

**The Older the Better! Age-Related Differences in
Emotion Regulation after Psychological Contract Breach**

P. Matthijs Bal*

Priscilla Smit

Erasmus University Rotterdam, the Netherlands

* Correspondence: Matthijs Bal, Department of Work and Organizational Psychology,
T13.36, Erasmus University Rotterdam, P.O. Box 1738, 3000 DR, Rotterdam, The
Netherlands. E-mail: p.bal@fsw.eur.nl; 0031(10)4089588.

Paper accepted for publication in Career Development International.

**The Older the Better! Age-Related Differences in
Emotion Regulation after Psychological Contract Breach**

Abstract

Purpose: The aim of this paper was to investigate the role of emotion regulation and age in reactions to psychological contract breach towards positive and negative affect. We expected that in the context of contract breach, reappraisal emotion regulation mitigate the negative relation with affect. Moreover, based on lifespan theory, suppression emotion regulation was expected to be important for younger workers, because older workers have learned how to express themselves appropriately at the workplace. Consequently, suppression would mitigate the relations of contract breach with well-being only among younger workers, while it strengthened the relation for older workers.

Design: Data were collected among 163 employees working in various Dutch organizations. Moderated regression analyses were used to test the hypotheses.

Findings: Reappraisal mitigated the relation of contract breach with positive affect, and suppression mitigated the relations of contract breach with positive affect only among younger workers, while for older workers with high suppression the relations were accentuated. We also found that contract breach was more strongly related to negative affect for younger workers than for older workers.

Research Implications: Reactions towards psychological contract breaches are influenced by the emotion regulation strategies people employ. Especially reappraisal is important to maintain optimal levels of affect, while suppression is detrimental especially for older workers.

Originality/value: This paper is the first study in which emotion regulation strategies are investigated in the context of psychological contract breaches. The paper presents novel

insights into how reactions to contract breaches are modified through emotion regulation strategies and age.

Keywords: Psychological Contract Breach, Emotion Regulation, Suppression, Reappraisal, Affect, Older Workers.

Categorization: Research Paper

The aging workforce presents an increasing challenge for organizations in the next 20 years (Peterson and Spiker, 2005). Because of decreasing fertility rates, increased life expectancy, and aging of the baby boom generation there are currently more older workers on the labor market. Consequently, governments, such as the European Commission (2006), encourage employees to continue working, even beyond retirement age. Despite these demographic changes and governmental encouragements to stimulate labor participation of older workers, few organizations actively prepare for these changes (Kanfer and Ackerman, 2004; Ng and Feldman, 2008). This may be partly due to the relative scarce knowledge available on how older workers differ from younger workers. Yet recent research has shown that the employment relationship is experienced differently among workers of different ages (Bal, De Lange, Jansen and Van der Velde, 2008, 2011). For instance, older workers tend to react less intensely to perceptions of the psychological contract than younger workers (Bal *et al.*, 2008; Ng and Feldman, 2009). Previously, research has primarily focused on psychological contract breach, which refers to the employee's perception that the employer did not fulfill its promises and obligations (Rousseau, 1995). Because older workers better know when to use specific emotion regulation skills, they tend to react differently to negative events in the workplace, such as contract breach (Bal *et al.*, 2008; John and Gross, 2004).

Despite these earlier results, there are a number of questions that arise from these studies on age-related differences in reactions to psychological contracts. First, as research has shown that older workers react differently to contract breach (Bal *et al.*, 2008, 2011), it is important to investigate the processes through which these changes take place. For instance, Ng and Feldman (2009) presented in their conceptual paper theoretical arguments based on socio-emotional selectivity theory (Carstensen, 2006) for a less intense effect of psychological contract breach on attitudinal and behavioral outcomes among older workers. They suggested that older workers become better in regulating their emotions, and therefore will react

differently to negative events on the workplace, such as contract breaches. This reasoning is consistent with work of Gross and colleagues (1998, 2001, Gross *et al.*, 1997; Gross and John, 2002), who found that older people are better in expressing their emotions after negative events than younger people. However, until date, no study has investigated actual emotion regulation strategies people use in relation to psychological contract breaches (John and Gross, 2004). Second, although previous meta-analyses have shown that psychological contract breach may impact job attitudes and work behaviors (Bal *et al.*, 2008; Zhao, Wayne, Glibkowski and Bravo, 2007) there is very little knowledge on how emotion regulation strategies interact with contract breaches in relation to the level of experienced affect (Conway, Guest and Trenberth, 2011). Therefore, this study focuses on the interactive effects of age, emotion regulation strategies and psychological contract breach in relation to both positive and negative affect (Barrett and Russell, 1998; Yik, Russell and Barrett, 1999). On the one hand, positive affect reflects the degree to which a person feels enthusiastic, active and alert, while on the other hand, negative affect refers to a general dimension of distress and unpleasant engagement (Watson, Clark and Tellegen, 1988). The two factors represent different affective state dimensions, both targeting the activation dimension of affect structure (Barrett and Russell, 1998; Yik *et al.*, 1999).

The current study contributes to previous research in the following ways. First, the study contributes to understanding of the effects of psychological contract breach by investigating the relations with affect. Second, and more importantly, we investigate the underlying processes of age-related changes in the reactions to psychological contract breach (Bal *et al.*, 2008; Ng and Feldman, 2009). We will show that the emotion regulation strategies determine the strength of the affective reactions to breach. If employees react emotionally to psychological contract breaches (see e.g., Zhao *et al.*, 2007), *emotion regulation strategies* should intervene in a favorable or unfavorable manner on the pathway connecting breach with

affective wellbeing. In line with the extant research on emotion regulation, we distinguish the widely used reappraisal and suppression emotion regulation (Gross, 1998; Gross and Thompson, 2007). Finally, we contribute to previous research by showing how the effectiveness of emotion regulation strategies depends on employee age. We will first explain the relations between contract breach and affects, after which we discuss the moderating roles of emotion regulation and age.

Psychological Contract Breach and Positive and Negative Affect

To understand the employment relation between an employee and his or her organization, Rousseau (1995) developed the concept of the psychological contract. The psychological contract is defined as the employees' beliefs regarding mutual obligations between the employee and the organization (Conway and Briner, 2005; Rousseau, 1995). Psychological contracts differ from legal contracts such that psychological contracts are subjective in nature and exist in the eye of the beholder (Suazo, Martínez and Sandoval, 2009). Thus, the psychological contract is a metaphor for understanding perceived written and unwritten obligations between an employee and the organization (Guest, 2004). Employees form perceptions of employer obligations and the extent to which their employer honors or fulfills its obligations. In case the employee perceives that the organization does not fulfill its obligations, psychological contract breach takes place. Psychological contract breach accordingly is defined as 'the employee's perceptions regarding the extent to which the organization has failed to fulfill its promises or obligations' (Zhao *et al.*, 2007, p. 649).

Previous studies on the effects of psychological contracts have shown that perceptions of contract breach are profoundly related to work outcomes (e.g. Zhao *et al.*, 2007). Researchers have used affective events theory to explain these effects of psychological contract breach (Weiss and Cropanzano, 1996; Zhao *et al.*, 2007). According to affective events theory, events at the workplace often evoke emotional reactions among people (Weiss

and Cropanzano, 1996). It is through these affective experiences that employees' attitudes and behaviors are influenced. Thus, a negative event at the workplace causes negative emotional reactions, such as anger or frustration (Morrison and Robinson, 1997; Weiss and Cropanzano, 1996). These intense emotions color the cognitive evaluations of one's job, in such a way that experience of negative emotions will cause a more negative view of the job and lower motivation to put effort in the job (Thoresen, Kaplan, Barsky, Warren and De Chermont, 2003). Zhao and colleagues (2007) argued that in particular psychological contract breaches are perceived as emotional events. Thus, contract breach leads to affective reactions, and in particular employees respond to contract breaches with decreased effort and activation (Zhao *et al.*, 2007). Hence, contract breach is related to experienced negative and positive emotions (Barret and Russell, 1998; Yik *et al.*, 1999). Moreover, Chambel and Oliveira-Cruz (2010) have argued that contract breach has detrimental effects on how people feel because they are associated with less control and predictability at the workplace, and deprivation of job resources. Therefore, contract breach will be related to less positive affect and more negative affect (see also Conway *et al.*, 2011). Stated more formally, hypothesis 1 is:

Hypothesis 1: Psychological contract breach is (a) negatively related with positive affect and (b) positively related with negative affect.

The Role of Emotion Regulation in the Reactions to Psychological Contract Breach

In the current paper, we argue that the emotion regulation strategies people use determine the strength of the affective reactions towards psychological contract breach. Gross (1998, p. 275) defined emotion regulation as "the process by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions." Emotion regulation may be automatic or controlled and may be executed consciously or unconsciously (Gross and Thompson, 2007). Emotion regulation strategies are partly genetic such that strategies correlate with personality (Gross and John, 2003; John and

Gross, 2004, 2007). However, they also develop over time, due to temperamental, maturational, and social changes. For instance, over time people may learn the best emotion regulation strategies to use at work. A dominant emotion regulation strategy may be present, although utilization of strategies may vary across both situations and time (Gross and Thompson, 2007). Emotion regulation can either be antecedent-focused or response-focused (Gross and Thompson, 2007). In contrast to antecedent-focused emotion regulation, which occurs before emotional responses have been fully activated, response-focused emotion regulation occurs after responses have been generated (Gross and John, 2003; Gross and Thompson, 2007). In line with previous research, in the current study we focus on two emotion regulation strategies: reappraisal (antecedent-focused) and suppression (response-focused; John and Gross, 2007; Wallace, Edwards, Shull and Finch, 2009).

Reappraisal involves a mental redirection of the emotional reaction. It refers to changing how one appraises the situation to alter its emotional significance (Gross and John, 2003). Reappraisal is directed at the possible meaning people attach to events that elicit emotions, such that emotional impact is modified. Reframing a negative event in a positive light can thus influence the associated emotion. For instance, through focusing on the positive aspects of a conflict at work (e.g., discovering better ways of working among colleagues), people reappraise the situation such that the meaning of an event changes.

Although Gross and Thompson (2007) stated that there is no universal best emotion regulation strategy, research has shown that people who use reappraisal strategies experience more positive outcomes in the long run, because it aims at resolving negative emotions rather than to escape them (Gross, 1998, 2001; Gross and John, 2003). When individuals tend to seek meaning in events they experience, and thus use reappraisal strategies, they will find better ways of dealing with contract breach, and overcome its negative consequences. Through reevaluating psychological contract breach in a more positive light, employees

engaging in reappraisal (e.g., reframing) are able to diminish the negative perceptions related to breach and, consequently, retain current levels of positive affect while diminishing negative affect arising from breaches. Reappraisers take on a more optimistic attitude and make an effort to repair negative moods (Gross and John, 2003). Empirical support for the benefits of reappraisal has been offered by Sheppes and Meiran (2007, 2008), who showed that performance on memory tasks was higher for people engaging in reappraisal strategies after seeing a sad film clip than for people focusing on distracting from the stimulus. Moreover, Gross and John (2003) showed that reappraisers experience more positive emotions. In sum, in a situation of psychological contract breach, affective wellbeing will be less severely influenced for people engaging in reappraisal emotion regulation. Consequently, hypothesis 2 is:

Hypothesis 2: reappraisal strategies moderate the relation between psychological contract breach and (a) positive affect and (b) negative affect, such that the relations are weaker for those with a high reappraisal strategy.

Suppression, Age and Psychological Contract Breach

In contrast to the benefits of reappraisal strategies in the context of contract breaches, we expect the moderating effect of suppression to be dependent on employee age. When a negative event has occurred and negative emotions are experienced, people may use inhibition forms of suppression, such as not expressing the emotions one feels at a certain moment and keeping emotions to oneself (Gross and Thompson, 2007; Parkinson and Totterdell, 1999). Suppression focuses on distraction from negative situations, in an effort to modify a person's mood and make it more neutral (Van Dillen and Koole, 2007). Not expressing emotions one feels after experiencing a negative event can have positive effects on the short run, but theorists have argued that in the long run, expressive suppression is detrimental for affective wellbeing (Gross and John, 2003; Gross and Thompson, 2007; Van Dillen and Koole, 2007).

Suppression costs energy and cognitive resources, and thus, these costs give rise to social costs as well, such as maintenance of affective well-being (Gross and John, 2003). Moreover, since the source of the negative emotion is still intact, suppression might even contribute to a vicious circle of maladaptive behavior, because an individual withdraws from a problematic situation, instead of focusing on solving the problem (Van Dillen and Koole, 2007). However, even though researchers have generally proposed negative effects of suppression, inconsistent findings leave the debate on suppression wide open. For instance, the recent study of Liu *et al.* (2010) indeed showed that reappraisal positively relates to wellbeing, but they did not find support for the negative relation of suppression (see also Totterdell and Parkinson, 1999).

One explanation for these inconsistent findings is that for some people expressive suppression might be better than for other people. We argue that while suppression is detrimental for older workers, it may be beneficial particularly for younger workers in response to contract breaches. According to socioemotional selectivity theory (Carstensen *et al.*, 2011) and emotion regulation theory (Diamond and Aspinwall, 2003; Gross, 2001), older people become better in regulating their emotions facing negative events. With increasing maturity, people learn to cope with their emotions, and are better in interpreting, managing, and deriving meaning from conflicting emotions (Diamond and Aspinwall, 2003). Moreover, research shows that emotional intelligence increases with age (Kafetsios, 2004). Hence, older people are better in regulating their emotional responses to negative events than younger people (Carstensen, 1995; Carstensen *et al.*, 2003, 2011). Moreover, when older people (Carstensen, Pasupathi, Mayr and Nesselroade, 2000; John and Gross, 2004; Lawton, Kleban and Dean, 1993). This argument is consistent with lifespan control theory (Heckhausen, Wrosch and Schulz, 2010), which argues that over time, people gain more

control over their lives, and hence, older people have more control over how they react to emotional events.

Because older workers know better how to appropriately respond to negative events due to their experience in dealing with such matters and their increased wisdom (John and Gross, 2004), they have fewer needs to suppress their feelings at the workplace. Hence, when older workers use suppression in response to negative events, their affective wellbeing may suffer (i.e., lower positive affect and higher negative affect). Knight *et al.* (2007) showed through experimental research that when older people have to suppress their emotions, they become distracted and more inclined to be drawn to negative stimuli, consequently leading to more negative outcomes. However, this was not the case for younger people.

For younger workers, due to the fact that they, in general, have little experience in dealing with negative events at the workplace, they have not yet learned how to appropriately respond to such negative events. Therefore, they might benefit from suppression, such that they avoid the negative consequences of inappropriate responses to contract breaches (John and Gross, 2004). If, for instance, a younger worker responds with public anger and frustration when he/she experiences a contract breach, this may lead to negative reactions among colleagues and supervisors, thereby not relieving negative emotions but rather increasing negative outcomes. Thus suppressing negative emotions will protect affective wellbeing of younger workers, while it negatively influences affective well-being of older workers, because suppression draws older people to more negative thoughts (Knight *et al.*, 2007). Hence, we expect a three-way interactive effect between age, suppression and psychological contract breach in relation to affect, such that the negative relations will be strongest among younger workers with low suppression and older workers with high suppression. Hypothesis 3 therefore is:

Hypothesis 3: Age moderates the interactive effect of suppression in the relation between psychological contract breach and (a) positive affect and (b) negative affect, such that the effects are stronger for younger workers with low suppression and older workers with high suppression.

Methods

Sample and Procedure

In 2010, 313 employees from a wide variety of organizations in the Netherlands were emailed and asked to participate in the study through filling out an anonymous digital questionnaire. Participants were collected by students subscribed to the psychology Master program of a Dutch university. Questionnaires were distributed in Dutch. In total 163 employees responded, resulting in a response rate of 52%. We chose to distribute the questionnaire to a wide variety of organizations, such that it would represent a wide variety of psychological contract experiences (Deery, Iverson and Walsh, 2006). The mean age in the study was 36 years old ($SD = 12.86$), and ranged from 17 to 62 years, which is the mean retirement age in the Netherlands (CBS, 2010). Average organizational tenure was 8.6 years ($SD = 10.48$) and 56% of the respondents were female. Highest finished educational level was distributed as follows: 16.6% secondary education, 9.8% vocational education, 32.5% college degree, and 40.5% university degree or higher.

Measures

Psychological contract breach was measured with the five-item scale ($\alpha = .91$) of Robinson and Morrison (2000) which assessed the extent to which the organization fulfilled its obligations towards the employee. Responses could be given on a 5-point Likert scale, ranging from 'not at all' to 'to a very great extent'. An example item is: "The organization has broken many of its promises to me even though I've upheld my side of the deal." Robinson

and Morrison reported high reliability for the scale (.92). The scale has been validated in previous research (Robinson and Morrison, 2000; Zhao *et al.*, 2007).

Emotion regulation strategies were assessed with scales from Gross and John (2003; John and Gross, 2004). Answers were provided on a 7-point Likert scale, ranging from 'strongly disagree' to 'strongly agree'. Six items were used to measure *reappraisal* ($\alpha = .82$). An example item is: "I control my emotions by changing the way I think about the situation I'm in". *Suppression* ($\alpha = .68$) was measured with four items referring to non-expression of negative emotions. An example is "I keep my emotions to myself".

Positive and Negative Affect were measured with the PANAS-scale from Watson and colleagues (1988). The measure consists of 20 items, of which ten referred to positive affect ($\alpha = .75$) and ten to negative affect ($\alpha = .83$). Respondents rated how they in general felt for the last three months, measured on a 5-point Likert scale, ranging from 'not at all' to 'to a very great extent'. Example items for positive affect are 'enthusiastic' and 'excited' and examples of negative affect are 'afraid' and 'nervous'.

Age was measured continuously. In the analyses, we also controlled for the effects of gender (1 = male, 2 = female), organizational tenure (measured continuously) and education (ranging from 1 = no finished education to 9 = university degree or higher).

Analysis

Moderated hierarchical regression analysis was conducted to test the hypotheses. In the first step, we controlled for the effects of gender, education, and organizational tenure, since it may relate to the dependent variables under study (e.g., Bal *et al.*, 2008; Hunter and Thatcher, 2007). The independent variables were centered before interaction terms were calculated (Aiken and West, 1991). In the second step, the independent variables were added, and subsequently in the third step the two-way interactions, and in the final step we added the three-way interaction. To rule out alternative explanations, we included all of the possible

interactions among contract breach, emotion regulation strategies, and age. Significant interactions were plotted and simple slopes were calculated for the moderator at one standard deviation below and above the mean, using the procedures recommended by Aiken and West (1991). Slope difference tests were performed to investigate whether the slopes of the interactions differed significantly from each other (see Dawson and Richter, 2006).

First, confirmatory factor analyses were conducted to test the factor structure underlying the data, using Lisrel 8.72 (Jöreskog and Sörbom, 2005). The hypothesized model was tested with the proposed five factors under study (contract breach, cognitive reappraisal, expressive suppression, positive affect, and negative affect). This model was tested against a one-factor model. To evaluate each model, established goodness-of-fit indices were used (Hu and Bentler, 1999). For the Root Mean Square Error of Approximation, a value of .05 or below is considered as good fit, and below .08 as acceptable (MacCallum, Browne and Sugawara, 1996). Further, Standardized Root Mean Square Residual (SRMR) should be lower than .10. Furthermore, Comparative Fit Index (CFI) and Non-Normed Fit Index (NNFI) should be larger than .90. The proposed five-factor model reached good fit ($\chi^2 = 883.72$, $df = 537$; $p < .001$; RMSEA = .06; SRMR = .09; CFI = .91; NNFI = .93). All items loaded significantly on their latent factor with standardized factor loadings higher than .45. Moreover, the model fits significantly better than the one factor model ($\Delta\chi^2 = 1560.31$, $\Delta df = 10$; $p < .001$). Therefore, it can be concluded that the factor structure is valid. Table 1 shows the means, standard deviations, and correlations among the variables under study.

 Insert Table 1 about here

Results

Hypothesis 1 predicted that psychological contract breach was negatively related with positive affect and positively related with negative affect. Table 1 shows the correlations among the variables under study. Contract breach was not related to positive affect ($r = -.02$,

ns), but it was positively related to negative affect ($r = .21, p < .01$). Therefore, hypothesis 1a was rejected and hypothesis 1b was supported.

Hypothesis 2 predicted that reappraisal moderated the relation between contract breach and affect. The interaction between psychological contract breach and reappraisal was significantly related to positive affect ($\beta = .16, p < .05$). Figure 1 shows the interaction effect. The relation was positive for high reappraisal employees ($B = .16, p < .001$), while the relation was negative for low reappraisal employees ($B = -.16, p < .001$). This supports hypothesis 2a. Reappraisal did not moderate the relation between contract breach and negative affect ($\beta = -.14, ns$). Therefore, hypothesis 2b is rejected. Age also interacted significantly with psychological contract breach in relation to negative affect ($\beta = -.17, p < .05$). Figure 2 shows the interaction pattern. Psychological contract breach was positively related to negative affect for younger workers ($B = .21, p < .001$), while the relation was not significant for older workers ($B = .04, ns$).

Hypothesis 3 predicted that age moderated the interactive effect between contract breach and suppression in relation to affective wellbeing. The three-way interaction between contract breach, suppression, and age was significantly related to positive affect ($\beta = -.16, p < .05$). Figure 3 shows a graphical representation of the interaction effect. The relation between contract breach and positive affect was positive for younger workers with high suppression ($B = .17, p < .01$), and for older workers with low suppression ($B = .15, p < .05$), while the relationship was negative for younger workers with low suppression ($B = -.16, p < .05$), and for older workers with high suppression ($B = -.14, p < .05$). Slope difference tests revealed that the slopes differed significantly from each other, except for the slopes of older workers with high suppression and younger workers with low suppression ($t = .179, ns$) and the slopes of younger workers with high suppression and of older workers with low suppression ($t = -.179, ns$). Thus, the relation between psychological contract breach and positive affect is

mitigated for younger workers with high suppression and older workers with low suppression. Hypothesis 3a is supported, such that the intensifying effect of suppression on the relation between contract breach and positive affect was present for younger workers, but buffered the relation for older workers. The three-way interaction between contract breach, age and suppression was not significantly related to negative affect ($\beta = .01, ns$). Therefore, hypothesis 3b is rejected.

Insert Tables 2-3 and Figures 1-3 about here

Discussion

The current study shows that emotion regulation strategies and age play important moderating roles in the relations between psychological contract breach and people's affective feelings. While reappraisal strategies benefit everyone in upholding positive affect after one has experienced a contract breach, suppression is particularly detrimental for affective wellbeing among older workers, as indicated by other emotion regulation studies (e.g., Diamond and Aspinwall, 2003; John and Gross, 2004). For younger workers, however, positive affect is particularly maintained in the context of psychological contract breach when they suppress their negative emotions arising from such negative events. According to emotion regulation theory, younger people have not yet learned how to express their emotions appropriately and do not have the organizational wisdom of older workers to express their negative emotions after contract breaches in such a way that positive affect is maintained (Gross, 2001; John and Gross, 2004). However, because older workers have learned how to appropriately express themselves, those who score high on suppression are likely to experience an inauthentic self and do not adequately respond to their negative emotions (Van Dillen and Koole, 2007). Our findings also explain the inconsistent findings regarding the role of suppression by offering an age-related perspective on the usefulness of suppression emotion regulation (Liu *et al.*, 2010).

We found moderating effects of emotion regulation strategies only in relation to positive affect, while interactive effects with age and psychological contract breach in relation to negative affect were not significant. It might be the case, as indicated by recent work of Conway and colleagues (2011) that contract breach refers to such a negative emotional event that its effects on negative affect are not easily repaired by emotion regulation strategies. However, emotion regulation strategies may serve primarily to uphold and maintain positive affect in the context of contract breach. Another reason might be that older people already generally score lower on negative affect, as indicated by the negative correlation between the two (see also Carstensen *et al.*, 2000, 2011). Therefore, in the context of contract breach, older workers have lower negative affect, and suppression does not add extra accentuation on the relation between contract breach and negative affect. Older workers might be avoiding negative aspects in their work, as for instance indicated by the interaction of age with contract breach, such that they do not have to regulate their emotions to decrease negative affect, because they tend to cognitively avoid negative affect (Carstensen *et al.*, 2011).

Moreover, we found that positive affect was enhanced for high reappraisers, younger suppressors, and older non-suppressors in the context of contract breaches. These findings contradict the general perspective that contract breach negatively influences well-being and work outcomes (Conway and Briner, 2005; Zhao *et al.*, 2007). It may be that some people tend to perceive contract breach as a challenge rather than a threat (Morrison and Robinson, 1997), and therefore react to breaches as a chance to change things at their work and in their lives, and consequently become in a state of positive activation (Barrett and Russell, 1998). For instance, contract breach has been shown to positively relate to turnover (Zhao *et al.*, 2007). While this has been primarily viewed as a negative event for organizations because of the loss of potentially valuable employees, for individuals, the step to leave their organization may be very positive, such that they take on new challenges in their careers, and start a new

job with another organization. Hence, contract breach may be the start of something positive in people's lives (Conway and Briner, 2005).

In this study, we advance a more nuanced view of breach and reactions to it, by testing emotion regulation strategies as moderators. Based on emotion regulation theory (Gross, 1998), employees' reactions to contract breach should be differentiated based on how they self-regulate. Our findings suggest that one factor mitigating the negative impact of psychological contract breach on affects is employees' regulation of corresponding emotions. Specifically, when engaging in reappraisal, positive affect is less likely to be harmed by breaches. In contrast, suppressive forms of emotion regulation will accentuate the detrimental effects of breach on wellbeing among older workers while it protects wellbeing of younger workers. Thus, our results present preliminary evidence for the moderating effects of reappraisal and suppression in the relation between contract breach and affective wellbeing.

Managerial Implications

If psychological contract breaches happen, it is useful for managers to know which employees are most likely to experience affective reactions, because in the long term this might be associated with higher feelings of burnout and absence. As our results indicate, subordinates who regulate their emotions through reappraisal may experience higher positive affect. Older employees who, on the contrary, engage in suppression as preferred emotion regulation strategy will be much more affected by contract breach. Knowing which employees use reappraisal and which suppression will be useful for decision makers, especially when psychological contract breach issues happen in the organization independent of their will and control. As opposed to personality traits which are less malleable, emotion regulation strategies can be learned and modified, and employees have a choice whether to use one regulation strategy or another (Gross and Thompson, 2007). Organizations can attempt to socialize or train employees to rely to a greater extent on cognitive antecedent-

based forms of emotion regulation. For decreasing suppression among older workers, encouraging employees to be authentic and engage in ongoing self-awareness may reduce utilization of these strategies (e.g., Hayes, Strosahl and Wilson, 1999). Knowing what buffers the negative consequences of psychological contract breach should not, however, provide a license to engage in such breaches.

Limitations, Strengths, and Future Research

We note several limitations of our research. First, our study design is cross-sectional and therefore limits conclusions related to causality. We based our hypotheses however on psychological contract theory (Rousseau, 1995) and existing research (Zhao *et al.*, 2007). Longitudinal designs with a time lag between psychological contract breach measurement and assessment of the outcomes (e.g., Ng, Feldman and Lam, 2010) could offer more credibility to the proposed relationships. Second, we used information reported by employees. Although interactions are less sensitive to data origination from one source (e.g., Evans, 1985), we encourage future studies to include perceptions of others in the organizations (e.g., coworkers or supervisors). Furthermore, the reliabilities of the emotion regulation measures were not optimal. One possibility to improve psychometric properties is to capture in greater detail specific aspects of emotion regulation, including forms of suppression and reappraisal (e.g., problem solving). Therefore, future research should focus on establishing reliable multi-dimensional measures of the broad range of emotion regulation strategies. Finally, our sample size was relatively small. Thus, future research on larger samples may be necessary, especially to detect interactions.

Future Research

Due to the multidimensional nature of the breach, employees' reactions to it, as well as the multiple components of affect regulation, other self-regulation aspects may be further integrated. It is useful to recall that Gross (1998) positioned *affect* regulation as superordinate

to emotion regulation and other forms of regulation such as coping. It is thus possible to situate reactions to psychological contract breaches in this broader context regulating affect. If so, other regulatory strategies, including mood repair and regulation (Morris and Reilly, 1987; Parkinson and Totterdell, 1999), coping strategies (Carver and Scheier, 1994; Carver, Scheier and Kumari Weintraub, 1989), and even ego-defense mechanisms (Laughlin, 1970) can modulate breach influences and need more attention.

We also note that additional attention needs to be directed in future studies to the extent to which particular forms of breach trigger specific forms of emotion regulation, independent of employees' preferences to regulate. For example, cognitive reframing may be chosen for low-intensity breach regarding peripheral issues, while such a strategy might be overwhelmed for breaches with high intensity or on issues important to the employees. Likewise, temporary annoyances (e.g., unfair work arrangement of only temporary nature) may be dealt by most employees through attentional mechanisms, as opposed to permanent changes, more likely to trigger reappraisal. Thus, even though breach negatively influences outcomes for employees, sometimes certain emotion regulation strategies (such as suppression) may be beneficial for employees to retain well-being. Therefore, future research should investigate the role of emotion regulation towards other outcomes of breach which aims at the employee rather than the organization.

More generally, we were not able to test for the role of emotion regulation in the duration and intensity of contract breaches. It is nevertheless possible for temporary breaches to be related to suppression, while for longer lasting breach – harming the employment relationship more severely – to have reappraisal as a more frequent strategy (Van Dillen and Koole, 2007). Overall, time-based approaches should be built in future models more explicitly (e.g., Duffy, Shaw, Hoobler and Tepper, 2010). Alternative explanations of the results should be also investigated in future research. For instance, previous studies have shown that

employees with a strong relationship with the organization react differently to breaches than those with poor relationships (Bal *et al.*, 2010; Dulac *et al.*, 2008). It might be that employees with strong relationships are more inclined to reappraise contract breach, such that the effects of breach are mitigated, while employees with poor relationships will engage in suppression. Given that preferences to use specific regulation strategies as a function of employees' relationship with their organization may confound results, future research should explore this issue.

Additionally, given that breaches in the psychological contract correlate positively with other negative aspects originating from the organization (such as obstruction from one's organization; Gibney, Zagenczyk and Masters, 2009), new research can examine the extent to which the effects of self-regulation expand to these additional organization-based impediments. From another direction, a closer integration between psychological contract theory and the bases of wellbeing may be attempted. Psychological contracts are proposed within an affective events framework (Zhao *et al.*, 2007), and thus it is inherently related to people's emotional experiences and wellbeing. Finally, the outcome space can be likewise enlarged. Wellbeing outcomes other than affective wellbeing can be considered, such as burnout, physical health and absence from work.

Conclusion

As argued by reviewers of the psychological contract literature, "while there is likely to be a great number of potential factors moderating employee's reactions to breach, only a few have been examined" (Conway and Briner, 2005, p. 79). From a host of possible moderators, we followed the need to examine the psychological contract and the "role it plays in influencing employees' emotions following a breach of contract" (Morrison and Robinson, 1997, p. 252). As our studies suggests, strategies used by employees to manage resulting emotions may modify their resulting affective wellbeing. Future research is necessary to

investigate other psychological factors mitigating the influence of breach, as well as the extent to which the results obtained in these studies generalize to other forms of wellbeing.

References

- Aiken, L. S. and West, S. G. (1991), *Multiple regression: Testing and interpreting interactions*, Sage Publications, San Francisco, CA.
- Bal, P.M., De Lange, A.H., Jansen, P.G.W. and Van der Velde, M.E.G. (2008), “Psychological contract breach and job attitudes: A meta-analysis of age as a moderator”, *Journal of Vocational Behavior*, Vol. 72, No. 1, pp. 143-158.
- Bal, P.M. De Lange, A.H., Jansen, P.G.W. and Van der Velde, M.E.G. (2011), “A longitudinal study of age-related differences in reactions to psychological contract breach” *Manuscript under review*.
- Bal, P.M., Jansen, P.G.W., Van der Velde, M.E.G., De Lange, A.H. and Rousseau, D.M. (2010), “The role of future time perspective in psychological contracts: a study among older workers”, *Journal of Vocational Behavior*, Vol. 76, pp. 474-486.
- Bellou, V. (2009), “Profiling the desirable psychological contract for different groups of employees: evidence from Greece”, *The International Journal of Human Resource Management*, Vol. 20, pp. 810-830.
- Carstensen, L.L. (1995), “Evidence for a life-span theory of socioemotional selectivity”, *Current Directions in Psychological Science*, Vol. 4, pp. 151-156.
- Carstensen, L.L. (2006), “The influence of a sense of time on human development”, *Science*, Vol. 312, pp. 1913-1915.
- Carstensen, L.L., Fung, H.H. and Charles, S.T. (2003), “Socioemotional selectivity theory and the regulation of emotion in the second half of life”, *Motivation and Emotion*, Vol. 27, pp. 103-123.
- Carstensen, L.L., Isaacowitz, D. and Charles, S.T. (1999), “Taking time seriously: A theory of socioemotional selectivity”, *American Psychologist*, Vol. 54, pp. 165-181.

- Carstensen, L.L. and Mikels, J.A. (2005), "At the intersection of emotion and cognition. Aging and the positivity effect", *Current Directions in Psychological Science*, Vol. 14, pp. 117-121.
- Carstensen, L.L., Pasupathi, M., Mayr, U. and Nesselroade, J. (2000), "Emotional experience in everyday life across the adult life span", *Journal of Personality and Social Psychology*, Vol. 79, pp. 644-655.
- Carstensen, L.L., Turan, B., Scheibe, S., Ram, N., Ersner-Hershfield, H., Samanez-Larkin, G.R. *et al.* (2011), "Emotional experience improves with age: evidence based on over 10 years of experience sampling", *Psychology and Aging*, Vol. 26, pp. 21-33.
- Carver, C. S. and Scheier, M. F. (1994), "Situational coping and coping dispositions in a stressful transaction", *Journal of Personality and Social Psychology*, Vol. 66, pp. 184-195.
- Carver, C. S., Scheier, M. F. and Kumari Weintraub, J. (1989), "Assessing coping strategies: A theoretically based approach", *Journal of Personality and Social Psychology*, Vol. 56, pp. 267-283.
- Cate, R.A. and John, O.P. (2007), "Testing models of the structure and development of future time perspective: maintaining a focus on opportunities in middle age", *Psychology and Aging*, Vol. 22, pp. 186-201.
- CBS Central Bureau for Statistics (2010). *CBS Statline*: <http://statline.cbs.nl/statweb/?LA=en> (Accessed July 14, 2011).
- Chambel, M.J. and Oliveira-Cruz, F. (2010), "Breach of psychological contract and the development of burnout and engagement: a longitudinal study among soldiers on a peacekeeping mission", *Military Psychology*, Vol. 22, pp. 110-127.
- Conway, N. and Briner, R.B. (2002), "A daily diary study of affective responses to psychological contract breach and exceeded promises", *Journal of Vocational Behavior*, Vol. 23, pp. 287-302.

- Conway, N. and Briner, R.B. (2005), *Understanding psychological contracts at work. A critical evaluation of theory and research*, Oxford University Press, Oxford, UK.
- Conway, N., Guest, D. and Trenberth, L. (2011), "Testing the differential effects of changes in psychological contract breach and fulfillment", *Journal of Vocational Behavior*, in press.
- Dawson, J.F. and Richter, A.W. (2006), "Probing three-way interactions in moderated multiple regression: Development and application of a slope difference test", *Journal of Applied Psychology*, Vol. 91, pp. 917–926.
- Deery, S.J., Iverson, R.D. and Walsh, J.T. (2006), "Toward a better understanding of psychological contract breach: A study of customer service employees", *Journal of Applied Psychology*, Vol. 91, pp. 166-175.
- Diamond, L.M. and Aspinwall, L.G. (2003), "Emotion regulation across the lifespan: an integrative perspective emphasizing self-regulation, positive affect, and dyadic processes", *Motivation and Emotion*, Vol. 27, pp. 125-156.
- Duffy, M. K., Shaw, J. D., Hoobler, J. M. and Tepper, B. J. (2010), "A time-based perspective on emotion regulation in emotional labor performance", *Research in Personnel and Human Resources Management*, Vol. 29, pp. 87-114.
- Dulac, T., Coyle-Shapiro, J. A. M., Henderson, D. J. and Wayne, S. J. (2008), "Not all responses to breach are the same: the interconnection of social exchange and psychological contract processes in organizations", *Academy of Management Journal*, Vol. 51, pp. 1079-1098.
- Evans, M.G. (1985), "A Monte Carlo study of the effects of correlated method variance in moderated multiple regression analysis", *Organizational Behavior and Human Decision Processes*, Vol. 36, pp. 305-323.

- European Commission (2006), *The demographic future of Europe: From challenge to opportunity*, Commission of the European Communities, Brussels, BE.
- Gibney, R., Zagenczyk, T. J. and Masters, M. F. (2009), "The negative aspects of social exchange: An introduction to perceived organizational obstruction", *Group and Organization Management*, Vol. 34, pp. 665-697.
- Gross, J.J. (1998), "Antecedent- and response-focused emotion regulation: Divergent consequences for experience, expression, and physiology", *Journal of Personality and Social Psychology*, Vol. 74, pp. 224-237.
- Gross, J.J. (2001), "Emotion regulation in adulthood: Timing is everything", *Current Directions in Psychological Science*, Vol. 10, pp. 214 - 219.
- Gross, J.J., Carstensen, L.L., Pasupathi, M., Tsai, J., Goettestam Skorpen, C. and Hsu, A.Y.C. (1997), "Emotion and aging: Experience, expression and control", *Psychology and Aging*, Vol. 12, pp. 590-599.
- Gross, J.J. and John, O.P. (2002), "Wise emotion regulation", Feldman Barrett, L. and Salovey P. (Ed.), *The wisdom of feelings: Psychological processes in emotional intelligence*, Guilford, New York, pp. 297-318.
- Gross, J. J. and John, O. P. (2003), "Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being", *Journal of Personality and Social Psychology*, Vol. 85, pp. 348-362.
- Gross, J.J. and Thompson, R.A. (2007), "Emotion Regulation: Conceptual foundations", Gross, J.J (Ed.), *Handbook of emotion regulation*, Guilford Press, New York, pp. 1-49.
- Guerrero, S. and Herrbach, O. (2008), "The affective underpinnings of psychological contract fulfillment", *Journal of Managerial Psychology*, Vol. 23, pp. 4-17.

- Guest, D.E. (2004), "The psychology of the employment relationship: An analysis based on the psychological contract", *Applied Psychology: An International Review*, Vol. 53, pp. 541-555.
- Hayes, S. C., Strosahl, K. D. and Wilson, K. G. (1999), *Acceptance and commitment therapy: An experiential approach to behavior change*, Guilford Press, New York.
- Heckhausen, J., Wrosch, C. and Schulz, R. (2010), "A motivational theory of life-span development", *Psychological Review*, Vol. 117, pp. 32-60.
- Hu, L. and Bentler, P.M. (1999), "Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives", *Structural Equation Modeling*, Vol. 6, pp. 1-55.
- Hunter, L.W. and Thatcher, S.M.B. (2007), "When do people produce? Effects of stress, commitment, and job experience on performance", *Academy of Management Journal*, Vol. 50, pp. 953-968.
- John O. P. and Gross, J.J. (2004), "Healthy and unhealthy emotion regulation: Personality processes, individual differences, and life span development", *Journal of Personality*, Vol. 72, pp. 1301-1333.
- John O.P. and Gross, J.J. (2007), "Individual differences in emotion regulation", Gross, J.J. (ed.), *Handbook of Emotion Regulation*, Guildford Press, New York, pp. 351-372.
- Jöreskog, K. and Sörbom, D. (2005), *Lisrel 8.72*, Scientific Software International., Chicago.
- Kafetsios, K. (2004), "Attachment and emotional intelligence abilities across the life course", *Personality and Individual Differences*, Vol. 37, pp. 129-145.
- Kanfer, R. and Ackerman, P.L. (2004), "Aging, adult development and work motivation", *Academy of Management Review*, Vol. 29, pp. 440-458.

- Knight, M., Syemour, T.L., Gaunt, J.T., Baker, C., Nesmith, K. and Mather, M. (2007), "Aging and goal-directed emotional attention: distraction reverses emotional biases", *Emotion*, Vol. 7, pp. 705-714.
- Laughlin, H. P. (1970), *The ego and its defenses*, Appleton-Century-Crofts, New York.
- Lawton, M.P., Kleban, M.H. and Dean, J. (1993), "Affect and age: Cross-sectional comparisons of structure and prevalence", *Psychology and Aging*, Vol. 8, pp. 165-175.
- Liu, Y., Prati, L.M., Perrewé, P.L. and Brymer, R.A. (2010), "Individual differences in emotion regulation, emotional experiences at work, and work-related outcomes: a two-study investigation", *Journal of Applied Social Psychology*, Vol. 40, pp. 1515-1538.
- MacCullum, R.C., Browne, M.W. and Sugawara, H.M. (1996), "Power analysis and determination of sample size for covariance structure modeling", *Psychological Methods*, Vol. 1, pp. 130-149.
- Morris, W. N. and Reilly, N. P. (1987), "Toward the self-regulation of mood: Theory and research", *Motivation and Emotion*, Vol. 11, pp. 215-249.
- Morrison, E.W. and Robinson, S.L. (1997), "When employees feel betrayed: A model of how psychological contract violation develops", *Academy of Management Review*, Vol. 22, pp. 226-256.
- Ng, T.W.H. and Feldman, D.C. (2008), "The relationship of age to ten dimensions of job performance", *Journal of Applied Psychology*, Vol. 93, pp. 392-423.
- Ng, T.H.W. and Feldman, D.C. (2009), "Age, work experience and the psychological contract", *Journal of Organizational Behavior*, Vol. 30, pp. 1053-1075.
- Ng, T. W. H., Feldman, D. C. and Lam, S. S. K. (2010), "Psychological contract breaches, organizational commitment, and innovation-related behaviors: A latent growth modeling approach", *Journal of Applied Psychology*, Vol. 95, pp. 744-751.

- Parkinson, B. and Totterdell, P. (1999), "Classifying affect regulation strategies", *Cognition and Emotion*, Vol. 13, pp. 277-303.
- Peterson, S.J. and Spiker, B.K. (2005), "Establishing the positive contributory value of older workers: A positive psychological perspective", *Organizational Dynamics*, Vol. 34, pp. 153-167.
- Robinson, S.L. and Morrison, E.W. (2000), "The development of psychological contract breach and violation: A longitudinal study", *Journal of Organizational Behavior*, Vol. 21, pp. 525-546.
- Rousseau, D.M. (1995), *Psychological contracts in organizations. Understanding written and unwritten agreements*, Sage Publications, Thousands Oaks, CA.
- Sheppes, G. and Meiran, N. (2007), "Better late than never? On the dynamics of online regulation of sadness using distraction and cognitive reappraisal", *Personality and Social Psychology Bulletin*, Vol. 33, pp. 1518-1532.
- Sheppes, G. and Meiran, N. (2008), "Divergent cognitive costs for online forms of reappraisal and distraction", *Emotion*, Vol. 8, pp. 870-874.
- Suazo, M. M., Martínez, P. G. and Sandoval, R. (2009), "Creating psychological and legal contracts through human resource practices: A signaling theory perspective", *Human Resource Management Review*, Vol. 19, pp. 154-166.
- Thoresen, C.J., Kaplan, S.A., Barsky, A.P., Warren, C.R. and De Chermont, K. (2003), "The affective underpinnings of job perceptions and attitudes: A meta-analytic review and integration", *Psychological Bulletin*, Vol. 129, pp. 914-945.
- Van Dillen, L.F. and Koole, S.L. (2007), "Clearing the mind: a working memory model of distraction from negative mood", *Emotion*, Vol. 7, pp. 715-725.
- Wagner, S.L. and Rush, M.C. (2000), "Altruistic organizational citizenship behavior: context, disposition, and age", *The Journal of Social Psychology*, Vol. 140, pp. 379-391.

- Wallace, J. C., Edwards, B. D., Shull, A. and Finch, D. M. (2009), "Examining the consequences of the tendency to suppress and reappraise emotions on task-related job performance", *Human Performance*, Vol. 22, pp. 23-43.
- Watson, D., Clark, A.L. and Tellegen, A. (1988), "Development and validation of brief measures of positive and negative affect: The PANAS Scale", *Journal of Personality and Social Psychology*, Vol. 54, pp. 1063-1070.
- Weiss, H.M. and Cropanzano, R. (1996), "Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work", Staw, B.M. and Cummings, L.L. (Ed), *Research in organizational behavior: An annual series of analytical essays and critical reviews*, Jai Press, Greenwich, CT, pp. 1-74.
- Zhao, H., Wayne, S.J. Glibkowski, B.C. and Bravo, J. (2007), "The impact of psychological contract breach on work-related outcomes: A meta-analysis", *Personnel Psychology*, Vol. 60, pp. 647-680.

Table 1: Means, standard deviations, and correlation of the variables under study ($N = 163$).

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1 Age	36.10	12.86	--								
2 Gender	1.56	--	.04	--							
3 Education	7.66	1.80	-.31**	-.11	--						
4 Tenure	8.56	10.48	.64**	-.07	-.32**	--					
5 Contract Breach	2.15	.75	.07	-.02	-.19*	.20*	.91				
6 Reappraisal	1.81	.68	-.05	.02	.05	.03	-.08	.82			
7 Suppression	4.95	.92	.01	-.16*	-.03	.05	.01	.15*	.68		
8 Positive Affect	3.27	.40	-.05	-.10	.06	-.04	-.02	.11	-.14	.75	
9 Negative Affect	1.77	.51	-.26**	.04	.10	-.15	.21**	-.07	-.03	.07	.83

Note. ** $p < .01$. * $p < .05$: Cronbach's alpha's of the variables are reported along the diagonal.

Gender: 1 = male, 2 = female. Education: scale of 1 = no education to 9 = university degree or higher.

Table 2: Results of moderated hierarchical regression analyses of PA and NA on age, contract breach, and cognitive reappraisal.

	Positive Affect			Negative Affect		
	β	β	β	β	β	β
<i>Demographic Variables</i>						
Gender	-.11	.10	-.10	.07	.06	.06
Education	.03	.01	.01	.08	.10	.10
Tenure	-.04	-.02	-.02	.00	.03	.03
<i>Independent Variables</i>						
Age	-.01	-.02	-.02	-.26**	-.26**	-.25**
Psychological Contract Breach (PCB)	.00	.01	.01	.24**	.24**	.25**
Reappraisal	.12	.11	.12	-.06	-.07	-.10
<i>Two-way Interactions</i>						
PCB * Age		.04	.04		-.18*	-.17*
PCB * Reappraisal		.15*	.16*		-.11	-.14
Age * Reappraisal		-.01	-.01		-.01	-.03
<i>Three-way interaction</i>						
PCB * Age * Reappraisal			-.03			.09
F	.73	.85	.77	3.91***	3.39***	3.17***
ΔF	.70 ^a	1.09	.08	6.24***	2.17	1.12
R ²	.03	.05	.05	.13	.17	.17
ΔR^2	.01 ^a	.02	.00	.11	.04	.01

Note. Standardized regression coefficients are reported. * $p < .05$. ** $p < .01$. ^a comparison with model with demographic variables (not shown in table).

Table 3: Results of moderated hierarchical regression analyses of PA and NA on age, contract breach, and expressive suppression.

	Positive Affect			Negative Affect		
	β	β	β	β	β	β
<i>Demographic Variables</i>						
Gender	-.13	-.13	-.15	.06	.05	.05
Education	.03	.03	.02	.08	.08	.08
Tenure	-.02	-.02	-.01	-.01	.04	.04
<i>Independent Variables</i>						
Age	-.02	-.02	-.03	-.25*	-.27**	-.27**
Psychological Contract Breach (PCB)	-.01	-.01	.01	.25**	.24**	.24**
Suppression	-.17*	-.18*	-.18*	-.02	-.05	-.05
<i>Two-way Interactions</i>						
PCB * Age		.01	.02		-.13	-.13
PCB * Suppression		-.03	-.00		-.11	-.11
Age * Suppression		-.05	-.07		-.14	-.14
<i>Three-way interaction</i>						
PCB * Age * Suppression			-.16*			.01
F	1.14	.81	1.09	3.81***	3.70***	3.31***
ΔF	1.52* ^a	.18	3.84*	6.06*** ^a	3.18*	.01
R ²	.04	.05	.07	.13	.18	.18
ΔR^2	.03 ^a	.00	.02	.10 ^a	.05	.00

Note. Standardized regression coefficients are reported. * $p < .05$. ** $p < .01$. ^a comparison with model with demographic variables (not shown in table).

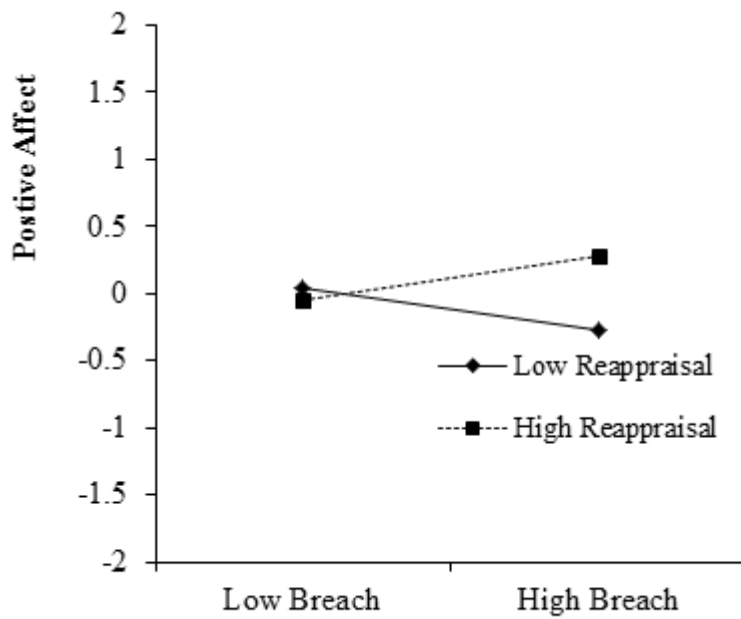


Figure 1: interaction between psychological contract breach and reappraisal in relation to positive affect.

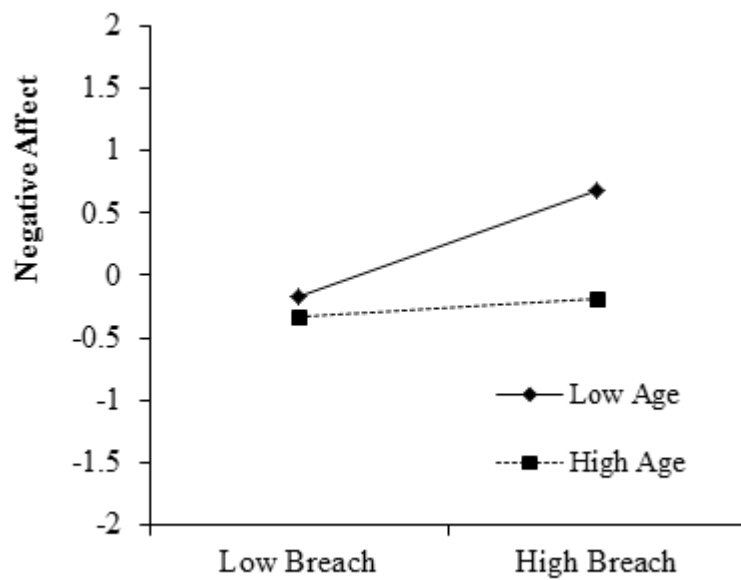


Figure 2: interaction between psychological contract breach and age in relation to negative affect.

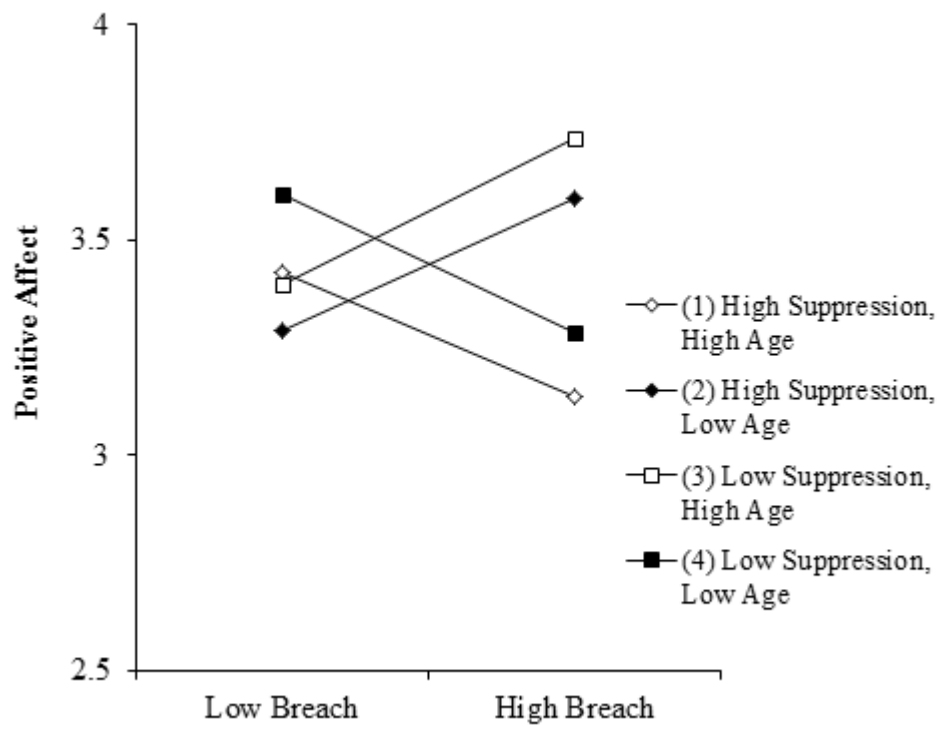


Figure 3: three-way interaction effect between psychological contract breach, suppression, and age in relation to positive affect.