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Fuel of the Self-Starter: How Mood Relates to Proactive Goal Regulation

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The authors consider how multiple dimensions of affect relate to individual proactivity. They conceptualized proactivity within a goal-regulatory framework that encompasses 4 elements: envisioning, planning, enacting, and reflecting. In a study of call center agents ($N = 225$), evidence supported the distinctiveness of the 4 elements of proactive goal regulation. Findings further indicated that high-activated positive mood was positively associated with all elements of proactive goal regulation, and low-activated negative mood was positively associated with envisioning proactivity. These findings were further supported in a longitudinal investigation of career-related proactivity amongst medical students ($N = 250$). The role of affective experience in proactivity is more nuanced than previously assumed.

Keywords: proactive behaviors, work performance, mood, goal regulation, latent growth modeling

To perform well against a background of unpredictability and uncertainty, organizations need staff that anticipate and act on future problems, as well as improve deficient processes under their own initiative (Campbell, 2000; Frese & Fay, 2001; Parker, 2000). These behaviors are captured by the concept of proactive behavior, which refers to a special type of goal-directed behavior in which individuals anticipate the future and actively take charge of situations to bring about change (Bindl & Parker, 2010; Crant, 2000; Grant & Ashford, 2008). Studies across multiple domains have shown both the distinctiveness of proactivity relative to other behavioral concepts (Griffin, Neal, & Parker, 2007; Van Dyne, & Le Pine, 1998), as well as the positive consequences of proactivity for a range of outcomes, such as job performance (Crant, 1995; Morrison, 1993), career success (Seibert, Kraimer, & Crant, 2001), and effective job socialization (Wanberg & Kammeyer-Mueller, 2000). Findings from a recent meta-analysis supported an overall positive association of proactivity and work performance (Thomas, Whitman, & Viswesvaran, 2010).

Given the value of proactivity across a range of domains, it is important to understand how it might be enhanced. Past research suggests that proactive behavior can be influenced by features of the work environment, such as job design (Frese, Garst, & Fay, 2007), leadership (Burris, Detert, & Chiaburu, 2008), and work climate (Dutton, Ashford, O'Neill, Hayes, & Wierba, 1997). Additionally, individual differences have been identified as influencing proactive behaviors, such as proactive personality (Bateman & Crant, 1993), role breadth-related self-efficacy (Ohly & Fritz, 2007), learning goal orientation (VandeWalle, Ganesan, Challagalla, & Brown, 2000), and organizational commitment (Den Hartog & Belschak, 2007). These variables contribute over and above situational factors (Parker, Williams, & Turner, 2006).

In an effort to synthesize the diverse literature on proactivity at work, Parker, Bindl, and Strauss (2010) proposed a model in which situational variables affect proactivity via three motivational pathways. Drawing on self-regulation theory (Bandura, 1997), goal-setting theory (Locke & Latham, 1990), and expectancy theory (Vroom, 1964), the researchers identified *can do* motivation as comprising perceptions of capability to engage in proactive actions (e.g., self-efficacy); *reason to* motivation as being an individuals' perception that it is worthwhile to engage in proactive actions (e.g., commitment to the organization); and *energized to* motivation as comprising affective experience that fuels individuals into engaging in proactivity. The first two pathways map onto Mitchell and Daniels' (2003) "cold" (or cognitive-motivational) processes, and there is considerable evidence for their role in influencing proactive behavior (Bindl & Parker, 2010). For instance, role-related self-efficacy beliefs have been shown to promote personal initiative (Ohly & Fritz, 2007), as well as taking charge (Parker & Collins, 2010), and affective organizational commitment has been

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positively linked with proactive service performance (Rank, Carsten, Unger, & Spector, 2007), self-initiative (Den Hartog & Belschak, 2007), and task proactivity (Griffin et al., 2007). The *energized to* pathway maps onto Mitchell and Daniels's (2003) "hot," or affect-related, individual processes. There is some initial evidence for the role of affect in shaping proactivity (Den Hartog & Belschak, 2007; Fritz & Sonnentag, 2009), but as we elaborate shortly, this evidence is limited in important ways.

Our goal in the current article is to more fully investigate the role of affect, or the *energized to*, pathway for proactivity. In developing our arguments, we draw on broader research that indicates the powerful ways in which affect influences work behaviors (Ashforth & Humphrey, 1995; Brief & Weiss, 2002; Isen & Baron, 1991). For instance, positive affect at work facilitates citizenship behaviors such as helping colleagues (Lee & Allen, 2002) or the organization (Dalal, Lam, Weiss, Welch, & Hulin, 2009), improved customer service (George, 1991), and higher work performance (Totterdell, 2000). Likewise, negative affect at work has been shown to spark positive behaviors, such as creativity (George & Zhou, 2002), and to inhibit others, such as citizenship (Kaplan, Bradley, Luchman, & Haynes, 2009) and prosocial behaviors (George, 1990).

Nevertheless, our focus on proactivity means we also go beyond this broader research on affect–behavior links. As already established in the literature (Grant & Ashford, 2008), proactivity can be distinguished from behaviors like citizenship and contextual performance because of its explicit focus on self-starting, anticipatory and change-oriented action. For instance, helping others, one of the most commonly focused on types of citizenship, tends to be operationalized in nonproactive terms, such as helping others when required (Frese & Fay, 2001). In the same vein, task performance is typically assessed by considering whether role requirements are met, rather than whether the individual has crafted broader role requirements and/or achieved them in a proactive way (Griffin et al., 2007). Proactivity is also distinct from creativity, which mainly represents cognitive compared with behavioral responses, and tends to be concerned with the generation of novel ideas (e.g., Amabile, Barsade, Mueller, & Staw, 2005). For instance, actively seeking feedback from lecturers on one's potential as a professional (Tharenou & Terry, 1998), a concept that we focus on in our Study 2, is proactive but neither novel nor creative. At the same time, an individual can be creative—generate lots of novel ideas—yet make no effort to proactively implement these ideas (Unsworth & Parker, 2002). We cannot, therefore, meaningfully assume that the same role of affect will occur for proactivity as for behaviors that have thus far been considered. Indeed, we contend that the emphasis of proactivity on self-initiating change gives rise to unique affect-behavior predictions—notably the role of activation in affect—that have thus far been ignored in the broader literature.

In pursuing our goal to investigate the role of affect for proactivity, we extend proactivity research. Previous research on proactivity has investigated mainly the enactment of proactivity, but we extend the focus to investigate proactivity as a goal-regulatory process that additionally includes envisioning, planning, and reflecting elements. Thus, we suggest proactivity is usefully understood as more than just an observable behavior or set of behaviors. Rather, it is a goal process that also involves unobservable cognitive elements. Importantly, we propose that affect has different implications according to which element of proactive goal regulation is considered.

Next we develop our arguments as to why affect, and more specifically mood, might be important in shaping proactivity. We identify the importance of considering the level of activation in mood. We then elaborate how greater insights can be obtained if proactivity itself is unbundled into distinct goal-regulatory elements. Finally, we hypothesize how different types of mood (high activated positive mood, low activated positive mood, high activated negative mood, low activated negative mood) relate to the different elements of proactive goal regulation (envisioning, planning, enacting, and reflecting).

Mood and Proactivity: Importance of Activation

We focus in this article on employees' experiences of moods in a work setting. Moods are of longer duration and are more generalized in their focus than emotions, which tend to be short-lived and related to a specific object (Rosenberg, 1998). Moods at work should be highly relevant for influencing employee proactivity. First, proactivity is characterized by high levels of self-initiative. Positive affect promotes individuals' setting of higher and more challenging goals (Ilies & Judge, 2005) and can create an upward spiral of self-regulatory advantage that should help individuals sustain self-initiated action (Martin, Ward, Achee, & Wyer, 1993). Second, being proactive involves bringing about change and, thus, is likely to require cognitive processes. Research indicates that affect may have a greater role in influencing behaviors when those behaviors require complex rather than simple cognitive processes (Weiss, Ashkanasy, & Beal, 2004). Thus, positive affect has been found to facilitate decision-making and cognitive flexibility (Fredrickson, 2001; Isen, 2000a) and to yield motivational potential for behaviors (George & Brief, 1996; Isen & Reeve, 2005). Negative affect might also play a role because it can indicate a gap between a present and desired situation (Carver & Scheier, 1982), thus potentially stimulating change-oriented, proactive behaviors. Third, being proactive involves thinking ahead and anticipating situations. Positive affect has been shown to promote future-oriented thinking (Foo, Uy, & Baron, 2009; Gervey, Igou, & Trope, 2005). Consistent with these ideas linking positive affect and proactivity, evidence suggests that positive mood is associated with higher levels of self-reported personal initiative (Den Hartog & Belschak, 2007) and with taking-charge behaviors on the same and the following working day (Fritz & Sonnentag, 2009).

Existing research on the relationship between affect and proactivity, while promising in indicating the presence of such relationships, leaves issues unresolved. Most significantly, research has investigated the role of positive versus negative valence in affect but has neglected the role of activation. *Valence* represents the extent to which individuals experience pleasant versus unpleasant feelings. The distinction "feeling good" versus "feeling bad" has been argued to apply across cultures and languages (Wierzbicka, 1999), and most research looking at affect-behavior makes this basic distinction between positive and negative affect (e.g., Watson, Clark, & Tellegen, 1988). Activation concerns a person's "state of readiness for action or energy expenditure" (Russell, 2003, p. 156), and represents "motivational intensity," or "the impetus to act" (Gable & Harmon-Jones, 2010, p. 1). The circumplex model of affect (Russell, 1980, 2003) depicts how unique

combinations of activation and valence result in four distinct quadrants: *high-activated positive affect*, *low-activated positive affect*, *low-activated negative affect*, and *high-activated negative affect*. Investigations of the role of activation are currently missing in affect-proactivity research, yet we contend that the self-initiated, change orientation of proactivity makes the consideration of activation particularly meaningful.

A further limitation of existing affect-proactivity research is that existing studies have focused only on the enactment of proactivity, thereby neglecting the role affect might have for proactivity-related cognitive processes. As we argue next, the contradictory findings observed to date for the association between negative affect and proactivity might be resolved with a more comprehensive approach to proactivity that includes these cognitive elements.

Proactive Goal Regulation: Going Beyond Enacting

Proactivity involves efforts to bring about future change, either by changing the work-situation (e.g., work-related improvements), or by changing one's own self (e.g., increasing one's skills; Parker et al., 2010). Thus, previous research suggests that employees can behave proactively by self-initiating feedback on their performance (Ashford, 1986), building networks (Lambert, Eby, & Reeves, 2006), initiating role expansions (Parker, Wall, & Jackson, 1997), voicing work-related concerns (Van Dyne & Le Pine, 1998), scanning strategic issues (Parker & Collins, 2010), and taking charge to bring about change (Morrison & Phelps, 1999), to name just a few of the ways people can act proactively at work (Bindl & Parker, 2010).

Despite the breadth of domains within which proactivity has been examined, with just a few exceptions, most research has focused only on observable behaviors, or the enactment of proactivity. Drawing on self-regulation theory (Frese & Zapf, 1994; Gollwitzer, 1990), as well as previous work that advocates a self-regulation perspective on proactivity (Frese & Fay, 2001; Grant & Ashford, 2008), we propose a goal-regulatory model of proactivity at work that includes envisioning, planning, enacting, and reflecting. When *envisioning*, individuals imagine a different future—they identify something that can be changed to bring about future benefit. An example of envisioning is an employee realizing that the way a task is completed is inefficient and, therefore, imagining ways to improve the process of completing this task. When *planning*, individuals prepare to engage in bringing about the envisioned future. For instance, employees might go through different scenarios in their mind of how to bring about the desired change. *Enacting* comprises overt proactive behavior. In the context of task proactivity, the focus is on actually bringing about change to improve work tasks, such as piloting a new approach. Finally, *reflecting* consists of individuals' efforts to understand the success, failure, or implications of their proactive behaviors. Reflective efforts serve as information that can lead an individual to sustain or modify subsequent elements of envisioning, planning, and enacting. For instance, individuals might reflect on what went well in their proactive pursuits and then envision further ways to improve their tasks. While the enacting element is observable, the elements of envisioning, planning, and reflecting are likely to be mostly cognitive rather than behavioral.

Past empirical work on proactive goal regulation provides some evidence for the relevance of distinct elements of proactive goal regulation. First, Raabe, Frese, and Beehr (2007) showed that goal commitment (similar to *envisioning*) was positively associated with plan quality (similar to *planning*) and that planning predicted self-management behaviors (similar to *enacting*) 3 months later. Although a specific "reflecting" element was not included as a separate measure, some of the self-management items included aspects of monitoring (similar to our *reflecting*). Raabe et al.'s work showed that different elements of proactive goal regulation can be meaningfully investigated and that planning predicts later enacting.

In a similar study, Brandstätter, Heimbeck, Malzacher, and Frese (2003) investigated regulation of one proactive goal. For a sample of 136 East Germans, individuals' intention to engage in continuous education (similar to *envisioning*), as well as the degree to which they had already formed specific plans for their education (similar to *planning*), predicted their engagement in education (similar to *enacting*) 2 years later. These results further support the importance of investigating envisioning and planning over and above enacting. In a third study, De Vos, De Clippeleer, and Dewilde (2009) showed for two samples of graduates that initial career progress goals (*envisioning*) were positively associated with networking activities (*enacting*) 1 to 3 years later via career planning (*planning*). Career planning, in turn, only related positively with later positive outcomes such as salary levels and career satisfaction upon them engaging in further networking activities. These results suggest the importance of implementing proactive goals and plans in order to achieve the desired positive career outcomes. Additionally, the more cognitive elements of establishing progress goals and planning appeared to influence overall outcomes, suggesting the importance of assessing elements of proactive goal regulation beyond purely enacting.

These three studies are promising in indicating the usefulness of a goal-regulatory approach to proactivity. Our present investigation adds to this past research in two important ways. First, we assess proactive goal regulation for any proactive goal or goals that the employee is focusing on over a given time period. Prior studies assessed proactive goal regulation for one focused goal only, such as job search or education. Our approach is amenable to examining any type of work-based proactivity, or multiple types, that the individual is engaged in. Second, in contrast to past research that has measured different elements of proactive goal regulation at different points in time, we assess all elements of proactive goal regulation simultaneously. As the elements are likely to covary, including all in an analysis at the same time accounts for their intercorrelations and thereby informs as to the unique determinants of any particular element.

Hypotheses

In regard to the role of positive mood, we propose a positive association with each element of proactive goal regulation. Positive mood can influence individuals' expectancies with regards to behavioral outcomes (Mayer, Gayle, Meehan, & Haarman, 1990) and thus generate positive expectancy judgments for these outcomes (Wegener & Petty, 1996). This effect should be particularly beneficial for self-initiated, rather than compliant, actions at work because they require high levels of confidence in positive outcomes (Frese, Fay, Hilburger, Leng, & Tag, 1997). Positive mood should thus promote individuals' setting of proactive goals, or

envisioning. Further, affect has been argued to infuse judgments especially when alternative models of action need to be evaluated (Forgas, 1995). Due to its self-initiated and change-oriented nature, proactive behaviors likely require such evaluations as part of their planning. Because affective experiences shape thoughts and actions that have a similar evaluative tone (Forgas & George, 2001), positive mood should be particularly beneficial in leading to positive cognitive evaluations that facilitate the planning and implementation of proactive goals. Further, positive mood should facilitate an approach motivation (Higgins, 1997) and enhance persistence during challenging goals (George & Brief, 1996). We thus expect positive mood to facilitate the enacting element of proactivity. Because positive mood facilitates intrinsic motivation and promotes responsible behaviors (Isen & Reeve, 2005), it should facilitate individuals' following through and reflecting on the outcomes of past proactive efforts. In sum, we expect positive mood to be positively associated with each element of proactive goal regulation.

However, we expect a positive association to apply for high-activated positive mood rather than low-activated positive mood. Proactivity involves actively, under one's own initiative, taking charge of a situation. We suggest that high-activated positive mood provides an energizing force that stimulates and sustains these active efforts (Fredrickson, 1998; Tsai et al., 2007). Low-activated positive mood, in contrast, does not lend itself to the engagement in self-initiated action but rather encourages inactivity and reflection (Frijda, 1986). Consistent with these predictions, work by Seo, Bartunek, and Feldman Barrett (2010) showed that high activation levels of mood were directly and, in contrast, high positive valence with neutral activation levels only indirectly associated with higher levels of effort in activities. Similarly, Foo and colleagues (2009) showed that high-activated positive feelings facilitated effort over and above what was immediately required. Given the self-initiated and change-oriented nature of proactive behaviors we thus argue that high-activated positive mood provides energizing potential for the instigation and sustaining of all elements of proactive goal regulation. In sum, we hypothesize the following:

> *Hypothesis 1:* High-activated positive mood will be positively associated with all elements of proactive goal regulation (envisioning, planning, enacting, and reflecting).

As we outline next, we expect the relationship between negative mood and proactive goal regulation to be more complex than the relationship between positive mood and proactivity. Turning to the envisioning element of proactive goal regulation, we predict that different activation levels in negative valence to lead to different outcomes for proactive goal regulation. As Gollwitzer (1990) pointed out, the more cognitive element of envisioning is characterized by a mindset in which individuals are receptive to diverse ideas and thoughts. Low-activated negative mood should be beneficial for envisioning because it promotes divergent thinking. Thus, owing to low levels of action-oriented, motivational intensity, low-activated negative mood has been linked with individuals' broadening of attentional focus that facilitates cognitive processing of a wide range of situational cues (Gable & Harmon-Jones, 2010). In a similar vein, low-activated negative mood has been shown to increase individuals' levels of rumination (Martin & Tesser, 1996). Thus, low-activated negative mood, such as depression, can lead individuals to have thoughts about changing their present situation (Verhaeghen, Joormann, & Khan, 2005). We therefore expect that low-activated negative mood will be positively associated with envisioning. In contrast, high-activated negative mood states such as feelings of anxiety have been shown to narrow attentional focus (Gable & Harmon-Jones, 2010) and to have a more ambivalent association with divergent thinking (George & Zhou, 2002). There is thus no reason to expect that high-activated negative mood will be positively associated with envisioning. Beyond envisioning, there are similar competing explanations as to how negative mood might affect the other elements of proactive goal regulation. On the one hand, there are reasons why one might expect that negative mood will inhibit the translation of proactive contemplation into more concrete planning or overt behaviors. Negative affective experiences are likely to derail the self-regulatory focus away from the goal to be implemented (Beal, Weiss, Barros, & MacDermid, 2005) and yield an avoidant, rather than an approach, orientation (Carver, 2006; Higgins, 1997) that ultimately leads to goal blockage (Berkowitz, 1989). Further, persistent negative feelings likely result in physical and psychological states of exhaustion (Gross & John, 2003) and are thus detrimental to the replenishment of self-regulatory resources (Hobfoll, 1989). Self-regulatory resources, in turn, are required for individuals' engagement in behaviors (Muraven & Baumeister, 2000; Schmeichel & Baumeister, 2004). Thus, negative affect should inhibit the translation of proactive contemplation into more concrete planning or overt behaviors.

On the other hand, negative affect can signal to an individual that the present situation needs changing (Carver & Scheier, 1990) and can thus act as a stimulus for initiating proactive behaviors to lessen negative feelings (Baumeister, Vohs, DeWall, & Zhang, 2007). Further, because negative affect signals a threat to the self (Easterbrook, 1959), it likely induces efforts to change a situation so that it can be made to fit with the individual's desired direction (Frijda, 1987). In particular, high-activated negative mood, due to its stronger element of action readiness (Russell, 2003) and potency (Shaver, Schwartz, Kirson, & O'Connor, 1987), should provide more energy to exert an influence than low-activated negative mood.

In sum, two competing perspectives prevail for the relationship of negative mood with planning, enacting, and reflecting on proactivity, and we investigate these relationships in an exploratory way. However, we do expect a clear positive association of low-activated negative mood with the envisioning element of proactivity, as outlined above. Thus, we propose the following:

> *Hypothesis 2:* Low-activated negative mood will be positively associated with envisioning proactivity.

We conducted two studies to test the hypotheses. Study 1 involved an initial exploration of affect and work-related proactive goal regulation in a call center setting. In Study 2 we extended analyses by testing our hypotheses using a longitudinal design to examine affect and career-related proactive goal regulation within a higher education setting.

Study 1

Sample and Procedure

We conducted this study with employees working for a United Kingdom-based, multinational organization in a call center envi-

ronment. Customer service representatives ($N = 694$) were invited to take part in a study that would help identify key issues to improve the quality of their working life. Participants completed online questionnaires during working hours, and were entered into a prize draw. Senior management endorsed the survey. We followed a list-wise deletion approach to the extent that only questionnaires in which at least one item per measure of interest was available were included in analyses (Howell, 2007). The response rate was 32% ($N = 225$). Respondents ranged from 18 to 61 years ($M = 33.72$, $SD = 11.24$), with tenure ranging from less than 1 year to 34 years ($M = 4.43$, $SD = 5.25$). 66% of the respondents were female, and 78% were full-time rather than part-time employed.

Measures

Control variables. In line with previous research on affect and proactivity at work (e.g., Den Hartog & Belschak, 2007; Fritz & Sonnentag, 2009), we controlled for gender and age in order to account for possible confounding effects. We further chose to control for trait positive and negative affectivity, in order to avoid systematic trait influences in the response to the measures investigated (see Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). *Gender* and *age* were each measured with one item (*gender*: 0 = female, 1 = male; *age*: in years). *Trait positive and negative affectivity* were assessed by using the respective five highest loading items from the Positivity and Negativity Affect Scale (PANAS; Watson et al., 1988). Respondents were asked, to what extent they in general felt "enthusiastic," "interested," "determined," "excited," and "inspired" (positive affectivity; $\alpha = .92$), as well as "scared," "afraid," "upset," "distressed," and "nervous" (negative affectivity; $\alpha = .89$). Anchors ranged from 1 (*very slightly or not at all*) to 5 (*extremely*).

In order to control for cognitive-motivational influencing factors, we chose established indicators of state *can do* (role breadth self-efficacy) and *reason to* (affective organizational commitment) cognitive-motivational influences on proactivity (Parker et al., 2010). We measured role breadth self-efficacy by the four highest loading items from Parker's (1998) scale. An example item was, "To what extent do you feel comfortable designing new procedures for your work area?" ($\alpha = .88$; 1 = *not at all confident* to 5 = *very confident*). We measured *affective organizational commitment* with the four highest loading items from the Meyer, Allen, and Smith (1993) measure. An example item was, "To what extent do you agree with the following statement: [name of the organization] has a great deal of personal meaning for me" ($\alpha = .90$; 1 = *strongly disagree* to 5 = *strongly agree*).

Work-related mood. We measured *mood* on a 7-point Likert-type scale with four items per mood type based on an extended measure of Warr (1990). High-activated positive mood was measured by the following items: "enthusiastic," "excited," "inspired," and "joyful" ($\alpha = .89$). Low-activated positive mood was measured with "at ease," "calm," "laid-back," "relaxed" ($\alpha = .82$). High-activated negative mood was measured with "anxious," "nervous," "tense," and "worried" ($\alpha = .80$), and low-activated negative mood with "dejected," "depressed," "despondent," and "hopeless" ($\alpha = .84$). We asked respondents to indicate their feelings at work over the past month (1 = *never* to 7 = *always*).

Work-related proactive goal regulation. For the enacting element of proactivity, we used the validated measure of *task proactivity* (Griffin et al., 2007). The scale comprises the following statements: "Thinking about how you have carried out your core job over the past month, to what extent have you . . . made changes to the way your core tasks are done, . . . initiated better ways of doing your core tasks, and . . . come up with ideas to improve the way in which your core tasks are done?" ($\alpha = .89$; 1 = *not at all* to 5 = *a great deal*). The same time frame was used as for inquiring about work-related affective experiences.

We developed new measures to assess the additional three elements of *envisioning*, *planning*, and *reflecting*, because measures do not currently exist. In doing so, we followed Hinkin's (2005) overall recommendations for scale development. Thus, based on prior theoretical conceptualizations of the elements of goal regulation (e.g., Frese & Fay, 2001; Gollwitzer, 1990; Grant & Ashford, 2008), we initially developed 29 items to assess the elements of envisioning, planning, and reflecting. After seeking feedback both from academics with knowledge of the field, as well as from employees who worked in the organization, we selected 16 items that appeared content valid to all experts for final inclusion in the survey.

For each item, respondents were asked how much time and effort they had expended over the last month, ranging from 1 (*not at all*) to 5 (*a great deal*). In order to enhance discriminatory power between the elements of proactive goal regulation, we reduced each element to comprise just three items, based on theoretical considerations, as well as on factor loadings from exploratory factor analysis and communalities. Further consideration of Cronbach's alphas, and item-total correlations, supported our choice of the following items: *Envisioning*—"thinking about ways to improve services to customers," "thinking about ways to save costs or increase efficiency at work," and "thinking about how to better perform your tasks" ($\alpha = .86$); *Planning*—"going through different scenarios in your head about how to best bring about a work change," . . . "getting yourself into the right mood before trying to make a change or put forward a suggestion," and "thinking about a change-related situation from different angles, before deciding how to act" ($\alpha = .88$); *Reflecting*—"monitoring the effects of your change-related behavior," "seeking feedback from others regarding the effects of your change-related actions," and "extracting lessons for the future from the change-related actions you engaged in" ($\alpha = .91$). In the proactive goal regulation model, comprising envisioning, planning, enacting, and reflecting, average exploratory factor loading was .80 and no item cross-loaded greater than .3 on different factors.

We additionally conducted a confirmatory factor analysis with MPlus, Version 6.1 (Muthén & Muthén, 1998–2010), in order to compare alternative structures. A large value of chi-square indicates that the model does not adequately fit the data, and a chi-square ratio (i.e., chi-square divided by degrees of freedom) of three or less is taken as a useful guideline for accepting a model (Schermelleh-Engel, Moosbrugger, & Müller, 2003). Because the sample size was relatively small we also used two incremental fit indices: the standardized root-mean-square residual (SRMR), for which values of less than .10 are desired, as well as the root-mean-square error of approximation (RMSEA), which should be less than .08. We further report the comparative fit index (CFI), for which Schermelleh-Engel and colleagues (2003) recommend val-

ues of .95 or greater. We started with Model 1, which assumed that no items were correlated with each other. Model 2 comprised one factor that integrated all four elements of proactive behavior. Alternatively, there may be no meaningful differences between the more cognitive elements of envisioning, planning, and reflecting, and the overt behavioral element of enacting. We accounted for this possibility by constructing Model 3, which comprised two factors—proactive behavior (enacting) versus pre- and post-elements of proactive behavior (envisioning, planning, and reflecting). Another possibility is that respondents do not realize a meaningful distinction between envisioning and planning proactive behavior, versus actually engaging and then reflecting on their engagement in behavior. We accounted for this possibility by including Model, 4 which distinguished the two factors of pre-proactive behavior (envisioning and planning), as well as during and after-proactive behavior (enacting and reflecting). We further accounted for the possibility that employees perceive no differences between the two pre-enacting elements (envisioning and planning), but distinguish between enacting and reflecting, in Model 5. Finally, in line with our theory-based deduction of the four goal-regulatory elements, we constructed Model 6 which distinguished four factors, one for each of the four elements of proactivity.

As expected, the hypothesized four-factor model (Model 6) had a significantly better fit than Models 1–5 (see Table 1), and had an excellent fit to the data (CFI = .98, RMSEA = .06, SRMR = .03, ratio of chi-square to degrees of freedom = 1.67). Thus CFA results indicated that the four elements of proactive behavior were indeed distinct from each other. The four self-regulatory elements of proactivity were nevertheless positively correlated (see Table 2), which one would expect because they all link into an overall goal regulation process in which individuals can progress and regress from one element to another (see King, 1992).

Results

Table 2 shows the descriptive statistics and zero-order correlations for the major variables. We ran general linear models in SPSS to test our hypotheses (see Table 3). In these models, we controlled all elements of proactive goal regulation, as well as all affect quadrants, to assess the unique relationships between each affect quadrant and each element of proactive goal regulation. For the reasons described earlier, we also controlled for trait positive affectivity, trait negative affectivity, age, gender, role breadth self-efficacy, and affective commitment.

Hypothesis 1 predicted that high-activated positive mood would be positively associated with all elements of proactive goal regulation. Results supported this hypothesis: Unstandardized coefficients were $B = .17$ ($SE = .06$, $p < .01$) for envisioning, $B = .21$ ($SE = .07$, $p < .01$) for planning, $B = .19$ ($SE = .07$, $p < .01$) for enacting, and $B = .25$ ($SE = .07$, $p < .001$) for reflecting. In line with our arguments, low-activated positive mood was not significantly associated with any elements of proactive goal regulation. It is important to note that high-activated positive mood was associated with proactive goal regulation element even after controlling for indicators of *can do* and *reason to* cognitive-motivational factors. Thus, how employees feel at work is associated with overall proactive goal regulation, irrespective of their commitment to the organization, or individual self-efficacy beliefs. The findings are consistent with the possibility that the experience of feelings such as enthusiasm at work might help individuals to develop proactive thoughts, as well as to implement and reflect on their proactive stances, though might also result from implementing and reflecting on proactive behaviors.

As predicted in Hypothesis 2, low-activated negative mood was positively associated with envisioning ($B = .24$, $SE = .07$, $p < .01$).[1] Exploratory analyses showed there were no significant associations of low-activated negative mood with planning, enacting, and reflecting, or high-activated negative mood with any elements of proactive goal regulation. Thus, depressed feelings at work, while associated with thoughts about changing a situation (envisioning), appear not be highly related to translating proactive thoughts into more specific planning or action.

While Study 1 provided initial support of our hypotheses, it was limited to investigating call center employees' proactivity in changing situations (rather than themselves), as well as in its cross-sectional study design. We thus set out in Study 2 to test whether findings replicated in a different setting, using career-related proactivity and a longitudinal design.

Study 2

Sample and Procedure

Participants in Study 2 were 250 first year undergraduate students in a British medical school. Demographic information and character traits (e.g., proactive personality) were measured prior to the beginning of the year. A longitudinal study was carried out with four almost equidistant time points (1–3 months apart, each), spanning the entire first year of participants' academic training. This study had a conceptual zero starting point because it began measuring study-related affect and proactivity at the onset of University education. Our study ended with data collection in one of the last lectures of the academic year. Participating students received individualized feedback at the end of the study and were entered into a prize draw.

The current study was based on all 225 students for whom responses on any of the measures in our study were available. At Time 1 there were 186 responses to the survey (corresponding to a 74% response rate), at Time 2 there were 186 responses (74% response rate), at Time 3 there were 142 responses (57% response rate), and at Time 4 there were 165 responses to our survey (68% response rate). Average response rate across time was 68%. Individual missing responses at any time point were estimated by MPlus, Version 6.1, using maximum likelihood (ML) estimation. Age ranged from 18 to 30 years ($M = 19.09$, $SD = 1.73$); 72% of the students were female.

Measures

Control variables. As with Study 1 we controlled for gender and age (*gender*: 0 = female, 1 = male; *age*: in years), as well as

[1] Note that we also tested the hypotheses using more traditional hierarchical regression analyses. The same pattern of findings was obtained, and the results showed that mood predicted each element of proactive goal regulation over and above the control variables (contact first author for these results).

Table 1
Study 1: Comparison of Alternative Factor Structures for Proactive Goal Regulation

Model	Descriptives	χ^2, *df*	Ratio χ^2/df	$\Delta\chi^2$, Δdf[b] (model of comparison)	CFI	RMSEA	SRMR
Model 1	Baseline model: All items uncorrelated	2068.55, 66	31.34	—	—	—	—
Model 2	One factor: Envisioning, planning, enacting, reflecting	623.28, 54	11.54	1445.27, 12[a] (Model1)	.72	.22	.09
Model 3	Two factors: Pre-and post elements (envisioning, planning, reflecting) vs. proactive behavior (enacting)	371.09, 53	7.00	252.19, 1[a] (Model2)	.84	.16	.07
Model 4	Two factors: Pre-elements (envisioning and planning) vs. during and after-elements (enacting and reflecting)	467.37, 53	8.82	−96.28, 0[a] (Model3)	.79	.19	.08
Model 5	Three factors: Pre-acting (envisioning and planning) vs. enacting, and reflecting	213.02, 51	4.18	158.07, 2[a] (Model3)	.92	.12	.06
Model 6	Four factors: All goal regulation elements as theorized (envisioning, planning, enacting, reflecting)	80.12, 48	1.67	132.90, 3[a] (Model5)	.98	.06	.03

Note. $N = 225$. CFI = comparative fit index; RMSEA = root-mean-square error of approximation; SRMR = standardized root-mean-square residual.
[a] Model improvement significant at $p < .05$ level. [b] Change assessed versus previously best model.

positive and negative affectivity. We used the same measure of trait positive affectivity ($\alpha = .76$) and trait negative affectivity ($\alpha = .83$) as in Study 1. Further, we controlled for established indicators of stable *can do* and *reason to* cognitive- motivational influences on proactivity, including proactive personality (Bateman & Crant, 1993) and learning goal orientation (Dweck, 1986). Anchors for these measures ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). We measured proactive personality with the six items from Bateman and Crant's (1993) proactive personality scale, as recommended by Claes, Beheydt, and Lemmens (2005). An example item was, "If I see something I don't like, I fix it" ($\alpha = .65$). We measured learning goal orientation with the three highest loading items from VandeWalle and Cummings's (1997) measure of learning goal orientation. An example item was, "I am willing to select a challenging task that I can learn a lot from" ($\alpha = .70$). Finally, because performance might co-vary with both affect and proactivity, in order to control for the effect of *perceived course performance*, we chose an adapted three-item measure of individual task performance (Griffin et al., 2007). An example item was, "To what extent have you achieved the learning objectives for this course?" (Time 1–4: $\alpha = .68$ to .75; 1 = *not at all* to 5 = *a great deal*).

Study-related mood. We used the same measure as in Study 1 to assess high-activated positive mood (Time 1–4: $\alpha = .79$ to .88) and low-activated negative mood (Time 1–4: $\alpha = .79$ to .86). Respondents indicated their feelings when carrying out their studies over the past month.

Career-related proactive goal regulation. Measures currently exist to assess the enacting element of career-related proactive goal regulation, but not the other elements. For *enacting*, we used a composite measure of feedback seeking (Ashford, 1986), as well as career initiative (Tharenou & Terry, 1998) that loaded onto one factor in initial exploratory factor analyses. The scale comprises the following statements: "In the last month, to what extent have you . . . sought extra feedback from your lecturers or tutors about your performance in the course, . . . sought feedback from your lecturers or tutors about your potential as a doctor, . . . discussed your career prospects with someone more experienced, . . . engaged in career path planning, . . . discussed your career aspirations with doctors or other professionals?" (Time 1–4: $\alpha = .76$ to .86; 1 = *not at all* to 5 = *a great deal*).

We adapted the measures from Study 1 to assess envisioning, planning, and reflecting in relation to career-related proactivity in a learning environment. Students were asked to indicate how much time and effort they had spent over the last month, ranging from 1 (*not at all*) to 5 (*a great deal*) doing the following: *Envisioning*—"thinking about ways to obtain extra feedback on your performance in your course," "thinking about ways to improve your career prospects," and "thinking about ways to receive feedback on your potential as a doctor" (Time 1–4: $\alpha = .82–.87$); *Planning*—"going through different scenarios in your head about how to approach someone for career advice," "thinking about a career-development related situation (e.g., whether to acquire additional skills that might help in progressing your career) from different angles, before deciding how to act," "getting yourself into the right mood before asking a lecturer or tutor for extra performance-related feedback," and "going through different scenarios in your head about how to best obtain extra performance-related feedback" (Time 1–4: $\alpha = .84–.88$); *Reflecting*—"monitoring the effects of your activities aimed at increasing your career prospects," "considering the outcomes of your queries for feedback," and "considering the outcomes of your efforts to progress your career" (Time 1–4: $\alpha = .76–.88$). We also used a composite score of envisioning, planning, enacting, and reflecting to represent *overall proactive goal regulation* at each time point (Time 1–4; $\alpha = .91–.94$).

In order to test for measurement properties of measures over time, we conducted longitudinal confirmatory factor analyses, following the steps outlined by Brown (2006). Thus, we tested models with free factor loading over time (configural invariance) and with factor loadings restricted to be equal over time (factor loading invariance). Fit indices suggested good fits to the data (see Table 4). Further, there were no significant differences between models testing for configural invariance and for factor loading invariance, providing good evidence for measure invariance over time. Additionally, Akaike information criteron (AIC; Akaike, 1987) values were lower for the more parsimonious models in which factor loadings were

Table 2
Study 1: Means, Standard Deviations, and Correlations

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Gender (0 = female, 1 = male)	0.34	0.47	—													
2. Age	33.72	11.24	−.12	—												
3. Positive Affectivity	3.44	0.94	−.14*	.07	*.92*											
4. Negative Affectivity	1.62	0.72	−.18**	.06	.02	*.89*										
5. Role breadth self-efficacy	3.39	1.00	.20*	−.10	.27**	−.17**	*.88*									
6. Affective organizational Commitment	3.05	1.00	−.13*	.05	.50**	.01	.04	*.90*								
7. Envisioning	3.05	1.00	−.04	−.08	.39**	.08	.49**	.30**	*.86*							
8. Planning	2.53	1.09	.12	−.14*	.29**	.08	.43**	.18**	.63**	*.88*						
9. Enacting (Task Proactivity)	2.98	1.08	−.06	−.15*	.33**	.05	.42**	.30**	.52**	.47**	*.89*					
10. Reflecting	2.36	1.07	−.02	−.11	.34**	.09	.41**	.24**	.56**	.69**	.55**	*.91*				
11. High-activated Positive Mood	3.43	1.33	−.18**	−.05	.63**	.01	.15*	.53**	.39**	.30**	.39**	.39**	*.89*			
12. Low-activated Positive Mood	3.88	1.19	.09	−.01	.30**	−.28**	.21**	.21**	.20**	.04	.19**	.09	.43**	*.82*		
13. High-activated Negative Mood	2.32	1.00	.00	.04	−.10	.55**	−.10	−.12	.02	.12	.02	.09	−.08	−.42**	*.80*	
14. Low-activated Negative Mood	2.24	1.14	.12	−.04	−.37**	.33**	.04	−.48**	.03	.03	−.06	−.04	−.42**	−.32**	.56**	*.84*

Note. $N = 225$. Internal consistency values (Cronbach's alphas) appear across the diagonal in italics.
* $p < .05$. ** $p < .01$.

restricted to be equal over time. We thus assumed measurement invariance across time.

Results

Table 5 shows zero-order correlations for the major variables. In the model, we tested the association of high-activated positive mood with an overall proactive goal regulation index (envisioning, planning, enacting, and reflecting combined). We opted for this more parsimonious approach to test Hypothesis 1, rather than reporting a separate model for each element, because the hypothesis linking high-activated positive mood and proactivity was the same across elements.[2] We also tested the association between low-activated negative mood with the envisioning element of proactive goal regulation (Hypothesis 2). A latent growth model with two linear parallel processes was used to test our hypotheses (Bollen & Curran, 2006). Intercept and slope coefficients of mood were linked to intercept and slope of elements of proactive goal regulation. We additionally included several time-invariant control variables in our model: trait positive and negative affectivity, gender, age, proactive personality, and learning goal orientation.

Modification indices suggested that freely estimating the mean of proactive goal regulation at Time Point 2 would improve model fit considerably. The mean of proactive goal regulation at this time point was significantly lower than at other time points. Between Time Points 1 and 2, students received marks for the first time in their medical training. This mark accounted for 40% of the overall grade for the year, potentially explaining the decrease in career-related proactive goal regulation at this time point that was not explained by the rest of the growth process. In sum, this finding suggests the importance of systematically controlling for perceived course performance, which was accounted for in Models 3 and 4.

In support of Hypothesis 1, initial levels of high-activated positive mood were positively associated with initial levels of proactive goal regulation ($B = .48$, $p < .001$; see Figure 1). Further, the slope for mood (capturing change in high-activated positive feelings) was positively associated with values of the slope of proactive goal regulation ($B = .34$, $p < .01$), suggesting that students who experience positive change in high-activated positive mood also experience positive change in proactive goal regulation. Model 1 had an excellent fit to the data with $\chi^2(51, N = 225) = 55.57$, $\chi^2/df = 1.09$, RMSEA = .02, SRMR = .05, CFI = .99.

Model 2 tested Hypothesis 2, controlling for the influence of cognitive motivation in the latent growth model. The residual variance of the slope factor for envisioning proactivity was fixed to zero, implying homogeneity in the slope growth factor for this construct. In support of Hypothesis 2, results indicated that initial levels of low-activated negative mood were positively associated with initial levels of envisioning proactivity ($B = .65$, $p < .001$). Further, the slope of low-activated negative mood (capturing change in negative feelings over time) was associated with higher values for the envisioning slope ($B = 1.28$, $p < .05$). Model 2 had

[2] We additionally ran separate latent growth models for the association of high-activated positive mood with each element of proactive goal regulation. Support for Hypothesis 1 was found in all separate models (details are available from the first author upon request).

Table 3
General Linear Models on Affect Quadrants and Work-Related Proactive Goal Regulation

Dependent variable	Parameter	*B*	*SE*	*t*
Envisioning[a]	High-activated positive mood	.17**	.06	2.89
	Low-activated positive mood	.02	.06	.41
	High-activated negative mood	−.07	.08	−.90
	Low-activated negative mood	.24**	.07	3.51
	Role breadth self-efficacy	.42***	.06	7.03
	Organizational Commitment	.23**	.07	3.36
Planning[b]	High-activated positive mood	.21**	.07	3.02
	Low-activated positive mood	−.12	.07	−1.86
	High-activated negative mood	.07	.09	.78
	Low-activated negative mood	.06	.08	.79
	Role breadth self-efficacy	.42***	.07	5.97
	Organizational Commitment	.08	.08	1.04
Enacting[c]	High-activated positive mood	.19**	.07	2.78
	Low-activated positive mood	.02	.06	.26
	High-activated negative mood	.03	.09	.30
	Low-activated negative mood	.10	.08	1.20
	Role breadth self-efficacy	.42***	.07	6.05
	Organizational Commitment	.21**	.08	2.66
Reflecting[d]	High-activated positive mood	.25***	.07	3.61
	Low-activated positive mood	−.08	.06	−1.30
	High-activated negative mood	.07	.09	.73
	Low-activated negative mood	.05	.08	.61
	Role breadth self-efficacy	.40***	.07	5.82
	Organizational Commitment	.09	.08	1.13

Note. $N = 225$. Additional controls for age, gender, and positive and negative affectivity were nonsignificantly or weakly associated with elements of proactivity and are omitted from display for parsimony. All coefficients are unstandardized.
[a] R^2 (adjusted) = .42 (.40), $F = 15.75^{***}$. [b] R^2 (adjusted) = .32 (.28), $F = 9.84^{***}$. [c] R^2 (adjusted) = .34 (.31), $F = 10.86^{***}$. [d] R^2 (adjusted) = .32 (.29), $F = 10.16^{***}$.
** $p < .01$. *** $p < .001$.

an excellent fit to the data with $\chi^2(53, N = 225) = 52.08$, $\chi^2/df = 0.98$, RMSEA = .00, SRMR = .05, CFI = 1.00.

In Models 3 and 4 we tested our Hypotheses 1 and 2 while controlling for perceived course performance as a time-variant covariate with paths to mean values of mood and proactive goal regulation (see Figure 2). Due to missing data on this time-variant covariate, sample size was reduced to $n = 100$ for Models 3 and 4. However, logistic regression analyses with mood (high-

Table 4
Longitudinal Confirmatory Factor Analyses

Model	χ^2, *df*	Ratio χ^2/df	$\Delta\chi^2$, Δdf[a]	AIC	CFI	SRMR	RMSEA
High-activated Positive Mood							
Configural Invariance	94.72, 74	1.28	—	7,498.39	.99	.04	.04
Factor Loading Invariance	101.83, 83	1.23	−7.11, −9	7,487.50	.99	.05	.03
Low-activated Negative Mood							
Configural Invariance	129.69, 74	1.75	—	6,637.04	.96	.07	.06
Factor Loading Invariance	134.67, 82	1.64	−4.98, −8	6,626.02	.96	.06	.05
Envisioning							
Configural Invariance	34.28, 30	1.14	—	4,978.73	.99	.03	.03
Factor Loading Invariance	40.94, 36	1.14	−6.66, −9	4,973.37	.99	.06	.03
Planning							
Configural Invariance	93.50, 68	1.38	—	6,093.39	.98	.04	.04
Factor Loading Invariance	98.95, 81	1.22	−5.45, −13	6,072.85	.99	.05	.03
Enacting							
Configural Invariance	198.89, 132	1.51	—	7,260.02	.96	.06	.05
Factor Loading Invariance	209.40, 143	1.46	−10.15, −11	7,231.15	.98	.05	.04
Reflecting							
Configural Invariance	53.48, 29	1.84	—	4,629.38	.98	.05	.06
Factor Loading Invariance	51.01, 34	1.50	2.47, −5	4,616.91	.98	.05	.05

Note. $N = 220–221$. AIC = Akaike information criteron; CFI = comparative fit index; SRMR = standardized root-mean-square residual; RMSEA = root-mean-square error of approximation.
[a] Change assessed versus respective configural invariance model.

activated positive and low-activated negative) and proactive goal regulation (envisioning, and overall proactive goal regulation) did not reveal significant differences ($p < .05$) between this subsample and the full sample at any occasion, thus justifying the use of the subsample that contained measures on perceived course performance.

Model 3 was designed to test Hypothesis 1 controlling for perceived course performance. In this model, the mean proactive goal regulation score at Time Point 2 did not require separate estimation, suggesting that the new time-variant covariate captured students' responses to course information across the year in a way that was sufficient to produce a well-fitting model despite the reduction in sample size, with $\chi^2(96, N = 100) = 135.67$, $\chi^2/df = 1.41$, RMSEA = .06, SRMR = .12, CFI = .94. Perceived course performance was positively associated with both high-activated positive mood and proactive goal regulation (all ps $< .05$), except for proactive goal regulation at Time Points 1 and 4 and high-activated positive mood at Time Point 4 (latter, at the border of statistical significance $p = .05$). In support of our Hypothesis 1, associations between the intercepts of high-activated positive mood and proactive goal regulation ($B = .39$, $p < .01$), as well as between the high-activated positive mood slope and the proactive goal regulation slope ($B = .33$, $p < .05$) remained significant and positive.

Model 4 was designed to test Hypothesis 2 while controlling for perceived course performance at each time point. Similar to Model 3, the mean envisioning score at Time Point 2 did not require separate estimation and the residual variance of envisioning proactivity was fixed to zero. The fit of Model 4 was acceptable, with $\chi^2(97, N = 100) = 123.28$, $\chi^2/df = 1.27$, RMSEA = .05, SRMR = .11, CFI = .94. Perceived course performance was only positively associated with envisioning at Time Points 3 and 4 ($B = .25$, B = .31, respectively; both $p < .01$) and was not associated with low-activated negative mood at any time point. In support of Hypothesis 2, associations between the initial values of low-activated negative mood and envisioning ($B = .73$, $p < .001$), as well as between growth in low-activated negative mood and growth in envisioning over time ($B = 1.06$, $p < .05$), remained significant.[3] In sum, Hypotheses 1 and 2 were supported over time, while controlling for stable cognitive motivation variables and for perceived course performance over the academic year.

General Discussion

A key finding of our studies concerns the positive association of high-activated positive mood with proactivity. High-activated positive mood, such as feelings of being inspired, energized and enthused, emerged as a consistent positive predictor of all elements of proactive goal regulation, across two independent investigations with diverse samples (call center employees and medical students) and focusing on two distinct types of proactivity (work- vs. career-related). Moreover, ruling out the possibility that personality is driving the findings, high-activated positive mood was important even after controlling for trait affectivity. The associations were also robust over and above controls of *can do* and *reason to* indicators of motivation (Studies 1 and 2), as well as perceived course performance (in Study 2).

Altogether, notwithstanding the need for further causal evidence, our study suggests that feeling positive in an activated way is important for prompting forward-thinking, change-oriented behavior. The association of positive mood with proactivity is consistent with previous findings of a positive relationship between positive affect and the enacting element of proactivity (Den Hartog & Belschak, 2007; Fritz & Sonnentag, 2009), but our investigation goes further than these studies because we show that it is particularly high-activated positive mood, rather than low-activated positive mood, that is associated with proactivity. Theoretically, our findings are consistent with Parker and colleagues' (2010) proposal for an *energized to* pathway for proactivity in which affect-related motivational states predict proactivity. Our findings also coincide with Spreitzer, Lam, and Quinn's (in press) arguments for the importance of human energy in organizations. Practically, assuming causal direction is confirmed in additional studies, our findings suggest the value of organizations' generating high-activated positive mood when proactivity is important, such as by creating challenging tasks for employees or increasing emotional attachment to the organization (Brief & Weiss, 2002; George & Brief, 1992).

Importantly, our article is one of the first to differentiate between high-activated positive mood and low-activated positive mood when predicting behavior. Studies typically do not make this distinction. Yet, as implied in the circumplex model of affect (Russell, 1980, 2003), affect can be distinguished in terms of both valence (positive, negative), and activation (high, low). Our studies support the value of this more differentiated approach to affect, showing that it is the combination of positive affect and activation—in the form of feelings like enthusiasm—that are key. Whereas previous research on affect and behaviors mainly highlighted the importance of positive mood "in general" for broadened cognitions and behaviors (e.g., Isen, 2000b), at least when it comes to proactive behaviors, it appears that it is not positive mood per se that is important, but high-activated positive mood. Our findings therefore suggest the need for the development of theory regarding the different consequences of positive affect with varying levels of activation. Practically, organizations should carefully consider which type of affective experience is measured in employee surveys. Not differentiating, for instance, between high-

[3] We additionally tested for indirect effects (Sobel, 1982) in Models 1–4, where proactive personality and learning goal orientation were modelled to influence proactivity via mediating influences of high-activated positive and low-activated negative mood. No evidence for mediating effects were found in any of the models, suggesting the associations between mood and proactive goal regulation in our models were independent of the influence of indicators of stable cognitive motivation. Further, we conducted exploratory analyses to assess the association of low-activated negative mood with planning, enacting, and reflecting, as well as high-activated negative mood with each of the elements of proactive goal regulation. Results were consistent with Study 1 to the extent that neither type of negative affect was positively associated with the actual implementation of proactivity and subsequent reflection processes. Unexpected significant positive associations were found between low-activated negative mood and planning and between high-activated negative mood and envisioning as well as planning. We discuss these findings in more detail in our discussion. Detailed findings can be obtained from the first author upon request.

Table 5
Study 2: Means, Standard Deviations, and Correlations

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10
1. Age	19.09	1.73	—									
2. Gender	0.37	0.48	.12	—								
3. Positive Affectivity	3.93	0.58	.13	−.07	*.76*							
4. Negative Affectivity	2.26	0.78	.02	−.11	−.02	*.83*						
5. Proactive Personality	3.62	0.61	.18*	−.01	.31**	−.12	*.65*					
6. Learning Goal Orientation	4.00	0.59	.21*	.17*	.31**	−.04	.33**	*.70*				
7. T1 High-activated Positive Mood	4.54	1.00	.06	.02	.49**	−.24**	.27**	.20*	*.79*			
8. T1 Low-activated Negative Mood	2.01	0.91	.02	−.03	−.06	.55**	.02	−.07	−.20**	*.82*		
9. T1 Envisioning	2.70	0.95	.25**	.01	.30**	.20*	.21*	.31**	.33**	.27**	*.82*	
10. T1 Overall Proactive Goal Regulation	2.20	0.68	.26**	.09	.34**	.13	.18*	.37**	.42**	.24**	.85**	*.91*
11. T1 Perceived Course Performance	3.76	0.60	.00	−.07	.38**	−.07	.27**	.20*	.36**	−.06	.23**	.22**
12. T2 High-activated Positive Mood	4.30	1.07	.14	.15*	.43**	−.25**	.26**	.30**	.64**	−.14	.27**	.36**
13. T2 Low-activated Negative Mood	1.95	0.87	.03	−.04	−.11	.51**	−.08	−.12	−.12	.55**	.30**	.28**
14. T2 Envisioning	2.43	0.91	.11	.13	.26**	.15	.21*	.33**	.26**	.22**	.60**	.64**
15. T2 Overall Proactive Goal Regulation	1.98	0.67	.21*	.15*	.27**	.11	.22*	.36**	.34**	.17*	.63**	.71**
16. T2 Perceived Course Performance	3.78	0.58	.05	−.05	.30**	−.12	.24**	.23**	.22**	−.08	.20*	.24**
17. T3 High-activated Positive Mood	4.23	1.13	.14	.16	.43**	−.21*	.36**	.20*	.60**	−.06	.30**	.35**
18. T3 Low-activated Negative Mood	1.99	0.86	.05	.01	−.06	.39**	−.02	.01	−.05	.58**	.19*	.23**
19. T3 Envisioning	2.57	0.94	.15	.06	.29**	.01	.35**	.29**	.37**	.12	.50**	.47**
20. T3 Overall Proactive Goal Regulation	2.08	0.74	.20*	.16	.31**	.02	.34**	.27**	.42**	.11	.52**	.56**
21. T3 Perceived Course Performance	3.94	0.61	.24*	−.07	.36**	−.12	.31**	.21*	.25**	−.11	.18*	.20*
22. T4 High-activated Positive Mood	4.27	1.17	.11	.18*	.40**	−.14	.21*	.10	.58**	−.05	.22**	.24**
23. T4 Low-activated Negative Mood	1.90	0.86	−.02	.01	−.12	.49**	−.05	−.03	−.16	.62**	.16	.17*
24. T4 Envisioning	2.52	0.96	.15	.18*	.34**	.17	.33**	.34**	.20*	.20*	.60**	.51**
25. T4 Overall Proactive Goal Regulation	1.99	0.66	.13	.20*	.34**	.18*	.23*	.33**	.29**	.16	.58**	.54**
26. T4 Perceived Course Performance	4.03	0.48	.16	−.06	.27**	−.20*	.15	.23*	.13	−.10	.21*	.20*

Note. $N = 107–186$. Internal consistency values (Cronbach's alphas) appear across the diagonal in italics.
* $p < .05$. ** $p < .01$.

and low-activated positive affect, may mask substantive relationships between affect and work performance.

A further important finding is the association of low-activated negative mood, or feelings such as being depressed or sad, with the envisioning element of proactive goal regulation for both work-related and career-related proactivity. These findings are consistent with the idea that feeling depressed at work may stimulate contemplation or rumination about changing a present situation or the self (Martin & Tesser, 1996). However, it is important to also observe that low-activated negative mood was consistently unrelated with actual change. Although we did not test this, extensive rumination or contemplation of proactive change without action could ultimately be disruptive, from both an organizational perspective (e.g., "wasted" time) and an individual perspective (e.g., discontent as a result of unfulfilled aspirations; Seligman, 1975).

Similarly, we found no associations between high-activated negative feelings, such as anxiety or tension, and proactivity. This exploratory null finding is interesting given that prior research has shown that stressors such as time pressure can activate proactive behaviors like personal initiative (e.g., Fay & Sonnentag, 2002). Our findings suggest, in line with Ohly and Fritz (2010), that it is unlikely that time pressure has its effects through prompting anxiety. Instead, time pressure might lead to higher levels of proactive behaviors by prompting feelings of challenge and hence elicit high-activated, positive feelings such as excitement in the job.

Notably, our investigation was limited to high-activated moods such as overall anxiety at work. Future research could usefully extend this investigation to discrete emotions of anger or frustration. For instance, feeling angry about a certain work process might spur individuals' engagement in changing this process. How the different affect dimensions interact also remains unclear. It could be that overall positive moods help alleviate the tendencies to abandon goals when encountering negative emotions (Carver & Scheier, 1990). In this vein, research suggests that high-activated positive overall moods provide the resources to cope with a stressful situation and to buffer against the effects of negative feelings (Fredrickson, Mancuso, Branigan, & Tugade, 2000), facilitating sustained proactive action. Alternatively, there might be a synergy effect between high-activated positive moods and negative emotions: Thus, negative emotions regarding a particular issue in the light of overall high-activated positive moods at work might have powerful effects on prompting and sustaining proactivity because individuals act proactively in order to maintain their positive mood (Carlson, Charlin, & Miller, 1988; Wegener & Petty, 1994). These alternative hypotheses remain to be tested.

Over and above the implications of our research for understanding how affect relates to proactivity, a further contribution of our research concerns the goal regulation approach to investigating proactivity. Studies have rarely looked at proactivity in this way, yet we showed that four elements of proactivity—envisioning, planning, enacting, and reflecting—can usefully be distinguished from each other. These elements were factorially distinct and operated in different ways. For instance, whereas depression was an important correlate of envisioning, these low-activated negative feelings had no association with enacting of proactivity. Our more

11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
.71															
.15	*.85*														
.06	−.25**	*.79*													
.19*	.27**	.16*	*.82*												
.16*	.34**	.18*	.84**	*.92*											
.54**	.20**	−.05	.28**	.29**	*.68*										
.14	.80**	−.16	.30**	.36**	.14	*.86*									
.07	.04	.56**	.21*	.24**	−.04	−.13	*.80*								
.20*	.31**	.07	.48**	.56**	.13	.38**	.22**	*.84*							
.18*	.37**	.10	.56**	.70**	.18*	.41**	.21*	.87**	*.94*						
.58**	.12	−.03	.18*	.17	.54**	.25**	−.09	.23**	.21*	*.75*					
.09	.72**	−.17*	.22**	.29**	.14	.83**	−.10	.36**	.38**	.14	*.88*				
−.07	−.20*	.54**	.26**	.19*	−.11	−.18	.65**	.16	.22*	−.17	−.18*	*.86*			
.20*	.26**	.18*	.61**	.59**	.22**	.40**	.12	.62**	.65**	.20*	.36**	.23**	*.87*		
.17*	.31**	.17*	.66**	.66**	.24**	.40**	.18	.61**	.71**	.16	.40**	.29**	.88**	*.93*	
.41**	.23**	−.06	.12	.12	.54**	.17	−.11	.24**	.20*	.55**	.22**	−.22**	.20**	.19*	*.69*

nuanced findings help to explain why past research, which has not made distinctions between different elements of proactivity, has not found coherent evidence for an association of negative affect with proactivity (Den Hartog & Belschak, 2007; Fritz & Sonnentag, 2009).

We recommend further investigation of proactivity and its antecedents using a goal regulation perspective. As Chen and Gogus (2008) have argued, action is most likely to be successful in achieving goals to the extent that it is "complete" (involves both goal generation and goal striving aspects). This possibility has not been tested in regard to proactivity. Moreover, by taking a proactive goal regulation perspective, organizations can investigate whether their employees are lacking engagement in any of the self-regulatory elements, or engaging too much in others. For instance, employees might put a lot of effort into reflecting on one proactive action, thereby depleting energies to engage in action per se (Hobfoll, 1989). On the other hand, moderate levels of effort to understand the effects of one's proactive behavior are probably desirable in order to ensure that proactive behaviors are appropriate and constructive in the corresponding context (Chan, 2006). Insights like these may then be used as a basis for targeted organizational interventions, aimed at increasing efficient proactive behaviors among employees. We also recommend investigating whether situational antecedents or contingencies, such as high levels of job control or of supervisor support (see Parker et al., 2006), differentially relate to the goal-regulatory elements. For instance, leader vision might be most important for envisioning, whereas job control might be most important for enacting.

In terms of strengths and limitations, our study approach has both. We replicated our findings across two distinct contexts with distinct types of proactivity. We also asked individuals to report on the various elements of proactive goal regulation simultaneously, with the advantage of providing respondents with the same point of reference for each element and thereby enabling us to establish the distinctiveness of the multiple goal-regulatory elements of proactivity. Further, our study design on career-related proactivity in Study 2 provided a longitudinal time frame starting at a natural zero point at the beginning of students' academic studies, and ending at the end of the first academic year. We showed, for example, that changes in affect over time were associated with matching changes in proactivity.

Nevertheless our studies also have limitations. Although Study 2 is longitudinal, our design does not rule out the possibility that proactivity might also influence affect. Experimental studies that manipulate affect will provide stronger tests of causality. Additionally, we focused on summative reflection processes that occurred as a function of having engaged in proactivity. However, this approach leaves open the possibility that low reflection scores occurred not out of a lack of reflection but out of a lack of enacting. Future research is needed that more fully distinguishes these elements. Such research will require a focus on a single goal in order to capture momentary thoughts and actions during a complete proactive goal regulation process.

Investigations into momentary emotional experiences in combination with situational factors could also help illuminate the conditions under which negative feelings are primarily

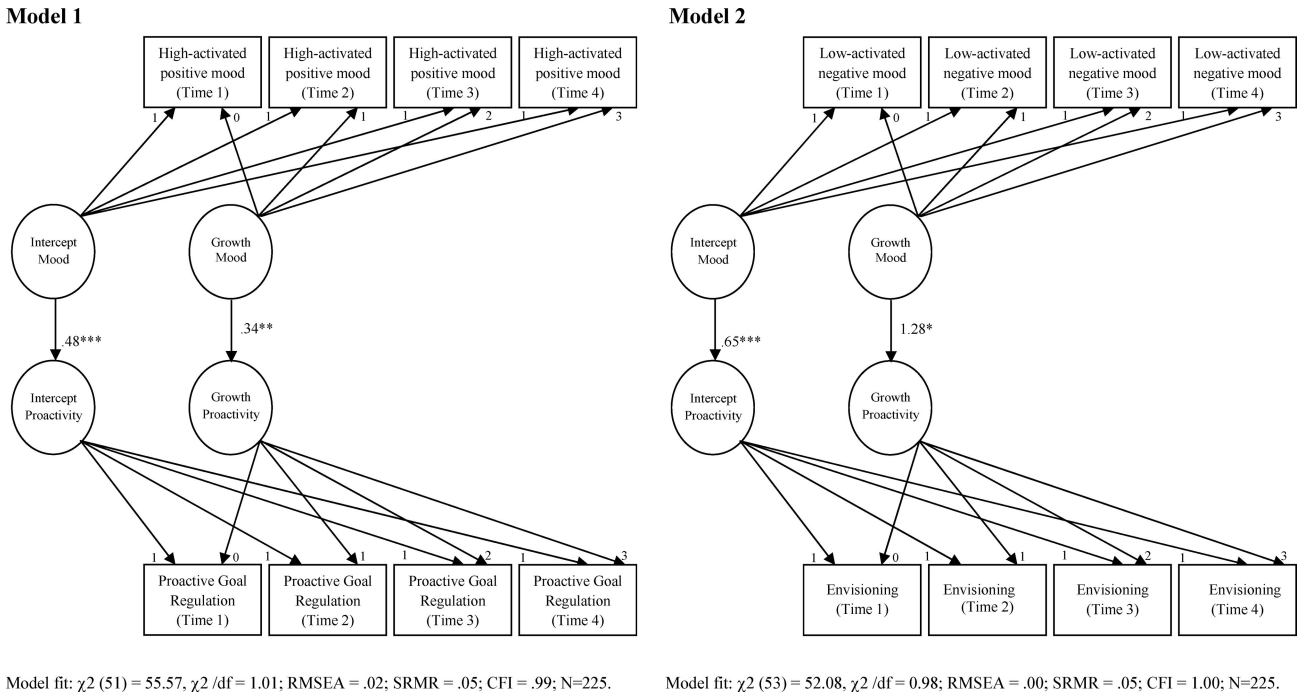

Figure 1. $N = 225$. Latent growth models. Time-invariant controls for age, gender, trait positive and negative affectivity, proactive personality, and learning goal orientation are omitted from display for parsimony. RMSEA = root-mean-square error of approximation; SRMR = standardized root-mean-square residual; CFI = comparative fit index. $^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

positively or negatively associated with proactivity, including under which circumstances they result in zero associations that reflect countervailing positive and negative functions of negative affect for proactivity. For instance, negative feelings could initially spur contemplation to change a situation (Carver & Scheier, 1990), but, over time, for instance when a work situation inhibits a quick implementation of changes, deplete self-regulatory resources (Muraven & Baumeister, 2000), ultimately resulting in a null relationship with the implementation of proactive goals.

Further, we focused on how mood relates to proactive goal regulation while controlling for cognitive-motivational processes, rather than on more complex linkages amongst mood and cognitive motivation. Previous research has found mixed results in this vein: For instance, a study by Den Hartog and Belschak (2007) indicated that trait positive affectivity was positively associated with personal initiative, independent of associations with affective organizational commitment (*reason to* motivation). In contrast, a study by Seo and Ilies (2009), using a simulation task, showed that positive emotions were directly positively associated with goal-related performance, and additionally indirectly influenced performance via a positive association with goal-related self-efficacy beliefs (*can do* motivation). We suggest further research on how affect combines with or relates to other motivational pathways.

Our studies also have other limitations. Study 1 was single-source and self-report, which means that inflated relationships due to common method variance threaten the validity of our findings. However, past research confirmed that self-ratings of proactive behaviors at work can be used as valid measurements (Frese et al., 1997). Additionally, as recommended by Podsakoff et al. (2003) we controlled for general response tendencies of individuals by adding trait affectivity as a control. We also replicated the findings in Study 2, which employed a longitudinal design that is less susceptible to common method threats. Finally, our findings are constrained to proactivity of employees in a call center environment, which involves highly customer-focused, interaction-based work tasks, and our findings on career-related proactivity are confined to the context of an academic learning environment. The consistency in findings across these very different contexts bodes well for the generalizability of our findings, although further research is needed to generalize more broadly.

Conclusion

Extending prior research that has mostly focused on "cold" cognitive-motivational predictors of proactivity, we showed that individuals' mood were associated with their proactive goal generation and pursuit. Importantly, the activation level of mood appears to matter: High-activated positive mood, which includes feeling energized, inspired, and enthused, was positively related to all elements of proactive goal regulation, including envisioning, planning, enacting, and reflecting. Experiencing low-activated negative feelings, such as being depressed, was linked with higher levels of contemplating to be proactive, but was not associated with actual implementation of these thoughts. Theoretically, our investigation supports the

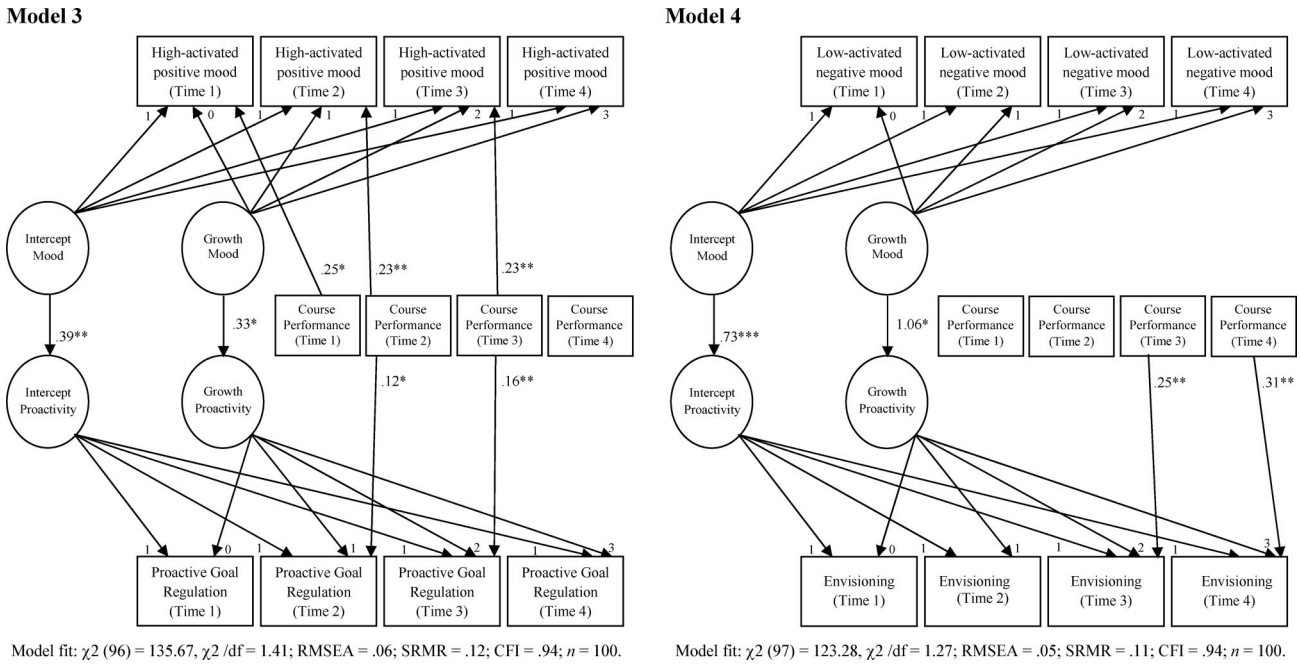

Figure 2. $n = 100$. Latent growth models including perceived course performance. Time-invariant controls for age, gender, trait positive and negative affectivity, proactive personality, and learning goal orientation are omitted from display for parsimony. RMSEA = root-mean-square error of approximation; SRMR = standardized root-mean-square residual; CFI = comparative fit index. $^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

value of distinguishing affect in terms of both valence and activation, and the consideration of proactivity as a goal regulation process rather than a one-off action.

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