In particular, it seems that individuals falling into this coping profile experienced a short-lived negative emotional and stress reaction in relation to PCB but reported no escalation in reactions over time. Hence, this profile of coping serves as a buffer against an

aggravation of maladaptive responses over time. However, these findings contradict previous research examining coping in terms of profiles. For instance, Steele and colleagues (2008) analogous profile of “high copers” displayed more self-reported symptoms of maladjustment and lower levels of self-reported prosocial competencies than “active copers” (i.e., high on emotion- and problem-focused coping and low on avoidance). Similarly, Freese and colleagues (2018) found that individuals whose coping profile is characterized by high scores on all coping strategies reported high levels of depressive symptoms and suicidality. A plausible explanation for these contradictory results is the different timeframe in which health-outcomes were measured. Most research on coping profiles used cross-sectional designs in which coping profiles were related to outcomes at a specific point in time (e.g., Doron et al., 2014; Freese et al., 2018; Gaudreau & Blondin, 2004; Steele et al. 2008). However, one can argue that coping strategies that aid current functioning may not always display the same advantage over time (Tolan et al., 2002). For instance, Sandler and colleagues’ (1994) study showed that even though avoidance coping was associated with anxiety at the time of the initial stress, it was not related to anxiety levels over time. Further, using distraction as a coping mechanism was not linked to distress at the time of occurrence but was related positively later on. In the same vein, there are reasons to believe that coping strategies associated to current functioning may display a different relation to change in functioning (Kliewer, 1997; Tolan et al., 2002). For example, Sandler et al. (1994) demonstrated that support seeking was negatively related to depression but positively to change in depressive feelings over time. These findings highlight the necessity to consider the role of time as it appears that depending on the timeframe used to measure outcomes (i.e., immediate effects versus longer term relations), other conclusions can be drawn. Additionally, it should be noted that while we compare our results with existing research on coping profiles, not all outcome variables operate in the same way. For instance, we have measured negative emotions and stress as outcome variables, whereas previously mentioned

coping researchers have focused on other mental health indicators such as depressive symptoms and suicidality. One might expect different operating mechanisms depending on the specific mental health indicator under study which might also explain the contradictions in results.

A similar explanation can be given to our results on low copers that contradicts previous research on coping profiles. Our findings suggest that low copers were associated with the lowest levels of psychological functioning over time. In particular, when confronted with increasing levels of PCB over time, individuals who use low levels of all three types of coping report growing threat on the job due to their escalating negative emotions. According to Stanton et al. (2001) high levels on the threat-subscale indicate more serious levels of stress (i.e., high and overwhelming levels of stress). These results are in contrast with previous studies on coping profiles with a similar profile categorization. For example, Doron et al.'s (2014) students considered as being "low copers" were associated with lower levels of stress and more healthy behaviors. Similarly, Smith and Wallston's (1996) patients using low levels of coping strategies experienced high levels of psychological adjustment. Again, here both studies were conducted using a cross-sectional design, hence, not allowing to capture the relationship between coping profiles and within-person changes in health-related outcomes over time.

Finally, it appears that average-problem-focused copers report growing pressure on the job generated by escalating negative emotions due to increasing levels of unfulfilled obligations. As the pressure-subscale indicate less serious levels of stress (i.e., job stress resulting from typical daily stressors) compared to the threat-subscale, these copers are associated with better psychological functioning compared to low copers. Nevertheless, these findings bring an important nuance in the generally accepted idea that problem-focused strategies will inherently lead to better outcomes. Indeed, previous research has demonstrated that the process of problem-focused coping can have aversive effects on one's health and

behavior (Cohen & Spacapan, 1978; Lee-Baggley et al., 2005). Thus, although problem-focused coping might appear adaptive in the short run, it could become maladaptive in the long run due to the lack of opportunities to recover from the resource loss associated with the continuous use of draining coping efforts (Schaufeli & Bakker, 2004). Similarly, Hobfoll's COR theory argues that, as resources are interrelated, if coping efforts do not lead to gains to offset resource deterioration, resource depletion will inevitably be accelerated and aggravated (Hobfoll, 2001; Westman et al., 2005). Hence, to increase the advantage of problem-focused coping, individuals need to recover and replenish their (energy) resources that have been depleted by attempts to actually overcome the stressor (Shimazu & Schaufeli, 2007).

Practical implications

The present study shows that increasing perceptions of unfulfilled obligations may lead to escalating psychologically dysfunctional states over time. These findings have important implications for practice. First, as psychological contracts are closely related to individual's perceptions of organizational justice (Cropanzano et al., 2002), managers in organizations should be aware of these perceptions and consider employees' perspective when making organizational decisions that may be viewed by the employees as yielding negative consequences. This could be, for example, achieved by giving explanations for change and giving employees the chance to participate in decision-making processes (Bies, 1987). Moreover, research has shown that organizational interventions and social accounts, such as apologies or compensation, may also help to reduce the experience of negative emotions in the aftermath of PCB (Lester et al., 2007). Hence, early organizational interventions may serve as a buffer against a chronically stressed workforce resulting from increased perceptions of PCB over time.

Second, our findings can provide practical insights to HR professionals responsible for career counseling. Counselors who assist employees need a solid understanding of what the PC

consists of and what the negative consequences of PCBs are. Our results show that increasing perceptions of PCB can deteriorate one's psychological wellbeing, thus threatening the continuity of an employee's career. Because of the increasing competitive pressures in the professional environment and incessant organizational changes, it becomes more and more challenging for organizations to fulfill employees' psychological contracts (Rousseau, 1995). These trends and the inherently subjective nature of PCs make it even harder to prevent PCBs (Restubog et al., 2013). We therefore argue that employees should be coached to learn to regularly discuss and clarify mutual expectations about obligations which will in part reflect career-related promises, to prevent the content of the PC from remaining largely unspecified and implicit. This also avoids the pitfall of not being able to determine whether a PCB is the result of unrealistic expectations or management failure to deliver on promises (Cullinane & Dundon, 2006), which might serve as valuable information for future career decisions and career advancement expectations. Moreover, previous research demonstrated that stress management is more effective when the intervention focuses both on the individual and the organization (Kompier et al., 2000; McVicar, 2003). In line with this, we argue that employees can also be trained to be aware of and, if needed, to adapt their coping choices when facing an aversive work event. As such, learning to apply adequate cognitive reappraisal strategies that allow effective down-regulation of negative emotions emerging from PCB, while still taking actions to address the problem, may serve as important buffers against high stress (Bakker et al., 2003; Gross & Muñoz, 1995).

Third, studying coping in terms of profiles instead of single strategies allows for distinguishing subgroups and their association with psychological functioning over time. Therefore, this research may provide valuable assistance to professionals involved in the prevention and intervention of various health problems since risk groups that might show

maladaptive profiles of coping in the long run can be identified (Doron et al., 2014; Kaluza, 2000).

Limitations and future research

While the present study took significant steps toward a better understanding of dynamic PC processes and individuals' coping, it is not without limitations. First, despite a longitudinal design and an analytic approach that can support causal inferences, we cannot definitively conclude a causal relationship between changes in PCB, negative emotions, and stress. Future research should therefore replicate our findings by using an experimental design in order to draw causal conclusions. Second, all variables were measured using self-reports, which might raise concerns about common method bias and social desirability (Podsakoff et al., 2012). However, we tried to reduce risks pertaining to social desirability by guaranteeing confidential and discrete participation. Moreover, we aimed to minimize concerns about common method bias by using time-lags, and by presenting all scales in a random order. Furthermore, previous studies show that self-reports are less problematic when the focus lies on within-person differences (Beal, 2012; Beal & Weiss, 2003). A final limitation concerns the use of an online paid participants panel. It can be argued that respondents would not respond honestly or reliably to the questionnaire as they might be primarily motivated by payment. However, to increase the quality of our data, we included instructed response items, specifically "check-items" (e.g., for this item, please indicate "totally agree") throughout each survey so that respondents who failed to correctly fill out at least five of these check-items were removed. Nevertheless, we encourage future research to replicate our findings by using an organizational sample to support their validity and reliability.

Even though the coping profiles we found in our research are similar to previous studies, our results concerning the relationship between those, and individuals' psychological functioning contradict previous research. We argue that these inconsistencies might result from

the different timeframe in which health-outcomes were measured (i.e., immediate effects versus longer term relations). These findings highlight the necessity for future research to consider the role of time as it appears that depending on the timeframe used to measure outcomes, other conclusions can be drawn (Tolan et al., 2002). Moreover, as previously mentioned, we argue that different mechanisms might be operating depending on the specific mental health indicator under study. Future research should therefore also study the specific underlying mechanisms when examining mental health outcomes to better understand their relationship with coping profiles over time.

Finally, in the same way as we analyzed different coping profiles, future research can also examine how individuals can be classified into different PCB profiles depending on which within-person type of fluctuations in perceptions of promised and delivered inducements over time takes place. More specifically, the different scenarios we have presented in the introduction can represent different PCB profiles and can potentially explain different psychological functioning outcomes over time.

Conclusion

Using a longitudinal design, this study adds to a growing literature on dynamic PC and coping. Our results indicated that when confronted with increasing levels of PCB over time, individuals report growing threat and pressure on the job due to their escalating negative emotions. Moreover, the latent profile analysis of coping performed in two randomly selected, complementary subgroups revealed the existence of three coping profiles within our sample (i.e., low copers, average-problem-focused copers, high-problem-and-emotion-focused copers). Additionally, we found evidence for differential trajectories of negative emotional and stress reactions to PCB depending on coping profiles. Our findings revealed that individuals endorsing high levels on all three types of coping but relatively higher levels on emotion-focused and problem-focused coping compared to avoidance coping were associated with the

most favorable psychological functioning over time, namely no escalation in emotional and stress reactions over time. In contrast, individuals endorsing low levels on all three types of coping reported less favorable psychological functioning in the long term.

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