Making things happen:
The role of affect for proactive behaviours at work

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Abstract

In this thesis, I investigate how affective experience influences proactivity at work. Proactivity is a special type of goal-directed behaviour in which individuals actively take charge of situations to bring about change in a future-focused way for themselves or their organisation. Firstly, I draw on self-regulation research to conceptualise and empirically validate a model of proactive goal regulation that comprises employees’ efforts in setting a proactive goal (*envisioning*), preparing to implement their proactive goal (*planning*), implementing their proactive goal (*enacting*) and engaging in learning processes concerning the outcomes of their proactive goal (*reflecting*). Secondly, I draw on affect research to argue that different types of work-related moods and emotions have an impact on the elements of proactive goal regulation in important ways. I investigate the relationship between affective experience and proactive goal regulation in three empirical studies:

In Study 1, I use a cross-sectional survey design to investigate the role of moods for work-related proactive goal regulation in a study of call centre employees (N=227). In Study 2, I replicate and extend findings from Study 1 in the context of career-related proactive goal regulation. Specifically, I draw on longitudinal surveys of undergraduate medical students (N=250) over four time points across the academic year in order to test how moods and career-related proactive goal regulation are related over time. In Study 3, I employ a qualitative interview approach in a sample of call centre employees (N=39) to explore the role of emotions in employees’ accounts of past proactive goal regulation.

The findings of this thesis provide initial empirical support for the model of proactive goal regulation. Results also indicate that work-related moods and emotions are significant predictors of proactive goal regulation and that the role of affective experience for proactivity at work is more nuanced than previously assumed.
Dissemination of Doctoral Research

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Conference Presentations


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There can be no knowledge without emotion. We may be aware of a truth, yet until we have felt its force, it is not ours.

(Arnold Bennett)
Chapter 1: Overview

This chapter contains an outline of the general research area, the content and structure of this thesis, as well as an overview of the overall research strategy and studies employed in this thesis. The aims of this chapter are twofold. Firstly, the chapter provides the reader with an overall picture of the research. This facilitates the reading of more detailed chapters. Secondly, this chapter serves to introduce the main concepts and propositions that drive the thesis, and thus to direct the reader’s attention to the key issues.

1.1 Research Area

Today’s globalised economy is characterised by high levels of uncertainty, as well as organisational dynamics (Campbell, 2000; Griffin, Neal, & Parker, 2007; Wall & Jackson, 1995). These developments have influenced characteristics of the work environment and thus behaviours required of employees to succeed in their jobs (Bridges, 1995; Ilgen & Pulakos, 1999). In organisations that are low in hierarchical differences and high in environmental uncertainty and ambiguity, employees are more than ever required to not only comply with broader goals that are set by their organisation, but also to be self-starting in shaping their own careers or in improving organisational performance (Frese, 2008). These active behaviours have increasingly come to be referred to as examples of proactivity.

Traditionally, work psychology has focused on more passive conceptualisations of work and employees, such as work characteristics to which employees adjust in order to perform their job (Hackman & Oldham, 1976), on employees’ commitment to goals that are provided by the organisation (Locke, Shaw, Saari, & Latham, 1981), and on social structures and cultures at work to which new employees need to adapt to (Van Maanen, 1976).

Theories on work motivation correspondingly assumed pre-set and specified goals by the organisation that specify the degree of individual performance (Locke & Latham, 1990) and set the frame within which employees can chose their actions (Vroom, 1964). Thus, traditional work motivation theories focused on specific, organisation-set goals that were achieved by clearly defined, proficient work behaviours (Steel & König, 2006). These theories, however, offer less explanation
for employees’ behaviours in work situations in which goals are not clearly defined, and direct links between rewards and performance are missing (Shamir, 1991).

Against this background, research on proactive behaviour focuses on explaining how employees actively take charge of situations to bring about change in a future-focused way (Grant & Ashford, 2008; Parker, Bindl, & Strauss, 2010). For instance, employees sometimes redefine the goals they are provided with by the organisation to come up with more challenging goals (Hacker, 1985), and actively influence socialisation processes in order to improve the quality of their experiences at work (Ashford & Black, 1996; Saks & Ashforth, 1996). Similarly, employees can decide to change the characteristics of their job and situation by using their personal initiative (Frese, Garst, & Fay, 2007) or via job crafting (Berg, Wrzesniewski, & Dutton, 2010; Wrzesniewski & Dutton, 2001), and to persuade managers of important new directions for the organisation (Dutton, Ashford, O’Neill, & Lawrence, 2001).

These types of proactive, self-initiated behaviours have been linked with superior levels of job performance. For example, employees who engaged in network building and personal initiative were concurrently evaluated more favourably by their supervisors (Thompson, 2005), and employees who voiced out constructive concerns on improving issues in the organisation were rated higher in individual performance by their supervisors six months later (Van Dyne & LePine, 1998). Likewise, in a study of real estate agents, Crant (1995) showed that proactive agents are likely to sell more houses, obtain more listings, and to gain higher commission incomes.

Importantly, proactive behaviours may not only directly boost performance at work, but can also help improve the employees’ experiences in their respective jobs. For instance, proactive information seeking has been positively linked with social integration into the organisation (Morrison, 1993b), and negatively linked with subsequent turnover three months later (Wanberg & Kammeyer-Mueller, 2000). Likewise, employees who show personal initiative at work have been found to be also more likely to negotiate more flexible working conditions with better development opportunities (Hornung, Rousseau, & Glaser, 2008).

\[1\] Research has found several contingencies that may influence the degree to which proactive behaviours lead to desired outcomes, as will be acknowledged in Chapter 2 (Section 2.7).
The relevance of proactive action for uncertain and dynamic situations, combined with clear evidence that proactive behaviour can promote important outcomes, means it is important for researchers to understand how motivational processes within the individual give rise to and influence proactivity at work. One such process is affect, and this thesis examines the role of affective experience in generating proactivity. Past research suggests that proactive behaviours can be influenced by features of the work environment, such as job design (Frese et al., 2007; Hornung & Rousseau, 2007), leadership (Burris, Detert, & Chiaburu, 2008; Rank, Carsten, Unger, & Spector, 2007), and work climate (Dutton, Ashford, O'Neill, Hayes, & Wierba, 1997; LePine & Van Dyne, 1998).

Additionally, diverse individual differences such as role-related self-efficacy beliefs (Griffin et al., 2007; Ohly & Fritz, 2007), prosocial motivation (Grant & Mayer, 2009), organisational commitment (Den Hartog & Belschak, 2007), and flexible role orientations (Dorenbosch, Van Engen, & Verhagen, 2005; Parker, Williams, & Turner, 2006) have been linked with higher levels of proactivity at work. These malleable individual differences have been shown to influence proactive behaviours over and above both situational constellations of the work place and more distal, stable personality traits (Parker et al., 2006). It is thus important to understand how such internal experiences of individuals at work shape their proactive behaviours.

Mitchell and Daniels (2003) distinguished between cold (or cognitive-motivational) processes as well as hot (or affect-related) processes that shape individuals’ behaviours. As Parker and colleagues (2010) in their review on proactive behaviours pointed out, research on influencing factors of proactivity to date has mainly focused on the former, cognitive-motivational factors. However, previous research on affect suggests that emotional-motivational factors should in their own right be powerful influencing factors for employees’ ways of behaving at work (e.g., Beal, Weiss, Barros, & MacDermid, 2005; Seo et al., 2009).

Traditionally, investigations of the role of affect for behaviours at work focused narrowly on the concept of job satisfaction, and neglected a systematic view on how different types of affect relate to different types of work behaviours in differential ways (Barsade, Brief, & Spataro, 2003; Brief & Weiss, 2002). It is this more comprehensive focus of investigation on distinct qualities of affective
experiences at work and how they relate to proactive behaviours at work that I will focus on in the subsequent chapters. This thesis thus sets out to contribute to the thriving research area of active performance concepts at work by investigating whether affect at work shapes employees’ ways of behaving proactively, including identifying what type of affect is most important and how affective experience influences elements of a proactive goal regulation process in differential ways.

1.2 Overview of Thesis Content and Structure

In Chapter 2, I review the extant literature on proactive behaviours in organisations. Firstly, I outline a definition of proactive behaviours, as well as summarise different types of proactive behaviours that have been previously investigated. I then provide an overview of different ways of conceptualising proactivity, from conceiving it as a stable character trait, to understanding it as a way of behaving from a goal regulation perspective. Finally, I summarise a model of proactive motivation in which I discuss different motivational pathways to proactivity: can do, reason to, and energised to. In essence my goal in this chapter is to describe what is known about proactivity and its motivation.

Chapter 3 has a detailed focus on one of the three motivational pathways to proactivity outlined above: the energised to motivational mechanism. Firstly, I delineate the concepts of different types of affective experiences at work (moods and emotions), and I discuss distinct ways of conceptualising affect, within the affective circumplex that distinguished affect along the dimensions of activation and valence (Russell, 1980, 2003), and within emotion families (Ekman, 1992; Izard, 1977; Plutchik, 1994; Shaver, Schwartz, Kirson, & O'Connor, 1987). Secondly, I briefly summarise theoretical conceptions of the relationship between affect and behaviours, and suggest an energised to motivational pathway of affect on proactivity. Thirdly, I review the relatively limited existing literature on affective experiences and proactivity, and identify research questions, based on limitations of previous work.

Following these introductory chapters, in the empirical Chapters 4 through Chapter 7, I report research that addresses distinct research questions within the research themes identified in Chapter 3. Figure 1.1 shows an overview of the research questions.
In Chapter 4 I report on tests of Research Questions 1 and 2: These broadest research questions in this thesis concern the overall relevance of the experience of work-related moods for proactive behaviours at work. Specifically, in Research Question 1 I will examine the relative importance of different types of moods within the affective circumplex for proactive vs. proficient work behaviours (Griffin et al., 2007; see Figure 1.1, path RQ1). To date, proactivity researchers have mainly focused on the high-activated ends of the circumplex model (see Chapter 3).

Thus, this chapter sets out to provide more comprehensive insights into the differential roles of activation and valence in moods for proactive behaviours, whilst simultaneously comparing their relevance for proactivity versus proficiency at work. Secondly, in Research Question 2 I will investigate the relevance of affect for proactivity over and above well-established, cognitive-motivational predictors. Specifically, I operationalise the motivational framework of proactive behaviours, introduced in Chapter 2, comprising can do, reason to, and energised to mechanisms (Parker et al., 2010; see Figure 1.1, path RQ2).

In Chapter 5 I introduce Research Question 3 which tests the conception of proactivity as a proactive goal regulation process. Whilst previous research on proactivity has investigated mainly the enactment of proactivity, I extend the focus to investigate proactivity as a goal regulation process that includes its self-initiated conception, planning and reflection as well as the actual implementation. To identify these elements, I draw on self-regulation theory (Frese & Zapf, 1994; Gollwitzer, 1990), and consider previous conceptual work that adopted a process perspective of proactivity (Frese & Fay, 2001; Grant & Ashford, 2008).

Thus, to test research question 3 (see Figure 1.1, path RQ3), I introduce and validate a model with distinct self-regulatory elements that individuals iteratively focus on in order to be proactive. The model includes the setting of a proactive goal (envisioning), the preparation to engage in proactive behaviour (planning), the actual proactive behaviour itself as measured in previous empirical studies on proactivity (enacting), and the individuals' efforts to understand the effects of their proactive behaviour (reflecting).

In Chapter 6 I combine the previous two research questions to investigate the role of different work-related moods for proactive goal regulation (Research Question 4). Firstly, I will focus on examining the roles of the four affective
quadrants for proactive goal regulation across the contexts of work- and of career-related proactivity. Secondly, I will follow Mitchell and James' (2001) call for an integration of time into organisational theories and specify the expected temporal associations between affect and proactive goal regulation, using a four-time point longitudinal research design (see Figure 1.1, path RQ4).

In Chapter 7 (Research Question 5) I extend investigations into the role of affective experience for proactive goal regulation by considering the role of emotions for proactivity. Individuals do not only experience overall moods at work (these are the focus of the previous chapters), but also emotions that are more intense and directly related to objects or events (Parkinson, Totterdell, Briner, & Reynolds, 1996). In this last empirical chapter of my thesis, I thus aim to contribute with a more fine-grained perspective of affective experiences at work, in relation to employees' proactivity and explore the role of emotions in employees' retrospective accounts of proactive goal regulation (see Figure 1.1, path RQ5).

In Chapter 8 I integrate the main findings of this thesis and draw general conclusions on the contributions made to the understanding of the role of affective experiences for proactive behaviours at work. Furthermore, I indicate implications for both theory and practice, outline limitations of the present thesis and point out avenues for future research.
1.3 Overview of Research Strategy and Studies

The overall research strategy of this thesis represents a triangulation approach via gathering data from different sources as well as by using different types of data in order to enhance confidence in empirical findings (Webb, Campbell, Schwartz & Sechrest, 1966).

Thus, for this thesis I conducted two quantitative investigations, one cross-sectional using both self- and other-reports of proactive behaviours of call centre employees, and the second investigation using four-time point lagged self-reports from medical students. Thirdly, I collected qualitative data from semi-structured interviews with call centre employees, with longitudinal follow-up interviews for a subsample of interviewees.

The first study (testing Research Questions 1, 2, 3, and 4) was conducted with employees working for a UK-based, multinational organisation in a call centre environment. 227 employees completed an online questionnaire that would help
identify key issues to improve the quality of their working life. I additionally obtained supervisor ratings for a subsample of 57 employees.

The second study (replicating and extending the tests of Research Questions 3 and 4) comprised a four-time point longitudinal design over the duration of one year, with 250 undergraduate medical students at a UK-based university. A baseline survey was carried out at the very beginning of the academic year, followed by four shorter surveys, tracking students' affects and proactive behaviours across the academic year. This study was designed to replicate and extend the first one by employing a longitudinal research design in a different domain of proactive behaviours (career proactivity).

Thirdly, in the context of the overall quality of working life study described above, I conducted semi-structured interviews with 39 call centre employees across four different hierarchical positions in the same organisation. At time 1, interviews were conducted with 39 employees, and 1-2 months apart additional follow-up interviews were conducted with a subsample of 21 employees (testing Research Question 5). This study adds additional insights by using an explorative approach, in addition to being based on the constructs established by studies 1 and 2.

To summarise, by employing both rigorous quantitative data and rich qualitative data, as well as focusing on very distinct samples, this thesis thus sets out to contribute to the extant literature on affect and work behaviours with insights on the role of affective experience for sustained employee proactivity.
Chapter 2: Proactive Behaviours in Organisations

2.1 Overview

In this chapter, I review research approaches to understanding proactivity and propose to consider proactivity as a self-directed way of behaving (or process) that involves thinking ahead to take charge of a situation and to bring about change in that situation or in one's self. I introduce a motivational framework for proactivity which will be extended in Chapter 3 in the context of affective experiences at work. Furthermore, distal antecedents and outcomes of proactive behaviours are discussed, in order to set the overall frame for this thesis. Thus, in this chapter I set out to provide discussions of central concepts and a review of the existing research context of proactive behaviours at work.

2.2 Features of Proactive Behaviours

In recent times, there has been a surge of interest in proactivity at work, partly reflecting academic developments and partly reflecting the increasing importance of this type of behaviour in today's organisations. Academically, there has been a flurry of proactive concepts albeit varying in whether proactivity is seen as a stable disposition (Crant, 2000), a pattern of behaviours (Frese & Fay, 2001), or -- as I do in this thesis -- a way of behaving at work (Grant & Ashford, 2008; Parker et al., 2010). As Frese (2008) noted in a recent article entitled The word is out: we need an active performance concept for modern work places, the current interest in proactivity is warranted given the inadequacy of traditional models that “assume that employees ought to follow instructions, task descriptions, and orders” (p. 67).

Practically, organisations are increasingly decentralised, change is fast-paced, there is a demand for innovation, and operational uncertainty is greater than ever; all trends that mean employees need to use their initiative and be proactive (e.g., Campbell, 2000; Wall & Jackson, 1995). Moreover, careers are increasingly boundary-less and not confined to one organisation, requiring individuals to take charge of their own careers (Mirvis & Hall, 1994). Thus, for both theoretical and practical reasons, research on proactivity is timely.

2 Parts of this chapter are taken directly from my previous publications (Bindl & Parker, 2010b; Parker, Bindl & Strauss, 2010).
In line with previous research, I define proactive behaviour for this thesis as self-directed and future-focused action in an organisation, in which the individual aims to bring about change, including change to the situation (e.g., introducing new work methods, influencing organisational strategy) and/or change within oneself (e.g., learning new skills to cope with future demands).

This definition concurs with lay definitions, which highlight both a future focus (anticipation) and a change focus (taking control). The Oxford English Dictionary (2008) defines being proactive as “creating or controlling a situation by taking the initiative and anticipating events or problems, rather than just reacting to them after they have occurred; (hence, more generally) innovative, tending to make things happen”. As an example, personal initiative is a form of proactive behaviour that involves going beyond assigned tasks, developing one’s own goals, and attempting to solve problems that have not yet occurred (Frese & Fay, 2001). Taking charge is also an example of proactive behaviour referring to active efforts to bring about change on work methods (Morrison & Phelps, 1999). Further examples include individuals proactively shaping their work environment as a newcomer (Ashford & Black, 1996), actively building networks (Morrison, 2002), and persuading leaders to take notice of important strategic issues (Dutton & Ashford, 1993). All of these behaviours have an emphasis on taking control of a situation by looking ahead and initiating change in common. To summarise, proactive behaviours are a special type of goal-directed behaviour in which individuals actively take charge of situations to bring about change in a future-focused way.

Whilst the vast majority of research has investigated the construct of proactivity using an individual level perspective, some research has focused on a team-level (e.g., Druskat & Kayes, 2000; Hyatt & Ruddy, 1997; Kirkman & Rosen, 1999; Tesluk & Mathieu, 1999) or even organisational level of analysis (e.g., Aragon-Correa, 1998; Aragon-Correa, Hurtado-Torres, Sharma, & Garcia-Morales, 2008; Frese, Van Gelderen, & Ombach, 2000; Ramus & Steger, 2000). Although these latter two foci represent very valuable endeavours, the emphasis of this thesis will be on an individual-level perspective that sets out to increase insights into the relationships between individuals’ affective experiences and their own proactivity in a self-regulatory research perspective.
2.3 Targets of Proactive Behaviour

Although having in common an emphasis on taking control of a situation in a self-directed future-focused way, the concepts studied under the umbrella of proactivity vary substantially from each other. In response to criticism that the field is not sufficiently integrated (Crant, 2000), Parker and Collins (2010) investigated a higher-order factor structure of proactive behaviour at work. Factor analyses of multiple forms of proactive behaviour suggested at least three higher-order categories, each with a different target of impact.

Firstly, proactive work behaviour includes those behaviours aimed at taking control of and bringing about change in, the internal organisation environment. Examples include taking charge (Morrison & Phelps, 1999), voice (Van Dyne & LePine, 1998), the implementation items of individual innovation (Scott & Bruce, 1994) and problem prevention (Frese & Fay, 2001; Parker & Collins, 2010).

Secondly, proactive strategic behaviour includes those behaviours aimed at taking control of and causing change in the broader unit’s strategy and its fit with the external environment. For instance, individuals can ‘sell’ important issues to the leader and thereby influence strategy (Ashford, Rothbard, Piderit, & Dutton, 1998), and they can scan the environment to anticipate new products and services the organisation might introduce to better achieve competitive advantage (Parker & Collins, 2010).

Thirdly, proactive person-environment fit behaviour includes those self-initiated behaviours that aim to achieve greater compatibility between one’s own attributes (skills, knowledge, values, preferences) and the organisational environment. An example is actively seeking feedback about performance such as through inquiry or monitoring (Ashford, Blatt, & VandeWalle, 2003). Through such action the individual aims to improve his or her performance within the organisation. Proactive person-environment fit behaviours also include those aimed at ensuring that the environment supplies the attributes desired or valued by an individual (supplies-values fit), such as job-change negotiation (Ashford & Black, 1996), ex post i-deals and job crafting. Ex post i-deals (Rousseau, Ho, & Greenberg, 2006) are arrangements that are negotiated by a new person on the job to accommodate their personal needs for the joint benefit of the individual and the organisation. Job crafting (Wrzesniewski & Dutton, 2001) involves individuals’ changing tasks, roles
and relationships to derive meaning and satisfaction from the work. Grant and Parker (2009) identified a further higher-order dimension - proactive career behaviour. In contrast to the other types of proactivity that occur within the context of a designated job, this dimension refers to proactivity beyond a specific job, such as actions to secure a job or to get a new job (career initiative, Tharenou & Terry, 1998), or actions to negotiate a better deal prior to accepting a job (ex ante i-deals, Rousseau et al., 2006).

Other scholars too have differentiated types of proactive behaviour. Thus, Griffin and colleagues (2007) identified individual proactivity, team member proactivity, and organisation member proactivity. These are effectively all types of proactive work behaviour (Parker & Collins, 2010) in that they aim to take control of and bring about change within the internal organisation environment. However, individual proactivity is directed towards one’s individual job (e.g., improving one’s work procedures), team proactivity is directed towards helping the team and other team members (e.g., making improvements to the way the team works) and organisation-member proactivity is directed towards changing wider organisation systems or practices (e.g., improving systems for knowledge management across the organisation).

Similarly, Belschak and Den Hartog (2010) identified three types of proactivity: self-oriented, social and organisational proactive behaviours, which are targeted at personal goals such as individual career progression, at co-workers and at the broader organisation respectively. Finally, in their recent review on proactivity, Parker and colleagues (2010) subsumed the above approaches of loci of proactive change by distinguishing between proactivity that is mainly focused at changing oneself versus proactivity that is mainly focused at changing others, or the situation.

In this thesis, I will draw on these categorisations of proactive behaviours, mainly on the latter distinction between work-related (changing the situation) and career-related (changing oneself) loci (Parker et al., 2010) as a distinction of proactive concepts.

2.4 Conceptualisation of Proactivity

Above, I defined proactivity as a way of behaving, and therefore acknowledged the role of both individual difference variables (e.g., personality) and
situational forces (job design) in shaping this type of action. Early research on the
topic of proactivity, however, conceived it as a stable, dispositional variable. From
this point of view, proactive personality refers to an individual who is relatively
unconstrained by situational forces and who effects environmental change (Bateman
& Crant, 1993). This concept assumes proactive individuals are proactive across
multiple contexts and over time, regardless of the contingencies of a situation.

Whilst this personality approach is valid, I focus on proactive actions within a
particular context in this thesis, recognising that proactive behaviour is shaped not
only by one’s overarching personality, but by one’s motivation in a particular
context. The implication of this approach is that it recognises that organisations can
promote proactivity in their existing workforce, rather than focusing purely on
selecting dispositionally proactive employees into the organisation.

A further perspective is to consider proactivity as a special type of citizenship
or extra-role behaviour. Some scholars have argued that proactive behaviour is by
definition extra-role since in-role activities are non-discretionary and hence not self-
directed (Van Dyne & LePine, 1998). However, classifications of in-role and extra-
role are unclear and they depend on how employees construe the boundary of their
role (Morrison, 1994). Proactive individuals are likely to construe their roles more
broadly (Parker, Wall, & Jackson, 1997) and to redefine their roles to encapsulate
new tasks and goals (Frese & Fay, 2001).

These issues have led researchers to suggest that a more useful way of
understanding proactivity is in terms of a dimension that is distinct from in-role and
extra-role behaviour (and the related dimension of task/ contextual performance).
Thus, all types of performance – whether they are defined as task, conceptual,
citizenship, or extra-role – can be carried out more or less proactively (Crant, 2000;
Grant & Ashford, 2008; Griffin et al., 2007). From this perspective there is no need
to confine proactive behaviour to be citizenship or extra-role behaviour, and not all
extra-role or citizenship behaviour is proactive.

Proactive behaviour can also be distinguished from related behaviours such as
innovation and adaptivity. Innovation is by definition novel, whereas being proactive
does not necessarily imply novelty. Employees might, for instance, speak out on
issues that affect their work group or they might take charge to resolve a pre-existing
problem. Such behaviour can be classified as proactive, yet not as innovative
(Unsworth & Parker, 2002). In a similar vein, adaptivity and proactivity have some parallels in that both behaviours are especially important in uncertain, unpredictable contexts (Griffin et al., 2007). However, adaptivity is about adjusting to and responding to change, whereas proactivity is about initiating and driving change.

The latest perspective on proactivity, which coincides with the understanding of proactivity as a way of behaving in this thesis, is that it is not just a single act, but rather a goal-driven process involving distinct phases (Parker et al., 2010). Grant and Ashford (2008) suggested that proactive action involves several phases (anticipation; planning; action towards impact). Frese and Fay (2001) similarly identified the redefinition of tasks, information collection and prognosis, plan and execution, monitoring and feedback as key phases of proactivity. In the course of this thesis I will adopt such a comprehensive goal-regulatory perspective and build on existing frameworks in order to extend and empirically test the understanding of the nuanced relationship between affective experiences and proactive behaviours at work.

2.5A Motivational Framework for Proactive Behaviours

In my conceptual work with Sharon Parker and Karoline Strauss (Parker et al., 2010), we proposed a model of proactive motivation based on expectancy (can do) and valence (reason to) judgements, and on affective experience (energised to). Below I discuss these “can do”- and “reason to” judgements as proximal antecedents of proactivity. The energised to part of the model will be introduced and discussed in the following Chapter 3. An overview of how these proximal antecedents within an overall model of antecedents and outcomes of proactive behaviours is provided in the summary of this chapter (Section 2.8) in Figure 2.1.

From a motivational perspective, most attention has been given to two cognitive-motivational processes that underpin proactivity (Parker et al., 2006): Firstly, one’s perceived capability of being proactive (can do pathway), and secondly, one’s wish to, or interest in, performing proactive behaviours (reason to pathway).

2.5.1 Can do motivational pathway to proactivity

Turning to the first of these, engaging in proactive behaviours is likely to involve a deliberate decision-process in which the individual assesses the likely outcomes of these behaviours (see Vroom, 1964). A belief that one can be successful
(perceived capability) is important because being proactive entails quite a high potential psychological risk to the individual. Such risks are connected with damaged image in the organisations and with decreases of perceived self-worth, in case self-initiated actions fail (Ashford et al., 2003).

Consistent with this idea, there is good evidence of the importance for proactivity of self-efficacy, or people's judgments with regards to their capability to perform particular tasks (Bandura, 1986). In a sample of part-time MBA students, self-efficacy beliefs were linked with higher levels of taking charge behaviours as rated by co-workers (Morrison & Phelps, 1999). Similarly, in a sophisticated, longitudinal design over four time points, Frese and colleagues (2007) showed that employees with higher levels of self-efficacy (operationalised in a combined measure with control aspirations and perceived opportunity for control) were also more likely to be rated as higher in personal initiative at the corresponding time point.

In addition to general self-efficacy beliefs, specific domains of self-efficacy have been tested in proactivity research. For instance, in a meta-analysis of fifty-nine studies and across 19,957 individuals, Kanfer, Wanberg, and Kantrowitz (2001) found a significantly positive, mean corrected sample-weighted correlation between job search-related self-efficacy and proactive job search. Another example is role breadth self-efficacy, or one's perceived capability of carrying out a range of proactive, interpersonal, and integrative activities beyond the prescribed technical core (Parker, 1998).

Role breadth self-efficacy has been shown to promote: the suggesting of improvements (Axtell, Holman, Unsworth, Wall, & Waterson, 2000), problem solving and idea implementation (Parker et al., 2006), personal initiative (Ohly & Fritz, 2007), voice, taking charge, and strategic scanning (Parker & Collins, 2010) as well as individual, team-member, and organisation-member proactivity across two different organisations (Griffin et al., 2007), to name but a few.

Finally, individuals' perceptions of low costs (e.g., time and energy needed) related to proactive efforts are relevant for their decisions to engage in proactivity (Aspinwall, 2005). To summarise, there is consistent, and collectively strong, evidence that perceived capability is positively related to proactivity at work (for an overview, see Table 2.1).
Table 2.1
Illustrative Can do Motivational Factors

<table>
<thead>
<tr>
<th>Example can do factor</th>
<th>Example publications</th>
</tr>
</thead>
<tbody>
<tr>
<td>General self-efficacy beliefs</td>
<td>Morrison &amp; Phelps, 1999</td>
</tr>
<tr>
<td></td>
<td>Ohly &amp; Fritz, 2007</td>
</tr>
<tr>
<td>Job search-related self-efficacy</td>
<td>Kanfer, Wanberg, &amp; Kantrowitz, 2001</td>
</tr>
<tr>
<td>Role breadth self-efficacy</td>
<td>Parker, Turner, &amp; Williams, 2006</td>
</tr>
<tr>
<td></td>
<td>Axtell et al., 2000</td>
</tr>
<tr>
<td></td>
<td>Ohly &amp; Fritz, 2007</td>
</tr>
<tr>
<td></td>
<td>Parker &amp; Collins, 2010</td>
</tr>
<tr>
<td>Control aspirations</td>
<td>Griffin, Parker, &amp; Neal, 2007</td>
</tr>
<tr>
<td>Perceived opportunity for control</td>
<td>Frese, Garst, &amp; Fay, 2007</td>
</tr>
<tr>
<td>Low perceived costs</td>
<td>Aspinwall, 2005</td>
</tr>
</tbody>
</table>

2.5.2 Reason to motivational pathway to proactivity

However, it is not enough for individuals to believe that they 'can' achieve an outcome; they also need to want to: "Even if people are certain they can do a task, they may have no compelling reason to do it" (Eccles & Wigfield, 2002, p.112). In other words, there is a need to focus on the 'why' of proactive behaviour. In this vein, temporal construal theory (Liberman & Trope, 1998) suggests that individuals are likely to chose desirability over feasibility, when deciding to engage in future-oriented goals. Relevant to this, a second motivational process underpinning proactive behaviour is whether one sees this behaviour as important for fulfilling one's goals or aspirations.

This theme also fits into broader motivational theories such as goal-setting theory (Locke & Latham, 1990), action theory (Hacker, 1985) and social cognitive theory (Bandura, 1986) and relates to Crant's (2000) recommendation to consider the role of goals in proactive behaviour. Parker and colleagues (2010) drew on self-determination theory (Ryan & Deci, 2000) to propose that different types of autonomous motivation will lead to proactive behaviours at work. The authors suggest that, in contrast, externally-regulated motivation will thus not be relevant for proactivity, because proactive behaviours are by definition self-initiated (Parker et al., 2010). At the simplest level, the outcome individuals are aiming for needs to be important to them. For instance, meta-analytic evidence suggests a positive
relationship between a strong financial need for employment and proactive job search (Kanfer et al., 2001). What individuals aspire for is also important. An individual’s belief that he or she is personally obligated to bring about environmental change has been repeatedly positively linked with proactive behaviours such as taking charge (Morrison & Phelps, 1999; Parker & Collins, 2010), voice (Fuller, Marler, & Hester, 2006; Parker & Collins, 2010), individual innovation and problem prevention (Parker & Collins, 2010) and continuous improvement (Fuller et al., 2006). Likewise, employees’ high levels of prosocial motives are positively related to the display of initiative at work (Grant & Mayer, 2010).

The employees’ attitude towards their organisation seems to take on an influencing role in determining levels of proactivity at work. For instance, employees who intend to leave the organisation are less likely to voice concerns about organisational improvements (Burris et al., 2008). Organisational commitment, on the other hand, may set the frame for employees’ goals to engage in proactive behaviours at work. In a recent meta-analysis, Thomas and colleagues (2010) found good evidence for a robust positive relationship between affective organisational commitment and diverse proactive behaviours, such as voicing concerns, taking charge of improving work issues and networking behaviours.

In a similar vein, amongst employees working in the financial services sector, affective organisational commitment was positively related to employees' engagement in proactive service performance (Rank, Carsten, Unger, & Spector, 2007). In a study across two organisations, Griffin and colleagues (2007) found positive relationships between affective organisational commitment with proactive behaviours directed at improving the effectiveness of the organisation. The relationships between affective organisational commitment with proactive behaviours directed at the individual or the team were comparatively smaller or non-significant altogether, thus indicating a match between the focus of commitment with the type of proactive action taken. Similarly, Den Hartog and Belschak (2007) showed that different foci of commitment (career, supervisor, team or organisation) related in differential ways with self and supervisor-ratings of personal initiative. Controlling for work-related affect, the researchers found that team commitment was most consistently positively related to self-rated personal initiative whereas organisational commitment emerged as a strong positive predictor of supervisor-
rated personal initiative. An explanation for these findings could be that different
types of commitment might shape different types of personal initiative. For instance,
self-initiated actions which are motivated by the employees’ goal to benefit the
organisation might be more salient to supervisors (hence the significant relationship)
than are career or team-commitment driven actions.

A final driving force of proactivity is employees having a flexible role
orientation (Parker et al., 1997). Flexible role orientation refers to individuals’
defining their job broadly, such as to include feeling ownership for customer
satisfaction rather than possessing a narrow and passive ‘that’s not my job’
mentality. As Gagné and Deci (2005) argued, the concept of flexible role orientation
might reflect the process of internalisation by which external structures (the
organisation’s goals, for instance) are internalised.

Parker and colleagues (2006) found flexible role orientation worked together
with role breadth self-efficacy to predict self-rated proactive behaviour; with both of
these aspects being significant and unique predictors, whereas affective commitment
became unimportant once these beliefs were controlled for. Likewise, Dorenbosch
and colleagues (2005) showed that ownership of work issues beyond one’s
immediate job (an indicator of flexible role orientation) predicted three types of self-
reported innovative work behaviour amongst Dutch administrative. Table 2.2
provides an overview of empirical studies on reason to motivational antecedents of
proactivity.

Table 2.2
Illustrative Reason to Motivational Factors

<table>
<thead>
<tr>
<th>Example reason to factor</th>
<th>Example publications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felt responsibility for change</td>
<td>Morrison &amp; Phelps, 1999</td>
</tr>
<tr>
<td></td>
<td>Parker &amp; Collins, 2010</td>
</tr>
<tr>
<td></td>
<td>Fuller, Marler, &amp; Hester, 2006</td>
</tr>
<tr>
<td>Prosocial motivation</td>
<td>Grant &amp; Mayer, 2010</td>
</tr>
<tr>
<td>Affective organisational commitment</td>
<td>Rank et al., 2007</td>
</tr>
<tr>
<td></td>
<td>Griffin, Parker, &amp; Neal, 2007</td>
</tr>
<tr>
<td></td>
<td>Den Hartog &amp; Belschak, 2007</td>
</tr>
<tr>
<td></td>
<td>Thomas, Whitman, &amp; Viswesvaran, 2010</td>
</tr>
<tr>
<td>Flexible role orientation</td>
<td>Parker, Williams, &amp; Turner, 2006</td>
</tr>
<tr>
<td>Ownership of work issues</td>
<td>Dorenbosch, van Engen, &amp; Verhagen, 2005</td>
</tr>
</tbody>
</table>
To summarise, there is good evidence that both can do, as well as reason to factors promote individuals' proactivity at work. In Chapter 3, I will argue that affective experiences at work (the energised to pathway) is a third, important pathway to proactivity over and above the more cognitively oriented first two motivational pathways. All three motivational pathways are likely preceded by more distal, individual and situational antecedents. The following section will provide an illustrative overview of more distal antecedents, as well as outcomes, of proactivity.

2.6 Distal Antecedents of Proactive Behaviours

Whereas the above section focused on the proximal motivational processes, this section briefly reviews major distal influences, including individual antecedents (demographics, knowledge and abilities, as well as personality) as well as situational antecedents (job design, leadership and climate). I also describe evidence suggesting that the various individual and situational factors can have their influence through the motivational processes described above.

2.6.1 Individual antecedents

Demographics. Several studies have investigated the relationship between demographical factors and proactive behaviour at work. Age appears to be negatively related to several proactive person-environment fit and career behaviours (Kanfer et al., 2001; Warr & Fay, 2001). In relation to work-improvement types of proactivity, results are inconsistent. Some studies show no relationships with age (Morrison & Phelps, 1999; Warr & Fay, 2001 for male respondents) whereas others suggest less proactivity for older workers (Axtell et al., 2000; Janssen & Van Yperen, 2004) and one study shows greater proactivity with age, at least for women (Wan & Fay, 2001). Altogether, whilst younger employees might not have arrived at their final career position, and are therefore likely to engage in career behaviours, employees of all ages could be equally concerned with improving the effectiveness of work processes and methods.

Research findings also suggest a mixed picture with regard to the influence of gender on proactive behaviours: Men were found to be more proactive than women both in terms of their willingness to engage in proactive job search (Kanfer et al., 2001) and in networking behaviours (Claes & Ruiz-Quintanilla, 1998). Men have also been found to be more likely to voice concerns about issues in the workplace.
(LePine & Van Dyne, 1998). However, all of these effects are small and Griffin et al.'s (2007) study showed inconsistent results with regards to the relationship between gender and proactivity depending on the sample. An issue here is that gender often confounds with occupational type and level, and these aspects need to be controlled in order to understand the role of gender and proactivity at work.

**Knowledge and abilities.** Knowledge and abilities have been suggested to influence individuals' proactive behaviour at work. Fay and Frese (2001, p.104) argued: "To be able to take initiative, one needs a good and thorough understanding of what one's work is, that is, one needs job-relevant knowledge, skills, and cognitive ability." There has been good evidence for this argument. For instance, for employees in East and West Germany, Fay and Frese (2001) found positive relationships between job qualification and both self-rated and other-rated personal initiative.

Kanfer and colleagues (2001) found meta-analytical evidence of a positive relationship between educational background and the degree of proactive job search. In the same vein, in their research on voicing behaviour in groups, LePine and Van Dyne (1998) showed that individuals with a higher educational background were also more likely to speak out with suggestions for improvements. Likewise, job-specific expertise has been linked with higher levels of proactivity at work (Dutton et al., 2001; Howell and Boies, 2004; Ohly, Sonnentag, and Pluntke, 2006).

**Personality.** A considerable amount of research has investigated personal trait characteristics as antecedents for proactive behaviour, particularly using the concept of proactive personality, or the tendency of an individual to influence their environment and to bring about change across multiple contexts and times. Bateman and Crant (1993) developed and validated a 17-item proactive personality scale, which investigates respondents' agreement to items such as "If I see something I don't like, I fix it." To name a few, exemplary findings, proactive personality has been positively linked with network building (Lambert, Eby, & Reeves, 2006; Thompson, 2005), proactive socialisation into the organisation (Kammeyer-Mueller & Wanberg, 2003), career initiative (Seibert, Kraimer, & Crant, 2001), and various proactive work behaviours such as taking charge, individual innovation, problem prevention, and voice (Parker & Collins, 2010). Apart from a direct relationship with proactive behaviour, evidence suggests that proactive personality has its effects via
several motivational states: role breadth self-efficacy (Parker et al., 2006) and job search self-efficacy (Brown et al., 2006), both representing *can do* proactive motivation; as well as flexible role orientation (Parker et al., 2006) and motivation to learn (Major, Turner, & Fletcher, 2006), both representing the *reason to* proactive motivation.

Another potentially relevant personality dimension is *conscientiousness*, reflecting tendencies and behaviours related to dependability, conformity and perseverance (Costa & McCrae, 1992). Unlike other ‘Big 5’- personality dimensions, conscientiousness has been rather consistently linked with proactive behaviours such as proactive job search (Kanfer et al., 2001), proactive performance and task information seeking (Tidwell & Sias, 2005) as well as to career planning behaviours (Carless & Bernath, 2007).

Likewise, individuals who are high in *learning goal orientation* (a preference to understand or master new aspects) as opposed to performance goal orientation (a preference to gain favourable, and avoid negative, judgments of their competence; Dweck, 1986) have been found to be more likely to engage in feedback seeking (e.g., Parker & Collins, 2010; VandeWalle, Ganesan, Challagalla, & Brown, 2000). One explanation for the favourable role of learning goal orientation is that individuals who emphasise learning processes rather than demonstrating capability might find it less risky and more valuable to engage in feedback seeking and therefore engage more frequently in this type of behaviour (VandeWalle, 2003; VandeWalle & Cummings, 1997).

2.6.2 Situational antecedents

Being proactive is certainly about the type of person one is – demographics and personality factors all play a role. However, the situation also makes a big difference. Individuals in psychologically ‘unsafe’, de-motivating work teams, for instance, are unlikely to take the risk to be proactive. Recently, there has been a growing focus on work and organisational differences in predicting proactive behaviour at work.

**Job Design.** A long history of job design research has shown that work structures influence the motivation, behaviour and well-being of employees (for reviews, see e.g. Latham & Pinder, 2005; Morgeson & Campion, 2003; Parker & Ohly, 2008). As elaborated earlier, proactive behaviour at work is a special type of
goal-directed behaviour, which goes hand in hand with perceptions of control and capability. Work design aspects that promote these perceptions should therefore be linked with higher levels of proactivity. In this vein, the concepts of *job autonomy, complexity and control*, all concerned with the degree to which employees can choose how to proceed with their work, have been very consistently shown to be positively related to proactive behaviours (e.g., Frese et al., 2007; Morrison, 2006).

For instance, job autonomy has been positively linked with proactive behaviours such as personal initiative (Hornung & Rousseau, 2007) and idea implementation and problem solving (Parker et al., 2006). Frese and colleagues (1996) recommended as a result of their longitudinal study that it would be wise to increase job control and complexity in order to enhance personal initiative at work, rather than to focus solely on selecting dispositionally-proactive employees into the organisation.

Different pathways through which job design has its influence on proactivity at work are possible. Recently, Salanova and Schaufeli (2008) found that job engagement (feelings of vigour and dedication) mediated the relationship between job resources (job control, feedback, and variety) and personal initiative. These affective experiences represent the energised to motivational states that I will focus on more closely in the next Chapter 3. Several longitudinal studies have shown that job enrichment predicts self-efficacy and flexible role orientations (Axtell & Parker, 2003; Parker, 1998; Parker et al., 1997), which in turn have shown to predict proactivity (Parker et al., 2006). In a study based on nurses, Tangirala and Ramanujam (2008) found a u-shaped relationship between personal control and voice such that high levels of personal control were most highly positively related to voice, medium levels of job control showed a negative relationship with voice, and low levels of personal controls again showed a positive relationship with voice, albeit not as strong as the high personal control/voice combination. The researchers interpreted their findings thus:

"At low levels of control, employees engage in voice owing to a particularly strong motivation arising from personal dissatisfaction with the status quo. At high levels of control, employees engage in voice owing to a particularly strong motivation arising from enhanced expectancy of..."
successfully influencing organisational outcomes. At intermediate levels of control, neither motivation is strong” (p. 1192).

In line with Tangirala and Ramanujam’s (2008) findings, other ‘negative’ work characteristics have been positively linked with proactive behaviour. There has been both conceptual consideration for (Frese & Fay, 2001), as well as empirical support for (e.g., Fay & Sonnentag, 2002; Ohly et al., 2006), a potentially positive role of job stressors like time pressure and situational constraints in motivating employees to engage in proactive behaviour at work. For instance, Ohly and Fritz (2010) in an experience-sampling approach found support for the assumption that employees perceive time pressure as challenging, and that challenge appraisal in turn promotes proactivity at work.

A theory which researchers repeatedly drew on is control theory (Carver & Scheier, 1982). Stressors can thus be perceived as a deviation between a desired and an actual situation, thereby motivating employees to take an active approach in order to decrease the difference between the desired and actual states. However, it remains to be tested whether stressors over a longer period of time remain positive for proactivity, or rather deplete individuals’ resources and energy (Hobfoll, 1989), which in turn should lead to decreases in self-initiated behaviours at work.

Leadership. Leaders, through their impact on motivation as well as their direct effect on the work environment, likely have a role to play in shaping proactive action. Participative leadership, which emphasises the value of subordinates’ contributions as well as involvement in decision making, predicted higher levels of proactive service performance beyond several individual antecedents (Rank et al., 2007). Transformational leadership, leading towards motivating employees to go beyond standard expectations, was positively linked with supervisor-rated individual innovation behaviours (Rank, Nelson, Allen, & Xu, 2009).

A high quality exchange between leader and employee should promote a climate of trust, in which employees dare to engage in change-oriented, self-initiated behaviours. In support of this, leader-member exchange (LMX) has been positively related to individual innovation behaviours (Janssen & Van Yperen, 2004), as well as to supervisor-rated voice (Burris et al., 2008). It might be important for employees to perceive not only support from their immediate supervisors, but also from more powerful individuals in the organisation at higher hierarchical levels, in order to risk
the engagement in proactive behaviours. In this vein, top managements' appreciative attitude towards proactive behaviours seems to be helpful: Axtell et al. (2000) found that management support facilitated the implementation of ideas over and above the positive influence of supervisor support. Furthermore, Morrison and Phelps (1999) found that top managements’ openness to change was positively related to employees’ willingness to engage in taking charge behaviours. Similarly, Dutton and colleagues (1997) in a qualitative research approach, based on grounded theory, showed that top management's willingness to listen to employees and a supportive organisational culture were positively related to employees’ perception that it was favourable to engage in issue selling behaviours.

Climate. Proactive behaviour is an interpersonal behaviour in that it is likely to affect and provoke reactions from other individuals in the work environment due to its change-oriented nature. The way individuals perceive their work climate, such as others’ receptiveness of their proactive actions, is therefore likely to be relevant. Empirically, those individuals who report being satisfied with their work group (LePine & Van Dyne, 1998) and who have a good relationship with the individuals who would be affected by their proactive action (Ashford et al., 1998) are more likely to engage in proactive behaviours.

Similarly, the perception of being supported by co-workers (Griffin et al., 2007; Kanfer et al., 2001), or by the organisation (Ashford et al., 1998; Dutton et al., 1997), positively relates to proactive behaviours at work. Parker and colleagues (2006) provided a first insight into the motivational processes underlying this relationship: For a sample of wire makers, the researchers showed that trust in co-workers may increase levels of self-reported proactivity at work, via broadening employees’ perception of their role (reason to proactive motivation).

2.7 Outcomes of Proactivity

Proactive behaviour has both been conceptually, as well as empirically, linked with superior performance. Particularly in uncertain contexts, taking charge of the situation rather than passively waiting to be instructed, should have performance benefits (Griffin et al., 2007; Thomas et al., 2010). Grant, Parker and Collins (2009) found that proactive individuals were rated more positively in their overall job performance by supervisors, especially if the employees were low in negative affect.
and high in prosocial motivation. Likewise, employees who engaged in network building and personal initiative were evaluated more favourably by their supervisors (Thompson, 2005) and employees who engaged in voice were rated higher in individual performance by their supervisors six months later (Van Dyne & LePine, 1998).

Individuals who seek feedback should overall perform more highly (Ashford, 1986; Ashford et al., 2003). Consistent with this, in a series of studies, Morrison (1993a, 1993b) found a positive influence of proactive information seeking on individual performance. Specifically, in a sample of accountants who were new to their jobs, higher levels of feedback seeking predicted increased levels of task mastery three months later (Morrison, 1993a). Similarly, in a further sample of accountants, Morrison (1993b) found that information seeking with regards to technical aspects of the job was related to higher levels of job performance as rated by supervisors three months later. Likewise, in a study of real estate agents, Crant (1995) showed that proactive agents are likely to sell more houses, obtain more listings and to gain higher commission incomes.

If supervisor-rated performance is used as the dependent variable, it is important to understand what this relationship means. It might be that proactive employees do indeed perform more effectively. But other processes might play a role as well. For instance, proactive employees might be better at managing the supervisory relationship, thereby resulting in higher performance evaluations: In a study of newcomers, Ashford and Black (1996) found that proactive relationship-building with the supervisor had a strong relationship with self-rated performance 6 months later. Similarly, early career employees who actively sought out possibilities to be mentored and get into contact with senior colleagues at the beginning of their career were more likely to have a higher income and a higher hierarchical position two years later (Blickle, Witzki, & Schneider, 2009). In a related vein, Singh, Ragins, and Tharenou (2009) showed that employees who engaged in career initiative and in skill development were more likely to have acquired a personal mentor at work one year later; these findings are again stressing the importance of proactive career behaviours for shaping interpersonal relations in order to progress within a company.
By being proactive, individuals seem to be able to craft better jobs for themselves to achieve jobs that represent advances in their career and/or jobs that are satisfying. For instance, higher levels of career initiative and individual innovation predicted substantial increases in career satisfaction and in actual promotions at work two years later (Seibert et al., 2001). Career-oriented proactive behaviours such as several types of information proactively sought (Morrison, 1993b), feedback seeking, relationship building and positive framing (Wanberg & Kammeyer-Mueller, 2000) have all been linked to higher levels of job satisfaction. For example, in a study of organisational newcomers, the greater the extent that employees engaged in different types of information seeking (e.g., technical information) was positively related to a lower intention to leave the organisation three months later (Morrison, 1993b). Similarly, employees who engaged in proactive coping at work were more likely to report higher levels of positive affect, which in turn was associated with lower levels of absenteeism (Greenglass & Fiksenbaum, 2009).

Some research suggests mechanisms by which these effects occur. Proactive behaviours might lead to a better fit between the job and the individual. Both feedback inquiry and monitoring have been suggested to lead to increased individual adaptation (Ashford, 1986). Job crafting, another form of proactive behaviour, has been suggested to be able to alter employees' meaning of work, as well as work identity (Wrzesniewski & Dutton, 2001). Empirically, proactive normative information seeking has been positively linked with social integration (Morrison, 1993a), and engagement in feedback seeking has been negatively linked with actual turnover three months later (Wanberg & Kammeyer-Mueller, 2000). Likewise, employees who show personal initiative at work have been found to be also more likely to negotiate more flexible working conditions with better development opportunities (Hornung et al., 2008). To summarise, there is good evidence that engaging in proactive behaviours is related to favourable individual outcomes.

However, proactive behaviour might not always lead to positive outcomes (Belschak, Den Hartog, & Fay, 2010). For instance, engaging in proactivity could create conflicts between proactive employees on the one hand, and non-proactive employees on the other hand (Bolino, Valcea, & Harvey, 2010). Negative outcomes can even manifest themselves in objective deteriorations of the work situation: Seibert and colleagues (2001) found that employees who voiced many concerns at
work were less likely to progress with their salary and to be promoted two years later, than were their colleagues who voiced fewer concerns. Given that other studies have found proactivity to primarily enhance career outcomes, Seibert et al.'s (2001) study suggests the role of moderators. For instance, it might be that voice is not always displayed in an appropriate way, thereby being perceived negatively by supervisors, or perhaps in some situations, voicing concerns might be rather passive behaviour, representing complaining with little effort to take charge of the problems or issues oneself.

Chan (2006) highlighted the role of situational judgment of employees in engaging in proactivity that is helpful for the organisation. Similarly, Grant and Ashford (2008, p.24) concluded on possible outcomes of proactivity at work: “Insofar as proactive behaviour involves expending additional effort, challenging the status quo, and disrupting deviating from assigned tasks, prescribed roles, reified norms, accepted practices, and existing routines, researchers should expect to find mixed effects and unintended consequences for groups, organisations, and employees themselves”.

Similarly, it is likely not enough for employees to engage in proactivity appropriately – the organisation too needs to provide an appropriate environment within which employees can display their proactive behaviours. In this vein, Baer and Frese (2003) showed that the positive effects of implemented process improvements for objective organisational performance, such as organisations' return on assets, were larger when climate for initiative and psychological safety in the organisation was high. What supervisors think of proactive employees also matters: A recent study on the outcomes of feedback seeking behaviours in organisations found that supervisors were, for instance, more likely to positively regard proactive efforts if the employee who engaged in proactive behaviours was perceived as performing overall well (De Stobbeleir, Ashford, & De Luque, 2010).

To summarise, proactive behaviours may not always be welcomed in the organisation (Frese & Fay, 2001), nor do they yield positive outcomes in all circumstances (e.g., Chan, 2006). Even dysfunctional behaviours, such as workplace deviance and aggression, could be considered proactive (Griffin & Lopez, 2005). However, in this thesis I focus on proactive behaviours that correspond to Griffin and colleagues’ (2007) notion of *positive work behaviours*, where employees aim to
improve organisational and/or self-functioning, without deliberately aiming to harm functioning of either the self or the organisation. To the extent that researchers and organisations understand the motivational processes by which employees engage in such proactive behaviours, they may help employees to display proactivity in a way that will benefit both the individual, as well as the organisation.

2.8 Summary

In this chapter, I defined proactivity as a self-directed way of behaving that involves thinking ahead to take charge of a situation and to bring about change in that situation or in one's self. Proactive behaviours are thus about *making things happen*, whether that be to change the work place, the broader organisation and its strategy, one's fit within the organisation or one's personal career. Figure 2.1 shows a model that integrates existing research on the antecedents, underpinning processes, outcomes and moderators of proactive behaviour.

Individual differences (personality, demographics, knowledge and abilities) as well as situational differences (job design, leadership, and climate-related constructs) have been identified as predictors of proactive behaviour. These individual and situational differences form distal antecedents of proactive behaviour. They appear to, at least in part, have their effects through more proximal motivational states that influence proactivity. Proactive behaviours in turn have been linked with higher levels of performance on the job and in the career, well-being and identification. The success of proactive behaviours are partly dependent on whether the employee engages in proactivity in an appropriate way, and on whether the organisation provides a general appropriate frame for employees to engage in proactivity.

The missing pathway in this model is the *energised to* pathway of affective experience, that shapes employees motivations to engage in such self-directed, proactive behaviours at work. The importance of this mechanism, over and above the described factors here will be subject of Chapter 3.
Figure 2.1
Overview of Antecedents and Outcomes of Proactive Behaviour

**Individual Differences**
- Demographics
- Knowledge and Abilities
- Personality

**Situational Differences**
- Job Design
- Leadership
- Climate

**Proactive Motivational States**
- Can do
- Reason to
- ENERGISED TO

**Proactive Behaviour**
- Targeted at changing the work environment
- Targeted at changing oneself

**Outcomes of Proactivity**
- Job Performance
- Career Progression
- Well-being
- Identification

**Appropriateness of Proactive Behaviour**
- Situational Judgment
- Employee Affect and Values
- Organizational Climate for Initiative
- Organizational Climate for Psychological Safety
3.1 Overview

In the present chapter, I focus on one of the three motivational pathways to proactivity, outlined in the previous chapter: the type of influence that affective experience at work has for proactivity via an energised to mechanism. Firstly, I delineate different types of affective experiences at work (moods and emotions), and I discuss distinct ways of conceptualising affect, within the affective circumplex (Russell, 1980, 2003) and within emotion families (Ekman, 1992; Izard, 1977; Plutchik, 1994; Shaver et al., 1987). Secondly, I summarise theoretical conceptions of the relationship between affect and behaviours, and suggest an energised to motivational influence of affect on proactivity. Thirdly, I review the existing literature on affective experiences and proactivity and identify research questions based on limitations of previous work.

3.2 The Nature of Affect

Affective experiences are "consciously accessible feelings" (Fredrickson, 2001, p.218) that are "an integral blend of hedonic (pleasure–displeasure) and arousal (sleepy–activated) values" (Russell, 2003, p. 147). Affect has been a topic of interest in a diverse range of schools in psychology, such as psychotherapy (Jacobsen, 1957) and animal cognition (Harlow, 1958). Already seminal research at the onset of psychology as a discipline indicated the importance of affect for human nature (Wundt, 1879) and, in the early 1900's, researchers first pointed out the importance of feelings in a work context (Hersey, 1932; Roethlisberger & Dickson, 1939). More recently, both conceptual and empirical work emphasised the influence that affective experience has for employee behaviours (Ashforth & Humphrey, 1995; Fineman, 1993; George, 1989, 1990, 1991; George & James, 1993; Pekrun & Frese, 1992).

Research into the role of affect for organisational behaviour traditionally focused on self-indications of affective experience (Brief & Weiss, 2002) with the rationale that individuals themselves are best placed to comprehend their own feelings. Recent research extends this approach by including bio-physiological (Hansson, Vingard, Arnetz, & Anderzén, 2008; Rösler et al., 2010) or neurological
indicators (Johnston, Boehm, Healy, Goebel, & Linden, 2010), but these approaches are relatively undeveloped. In this thesis the focus is on self-indicated affective experience rather than the bio-physiological or neurological processes that might underlie experiences of affect. In the next section, drawing on social and personality psychology literature, I proceed to delineate different types of affect, including alternative conceptualisations of the construct.

3.2.1 Features of affect

Affect can be distinguished along three hierarchical levels, ranging from trait affectivity on the highest level to state affective experiences, which, in turn, comprise mood and emotions (Rosenberg, 1998). The work environment likely influences different levels of affect to varying degrees. State affective experiences such as mood and emotions appear readily influenced by various features of work such as the quality of work design, teams or leaders (Brief & Weiss, 2002; George & Brief, 1992). To the contrary, trait affectivity is likely only influenced by psychotherapeutic intervention, brain damage, usage of medication and the like, and thus is not prone to varying naturally or as a response to a specific work setting (Parkinson et al., 1996).

Trait affectivity can, however, provide a threshold for more fluctuant state experiences (Rosenberg, 1998). Thus, negative affectivity has been associated with employees' higher levels of negative state affective experiences at work (Fortunato, Jex, & Heinisch, 1999; Heinisch & Jex, 1997; Schaubroeck, Ganster, & Fox, 1992). Other studies suggest why this relationship prevails: Individuals who, as a stable disposition, experience high levels of negative affect appear to be more sensitive to negative stimuli, and thus more likely to experiencing negative emotions at work than individuals who are high in positive affectivity (Parkes, 1990). They also tend to experience positive mood inductions due to positive events in the work place for a shorter time, as compared to their counterparts who are high in positive affectivity (Brief, Butcher, & Roberson, 1995).

The emphasis of this thesis is on employees' experiences of affective states in a work setting (i.e., moods and emotions) rather than trait levels of affect. This focus is in accordance with the conceptualisation of proactivity, being a rather malleable way of behaving as opposed to a stable disposition (see Chapter 2). Adopting a state perspective on affect, and a behavioural perspective on proactivity
thus allows to understand changes in these constructs over time, and to ultimately develop suggestions for organisational interventions aimed at increasing proactivity at work (Parker, Johnson, & Collins, 2006; Raabe, Frese, & Beehr, 2007; Searle, 2008). In my thesis I will, however, account for systematic influences of more stable affective traits on state affective experience by controlling for trait affectivity in all quantitative analyses (Chapters 4, 5, and 6).

Moods and emotions particularly differ with regards to three main features: Firstly, in their *duration* (moods tend to last longer than emotions) and secondly in their *intensity* (emotions tend to be experienced by individuals as more intense than moods; Nowlis & Nowlis, 1956; Watson & Clark, 1994). However, these two first benchmarks of distinction can prove to be problematic in cases where moods such as feelings of anxiety or depression at work may have rather high levels of intensity, compared to the more transient emotional reaction of contentment about success in a customer transaction for instance.

Similarly, laboratory experiments use mood inductions that are short-lived (e.g., Isen, Clark, & Schwartz, 1976), yet have been classified as moods rather than as emotions. In contrast, emotions may be experienced repeatedly in response to the same event (Parkinson et al., 1996) and may thus last a substantial time, such as a day or longer (Frijda, Mesquita, Sonnemans, & van Goozen, 1991). Further putting into question the characteristic of duration to distinguish between emotions and moods, research by Watson (1988) suggests the overall structure of moods appears to be rather robust, irrespective of whether very short time frames of measurement, such as *right now* or *during the past few weeks* or longer periods of time reference such as *during the past year* are chosen.

Thirdly, and there has been considerable agreement amongst researchers about the ability of this characteristic to aptly distinguish between different types of state affective experience (Weiss & Cropanzano, 1996), moods and emotions differ in relation to their degree of *specificity*. Thus, emotions tend to be directed towards a specific object or event, whereas moods, although also possibly originating from a specific cause, do not unfold directly in relation to that specific cause (Parkinson et al., 1996). As such, emotions should be more likely to elicit behavioural responses in relation to a specific object (Isen, 1984). However, there is good evidence that situation-unspecific moods, too, can lead to cognitive processes and behavioural
outcomes towards specific objects (Albarracin & Wyer Jr., 2001; Robbins & DeNisi, 1994; Weiss & Cropanzano, 1996). Indeed, research suggests that emotions that lose their focus on a specific events and lose their intensity (Isen, 1984) subsequently turn into moods (Frijda, 1993; Isen, 1984). In turn, individuals’ awareness of the cause of their moods may transform moods into specific emotions (Clore, 1992).

The focus of this thesis will be particularly on work-related moods and emotions. This specification is relevant as affective experiences vary in the context that they can occur in. Thus, individuals can experience overall evaluative feelings that average experiences across all aspects of their lives (which corresponds to the level of trait affectivity). Furthermore, affective experiences can relate to a specific context, for instance, the work environment, or family life. Within these contexts, they can be further divided into specific facets, such as affective experiences with regards to salary in the job, career progression, leadership qualities of one’s supervisor, and so on. These different levels of specificity have been referred to as context-free, context-specific and facet-specific well-being, respectively (Warr, 1990, 2007).

Affective experiences that occur outside of work, such as mood and emotions experienced when employees are with their families and friends, may well spill over to the work context (Grzywacz & Marks, 2000; Hersey, 1932) and explain variations in behaviours at work (e.g., Binnewies, Sonnentag, & Mojza, 2010). In my thesis, I conceptualise affect in regard to the overall work environment, and thus emphasise a context that directly relates to proactive behaviours at work. In my empirical study designs I account for influences from different life domains by asking respondents to report on their moods when at work, as compared to evaluating how they feel about their work.

This measurement approach subsumes any affective experiences that likely influence work behaviours in the context of their professional life. In contrast, emotions are per definition related to a specific object or event. Thus, in my thesis (in Chapter 7), I consider emotions in regard to how employees felt in relation to proactive efforts that are aimed at changing a situation or oneself. Similarly, when controlling for the systematic influence of affectivity in my analyses, I investigate trait affectivity by asking respondents in a context-free fashion how they feel in general.
3.2.2 Categorisation of affect

As Parkinson and colleagues (1996, pp.18-19) pointed out that “much of the research ... does not make the distinction between emotion and mood explicitly but works instead towards a general-purpose structural model of affect”. Below I introduce the affective circumplex model of affect (Russell, 1980, 2003) which is generally considered to be the most widely used model of affective experience (Yik, Russel, & Feldman Barrett, 1999) and is commonly used to categorise types of mood. More specific to the conception of emotions is the notion of emotion families (Ekman, 1992; Izard, 1977; Plutchik, 1994; Shaver et al., 1987), although some researchers have applied the structure of the affective circumplex, too, when investigating emotions (Shaver et al., 1987). I next turn to brief summaries of main approaches to categorise moods and emotions.

3.2.2.1 The circumplex model of affect

There is good evidence that affective experience can be represented by two independent dimensions of valence and activation in a bipolar space, as described in the circumplex model of affect (Green, Goldman, & Salovey, 1993; Russell, 1978; Sevastos, Smith, & Cordery, 1992; e.g., Spector, Van Katwyk, Brannick, & Chen, 1997; Yik et al., 1999). Accordingly, unique combinations of the dimensional poles 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 (Russell, 2003; see Figure 3.1).

Thus, valence represents the extent to which individuals experience pleasant versus unpleasant feelings. The distinction between positive and negative experience of affect, with concept of ‘feeling good’ versus ‘feeling bad’ has been argued to apply across cultures and languages (Wierzbicka, 1999). A second dimension in the affective circumplex, activation concerns a person’s “state of readiness for action or energy expenditure” (Russell, 2003, p.156). Thus, the upper two quadrants of high-activated positive and negative affect are viewed as “tense arousal” and “energetic arousal” (Thayer, 1989), and represent “motivational intensity” – “the impetus to act” (Gable & Harmon-Jones, 2010, p.1).
Whilst most research distinguished between the two dimensions of positive and negative valence and high versus low activation when describing the qualities of affective experience (e.g., Burke et al., 1989; Cropanzano, Weiss, Hale, & Reb, 2003; Feldman Barrett & Russell, 1998; Remington, Fabrigar, & Visser, 2000; Yik et al., 1999), some researchers suggested additional dimensions of affective experience, such as intensity, or depth of experience (see Parkinson et al., 1996, for a detailed overview). Conventional measures of self-report affective experience have, however, not systematically accounted for any dimensions beyond activation and valence. In fact, existing measures of self-reported affect only cover the two dimensions of valence and activation to different extents:

For instance, the widely used Positive and Negative Affect Schedule (PANAS) by Watson, Clark and Tellegen (1988) used items such as feeling enthused, interested and determined for positive affect and feeling scared, afraid and upset for negative affect. The authors later acknowledged that this choice of items, rather than covering the entire circumplex, narrowed down on the more activated two quadrants of high-activated positive and high-activated negative affect.

The authors thus later suggested to rename their instrument into Positive and Negative Activation rather than Affect (Tellegen, Watson, & Clark, 1999). To
summarise, the PANAS measure suggested the investigation of affect as positive versus negative valence of feelings (Watson et al., 1988). Other research suggested the measurement of affect in one composite measure of all types of feelings (Van Katwyk, Fox, Spector, & Kelloway, 2000), or as two scores that represent diagonals from high-activated positive to low-activated negative, as well as from low-activated positive to high-activated negative affect (Warr, 1990). A detailed overview of different affect measures is provided by Lyubomirsky, King and Diener (2005).

A more detailed way of measuring the affective circumplex is by measuring all four conceptual quadrants separately (e.g., Burke et al., 1989). It is this detailed approach of acknowledging the four unique combinations of valence and activation of the affective circumplex that is necessary to investigate the relationship between moods and proactivity at work, as I will argue in later chapters of my thesis.

3.2.2.2 Emotion families

Much research has offered classification systems for emotions, so called emotion families (e.g., Ekman, 1992; Izard, 1977; Plutchik, 1994; Shaver et al., 1987). Common to these classification systems is that researchers speak of primary emotions (first-order, overarching emotional experiences) and secondary emotions (emotions that are more nuanced than primary emotions, and classify under the primary emotion categories in a second-order fashion as derived from primary emotions).

Primary emotions differ amongst classifications of emotion families: Thus, Ekman (1992) in his classification presented emotions such as anger, fear, disgust, sadness, enjoyment and surprise. Izard (1977) identified anger, fear, disgust, guilt, shame, contempt, distress, interest, enjoyment and surprise. Plutchik (1994), in turn, spoke of anger, fear, disgust, sadness, acceptance, expectation, joy and surprise. A comprehensive overview of classification systems of emotion families is, for instance, provided by Ortony and Turner (1990).

Next, I elaborate the classification system by Shaver and colleagues (1987) in more detail (see Figure 3.2). I will draw on this classification system in my thesis for two reasons: Firstly, it provides a rather comprehensive empirical approach to identifying and classifying emotions. As such, it will offer a framework for classifying emotions that are experienced by respondents in the context of proactivity.
in my empirical investigation in Study 3 (Chapter 7). Secondly, the classification system, although mainly presented by identifying primary and secondary emotions, also links these emotions to the circumplex model of affect. This linkage, in turn, is helpful for my discussion in Chapter 8, where I will jointly discuss and integrate my research findings on moods (Chapters 4 and 6) and emotions (Chapter 7).

Shaver and colleagues (1987) presented a semantic classification of 135 emotions that were allocated by study participants according to their emotional qualities. Cluster analyses yielded an overall structure of these emotions within six primary emotion categories of love, joy, surprise, anger, sadness and fear. The researchers suggested that different emotion categories represented the circumplex dimensions of activation and valence to different extents.

Thus, whilst the emotions of love, joy and surprise were characterised by positive valence, anger, sadness, and fear were characterised by negative valence. A second dimension was the level of activation of emotions: whilst fear and surprise were highly activated, love was low-activated and joy, anger and sadness were characterised by medium levels of activation.

The researchers further distinguished emotions along their level of potency, i.e., their perceived strength. Thus, anger was particularly high, and sadness particularly low in potency, while other emotions (love, joy, surprise and fear) emerged as medium in potency (Shaver et al., 1987). I will return to discussing the representation of emotions in the circumplex model of affect in Chapter 7.
Figure 3.2
Emotion Families (based on Shaver et al., 1987)

<table>
<thead>
<tr>
<th>Love</th>
<th>Joy</th>
<th>Surprise</th>
<th>Anger</th>
<th>Sadness</th>
<th>Fear</th>
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</thead>
<tbody>
<tr>
<td>Adoration</td>
<td>Amusement</td>
<td>Amazement</td>
<td>Aggravation</td>
<td>Agony</td>
<td>Alarm</td>
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<tr>
<td>Affection</td>
<td>Bliss</td>
<td>Astonishment</td>
<td>Agitation</td>
<td>Alienation</td>
<td>Anxiety</td>
</tr>
<tr>
<td>Arousal</td>
<td>Cheerfulness</td>
<td>Surprise</td>
<td>Anger</td>
<td>Anguish</td>
<td>Apprehension</td>
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<tr>
<td>Attraction</td>
<td>Contentment</td>
<td></td>
<td>Bitterness</td>
<td>Defeat</td>
<td>Distress</td>
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<tr>
<td>Caring</td>
<td>Delight</td>
<td></td>
<td>Contempt</td>
<td>Depression</td>
<td>Dread</td>
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<tr>
<td>Compassion</td>
<td>Eagerness</td>
<td></td>
<td>Disgust</td>
<td>Despair</td>
<td>Fear</td>
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<tr>
<td>Desire</td>
<td>Ecstasy</td>
<td></td>
<td>Dislike</td>
<td>Disappointment</td>
<td>Fright</td>
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<td>Fondness</td>
<td>Elation</td>
<td></td>
<td>Env</td>
<td>Dismay</td>
<td>Horror</td>
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<td>Infatuation</td>
<td>Enjoyment</td>
<td></td>
<td>Exasperation</td>
<td>Displeasure</td>
<td>Hysteria</td>
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<td>Enthusiasm</td>
<td></td>
<td>Ferocity</td>
<td>Embarrassment</td>
<td>Mortification</td>
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<td>Longing</td>
<td>Excitement</td>
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<td>Frustration</td>
<td>Gloom</td>
<td>Nervousness</td>
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<td>Gaiety</td>
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<td>Fury</td>
<td>Glumness</td>
<td>Panic</td>
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<td>Gladness</td>
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<td>Grouchiness</td>
<td>Grief</td>
<td>Shock</td>
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<td>Grumpiness</td>
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<td>Jolliness</td>
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<td>Optimism</td>
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<td>Pleasure</td>
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<td>Pride</td>
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<td>Resentment</td>
<td>Loneliness</td>
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<td>Rapture</td>
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<td>Revision</td>
<td>Melancholy</td>
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<td>Relief</td>
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<td>Misery</td>
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<td>Satisfaction</td>
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<td>Neglect</td>
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<td>Thrill</td>
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<td>Torment</td>
<td>Pity</td>
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<td></td>
<td>Triumph</td>
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<td>Vengefulness</td>
<td>Regret</td>
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<td>Zeal</td>
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<td>Wrath</td>
<td>Rejection</td>
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<td>Zest</td>
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<td>Remorse</td>
<td></td>
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</tbody>
</table>

3.3 Conceptions of the Relationship between Affect and Proactive Behaviours

Affect has been the subject of research interest from two key perspectives:
Firstly, in the notion of affect as an outcome, and secondly in the notion of affect as a cause. Turning to the first, affect as an outcome, theories such as affective events theory suggest that certain events in the workplace give rise to affective experience (Weiss & Beal, 2005; Weiss & Cropanzano, 1996). For instance, Weiss and Cropanzano (1996), drawing on cognitively oriented affect theory (e.g., Lazarus, 1991a, 1991b), pointed out the role of employees' appraisals of work events in eliciting affective experience as well as to employees' disposition and to environmental causes (for instance, temperature and noise levels) in directly generating affect at work. Further conceptual work suggested the role of work group
characteristics (George, 1996) and of organisational reward systems (George & Brief, 1992) for shaping employees’ affect experience at work.

Turning to the research focus on affect as a cause, researchers have investigated relationships between affective experience and organisational outcomes. For instance, Isen and Baron (1991) proposed that positive affect should have effects for such diverse outcomes as employees’ cognitive processes, attitudes towards work and work-related behaviours. Research to date mostly focused on attitudinal outcomes whilst neglecting its role for performance outcomes (Brief & Weiss, 2002) although more recently affective experience at work has been associated with positive outcomes such as task performance (Johnson, Tolentino, Rodopman, & Cho, 2010; Staw, Sutton, & Pelled, 1994; Totterdell, 1999, 2000; Tsai, Chen, & Liu, 2007; Wright & Staw, 1999), creativity (George & Zhou, 2002), organisational citizenship behaviours (Dalal, Lam, Weiss, Welch, & Hulin, 2009; George, 1991) and with negative outcomes such as workplace deviance (e.g., Dalal et al., 2009; Fox & Spector, 1999; Judge, Scott, & Ilies, 2006; Lee & Allen, 2002).

The focus of this thesis is on affect as a cause of positive performance outcomes in the workplace, particularly of proactivity. In this vein, I will briefly summarise main schools of thought in conceiving affect as a predictor of behaviour (Section 3.3.1). I will then elaborate the expected relationship between affect and proactivity more specifically (Section 3.3.2). In the last sections of this chapter I will then turn to summarising empirical evidence on the role of affect for proactivity (Section 3.4) and I will identify research questions, based on limitations of previous work that has investigated the role of affective experience for proactivity (Section 3.5).

### 3.3.1 The role of affect for behaviours

Previous research conceptualised the relationship between affective experience and behaviours in two distinct, although interrelated, approaches: Firstly, historically, research has mainly conceived affect as directly causing behaviours. Thus, emotions represented fight versus flight stimuli that expressed themselves in corresponding behaviours (Cannon, 1927, 1929). Similarly, Frijda (1986) in his work on emotions argued that contentment (i.e., low-activated positive affect) lead to inactivity whereas joy (i.e., high-activated positive affect) encouraged what he
named ‘free activation’, that is “aimless, unasked-for-readiness to engage in whatever interaction presents itself” (p.89).

More recently, researchers emphasised a more complex role of indirect influences of affect on behaviours via cognitive processes (Baumeister, Vohs, DeWall, & Zhang, 2007; Fredrickson, 1998, 2001; Isen & Baron, 1991). Thus, Fredrickson (1998) suggested “the ... presumption that ... should be discarded is that emotions must necessarily spark tendencies for physical action. Some positive emotions seem instead to spark changes primarily in cognitive activity, with changes in physical activity (if any) following from these cognitive changes” (p.303). In this vein, broaden-and-build theory proposed that affect, rather than prompting specific behaviours, facilitated thought-action tendencies (Fredrickson, 1998).

Whilst direct influences of affect on tendencies towards action versus inactivity were acknowledged in this theory (Fredrickson & Levenson, 1998), the focus was on explaining how positive affective experience impacts on behaviours indirectly by broadening cognitive flexibility of individuals that should, in turn, enhance the array of behavioural options an individual could choose from in any given situation (Fredrickson, 2001). In a similar vein, Baumeister and colleagues (2007) argued that “conscious emotion operates mainly and best by means of its influence on cognitive processes, which in turn are input into decision and behaviour regulation processes.” The assumption of the role of affect on cognitions, rather than directly on behaviours, has found support in social psychology (e.g., DeSteno, Petty, Rucker, Wegener, & Braverman, 2004; Scherer, Schorr, & Johnstone, 2001; Smith & Ellsworth, 1985) as well as in organisational research (e.g., Beal et al., 2005; Foo, et al., 2009; Forgas & George, 2001; Seo, Goldfarb, & Feldman Barrett, 2010; Tsai, et al., 2007).

The extent to which affective experience influences behaviours directly or indirectly, however, likely depends on the type of behaviour in question. For instance, affective events theory suggested that some behaviours are either directly caused by affect (so-called affect-driven behaviours) such as spontaneous acts of

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3 Baumeister and colleagues (2007) further acknowledged an additional, direct influence of affect on behaviors mainly via more automated types of affective experience. However, the researchers argued that the main role of affect for behaviors was to influence cognitions which, in turn, influenced behaviours.
helping colleagues (George & Brief, 1992; Isen, 1984), whilst others involve more deliberate decision making processes and are rather indirectly influenced by affect via cognitive judgments (so-called *judgment-driven behaviours*; Weiss & Cropanzano, 1996). These differences of influences are associated with the functions of affective experience for cognitive processes. For instance, affective experience has a greater role in influencing judgments that involve heuristic and systematic, as opposed to simple, requirements for cognitive processing (Forgas, 1995). More specifically, positive affective experience thus influences behaviours via influencing distal motivation (choice of task and initial effort) and proximal motivation (persistence) of behaviours (George & Brief, 1996).

Proactive behaviours constitute individuals' self-setting and pursuing of goals that are anticipatory and change-oriented (Grant & Ashford, 2008; Parker et al., 2010) that are risky to the extent that they may not always be welcomed by the organisation (Frese & Fay, 2001) and yield potential costs for the self-image (De Stobbeleir et al., 2010). I thus expect proactive behaviours to comprise conscious self-regulatory efforts (Muraven & Baumeister, 2000) that resemble a *judgment-driven* way of behaving (Weiss & Cropanzano, 1996). Thus, in my thesis, I will adopt the more complex, indirect influence perspective of the influence of affect on proactive behaviours, and will conceptualise proactivity in later chapters as a self-regulatory process that is influenced by affect at its different stages.

### 3.3.2 Energised to motivational pathway to proactivity

In addition to the *cold* motivational states of can do and reason to (outlined in Chapter 2), proactivity scholars have proposed that *hot* affect-related motivational states can affect proactive behaviours. Proactivity is about improving the organisation or the fit between oneself and the environment and as such the proactive individual intends it to be a positive way of engaging with his or her environment. Thus, drawing on research indicating that affective states facilitate retrieval of mood-congruent information (e.g., Bower, 1981; Mayer, Gaschke, Braverman, & Evans, 1992) and promote behaviours with a similar evaluative tone (Forgas & George, 1995).
2001), I propose that, overall, positive rather than negative affect will facilitate the engagement in proactive behaviours.

In discussing the influence of affect for proactive behaviours I draw on research reviewed in the previous section (Section 3.3.1) that provided evidence for affect influencing behaviours not only directly, but also indirectly via shaping cognitions that precede and follow actual behaviour. The view that proactive behaviours are preceded and followed by cognitions has had mainly conceptual attention in proactivity research (Frese & Fay, 2001; Grant & Ashford, 2008): Thus, proactivity has been conceived as a process in which employees set a proactive goal, plan for its implementation, enact on the proactive goal as well as monitor and revise progress to the proactive goal. Affective experience should influence this process of proactivity at different stages.

Firstly, in regard to the proactive goal setting part, Seo and colleagues (2004; Seo, Bartunek, & Feldman Barrett, 2009) theorised, and found empirical support for the theory that positive affect activated an approach-related action tendency. Others have shown that positive affect broadens individuals’ momentary action-thought repertoires (Fredrickson, 1998; Fredrickson & Joiner, 2002; Isen, 1999), enhances the flexibility of cognitive processes (Isen, 1999) and facilitates exploration of novel situations (Watson, Wiese, Vaidya, & Tellegen, 1999). Positive affect promotes the setting of more challenging goals (Ilies & Judge, 2005), improves decision making (Staw & Barsade, 1993) and helps individuals engage with a more problematic future (Oettingen, Mayer, Thorpe, Janetzke, & Lorenz, 2005). For all these reasons, positive affect should enhance the likelihood that individuals set proactive goals.

Secondly, positive affect also potentially promotes more effective proactive goal striving; the subsequent behavioural elements of proactivity. The cognitive broadening and flexibility that come with positive affect (for a review, see Isen, 1999) bode well for more creative ways of dealing with problems that can arise during proactive goal striving. For instance, positive affect raises the chance that people will pursue efficient outcomes of problem solving because they are better able to see possibilities, think innovatively and flexibly reason about trade-offs.

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5 I will additionally consider how negative affect, too, might promote proactivity when discussing the role of moods for different elements of proactive goal regulation (Chapter 6), and the role of emotions in relation to proactivity-related issues in the organisation (Chapter 7).
Likewise, positive affect can influence goal revision during proactive goal regulation by increasing openness to feedback (Gervey, Igou, & Trope, 2005). Positive affect also motivates individuals to persist in setting goals (Clore, 1994). Thus, upon experiencing positive affect individuals should be more likely to implement their proactive goals, remain enacting in their proactive actions longer and persist in the case of obstacles.

Additionally, the level of activation in positive affect should play a role: A high degree of activation provides feelings of energy (Brehm, Miron, & Miller, 2009; Shraga & Shirom, 2009) and thus facilitate the engagement and persistence in activities (Fredrickson, 1998; Tsai, et al., 2007). In contrast, evidence suggests that feelings of contentment tend to be associated with inactivity and reflection (Frijda, 1986) and individuals’ preference to savour, as compared to change, current circumstances (Izard, 1977). For this reason, in my conceptual research with Sharon Parker and Karoline Strauss (Parker et al., 2010), we identify energised to as the key direct affect pathway influencing proactive goal generation and striving.

In later chapters of this thesis, I will expand on discussing the conceptual relationship between affect and proactivity. In this vein, I will additionally consider how low-activated positive affect and negative types of affects might also have a role to play in employees' proactivity. Specifically, I will draw on a large body of affect research to discuss how each of the four quadrants from the affective circumplex should relate to the process elements of the model of proactive goal regulation (to be introduced in Chapter 5 of this thesis) in differential ways.

3.4 Empirical Evidence for the Role of Affect on Proactivity

Recent research supports the energised to motivational pathway to proactivity. In a cross-sectional study conducted in a health care sector environment (Den Hartog & Belschak, 2007), employees who indicated positive high-activated work-related affect also reported higher levels of personal initiative at work. Interestingly, the researchers did not find any relationship between high-activated positive affect and supervisor-rated personal initiative. This could indicate that relationships between self-reported affect and proactive behaviour at work merely reflect respondents' tendencies to view their behaviour in a more positive light when in a good mood, thus stressing the importance of avoiding common method biases.
(Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) when measuring the relationship between affect and proactivity. Den Hartog and Belschak’s (2007) is one of the only studies to systematically compare the role of affect (energised to pathway) and affective organisational commitment (reason to pathway) for proactivity. The researchers found independently positive associations between both pathways and proactive behaviours and thus provided partial empirical support for the can do, reason to, energised to model of proactive motivation (see Chapter 2; Parker et al., 2010).

Furthermore, Fritz and Sonnentag (2009) investigated day-level variations of affect and proactivity at work. The researchers distributed daily questionnaires over the period of four consecutive work days to a sample of civil service employees. High-activated positive affect was positively related to taking charge behaviours both on the same day, as well as on the following day. Fritz and Sonnentag’s study relied on self-reports of taking charge, but the lagged effect of affect on behaviour over time helps to establish that affect causes behavioural change rather than the association being a methodological artefact.

In a study of MBA students that used other-reports of proactivity, Parker, Collins and Grant (2008) showed that high-activated positive affect predicted higher levels of taking charge and strategic scanning. Positive affect was, however, only associated with individual innovation and issue selling when individuals did not possess a high performance orientation (performance orientation represents the reason to motivational pathway to proactivity, see Chapter 2). When performance orientation was high, the negative association of a strong desire to prove one’s competency on proactivity appeared to overwhelm any value of positive affect. The authors interpreted these findings as suggesting that positive affect has a direct influence on some types of proactive behaviours, whilst for others – perhaps those that are perceived as more risky such as innovation and issue selling – other motivational dynamics might play a suppressing role.

Although Parker and colleagues’ (2008) study enhanced the focus of investigation to comparing the role of affect across a wider range of proactive behaviours, they did not extend the focus to comparing the role of affect for proactive versus other types of positive work behaviours (Griffin et al., 2007). In the next section, I will outline that such a comparison is needed in order to increase
insights into the importance of affective experience for influencing employees' self-initiated actions at work.

Several studies investigated the influence of concepts on proactivity at work which are rather close to, albeit not identical with, positive work-related affect. Job engagement, for instance, was measured by investigating respondents' feelings of work-related vigour, dedication and absorption. Employees who feel engaged should be more likely to engage in effortful behaviours that are related to changing the situation or themselves, than employees who feel less engaged (Bakker & Schaufeli, 2008). In support of this argument, Salanova and Schaufeli (2008) found for Spanish and Dutch samples, respectively, positive relationships between work engagement and self-reported personal initiative. Similarly, in an online study across professions in the Netherlands, work engagement was found to be positively related to self-reported innovative work behaviours (Schaufeli, Taris, & Bakker, 2006).

There has been evidence that this relationship also holds for a three-year time frame: In a sample of dentists, those individuals who indicated higher levels of work engagement at time point one also indicated higher levels of personal initiative three years later, whilst controlling for previous levels of personal initiative (Hakanen, Perhoniemi, & Toppinen-Tanner, 2008). Interestingly, the authors found furthermore a weakly positive association between personal initiative and subsequent higher levels of work engagement for the same time frame, indicating a reciprocal effect between work engagement and personal initiative.

Regarding the possible influence of work engagement onto personal initiative, further support stems from longitudinal frames of investigations conducted via diary studies. Sonnentag (2003) found positive relationships between day-level work-engagement and day-level self initiative, as well as the pursuit of learning over the period of five consecutive days. In a similar string of research, but showing even more powerful lagged effects, Binnewies, Sonnentag and Mojza (2009) showed that the feeling of being recovered in the morning predicted higher levels of personal initiative during the same work day and Binnewies, Sonnentag and Mojza (2010) showed that employees who recover well from work over the weekend are likely to engage in higher levels of personal initiative during the following working week.

Even though it might be expected that negative affect would suppress proactivity, under some situations negative affect might signal a discrepancy between
an actual situation and a desired situation, thereby stimulating individuals to engage in self-initiated and change-oriented behaviours in order to reduce the perceived discrepancy (Carver & Scheier, 1982). In support of this argument, Den Hartog and Belschak (2007), across two cross-sectional studies, found some evidence that high-activated work-related negative affect positively related to personal initiative, although the effect was not consistent across different samples and only applied to self-ratings of initiative. Further calling into question the relationship between negative affect and proactivity, Fritz and Sonnentag (2009) in their diary study found that high-activated negative affect was not related to proactivity, although the same measure for affect was used, and a similar type of proactivity at work, was investigated.

Overall, there is reasonably good evidence that affect can promote or inhibit proactive behaviours. However, as I will outline in the next section, evidence is limited in relation to more specific ways in which different types of affective experience and proactivity are associated. In order to depict these limitations, Table 3.1 provides an overview of the above studies along different criteria: The type of affect investigated (trait affectivity, moods or emotions); the location of affect in the affective circumplex (pleasant vs. unpleasant, high vs. low-activated affect); the part of the proactivity process investigated in the study (enacted proactive behaviour versus cognitions that precede or follow the proactive behaviour, in the following referred to as proactive goal regulation); and finally the found association between affect and proactivity in the corresponding studies.

On the basis of my review on affect and proactivity research, in the next section of this chapter, I will outline five research questions on the relationship between affect and proactivity and I will describe how the empirical studies of my thesis set out to investigate each of these research questions.
<table>
<thead>
<tr>
<th>Study</th>
<th>Type of Affect investigated</th>
<th>Location in Affective Circumplex</th>
<th>Aspect of Proactive Goal Regulation investigated</th>
<th>Association between Affect and Proactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Binnewies, Sonnentag &amp; Mojza (2009)*</td>
<td>Moods</td>
<td>High-activated positive</td>
<td>Enacted Behaviour</td>
<td>+</td>
</tr>
<tr>
<td>2 Binnewies, Sonnentag, &amp; Mojza (2010)*</td>
<td>Moods</td>
<td>High-activated positive</td>
<td>Enacted Behaviour</td>
<td>+</td>
</tr>
<tr>
<td>3 Den Hartog &amp; Belschak (2007)</td>
<td>Trait affectivity</td>
<td>High-activated positive</td>
<td>Enacted Behaviour</td>
<td>+ (S 1 &amp; 2: self-rated) / ns (S 2: supervisor-rated)</td>
</tr>
<tr>
<td>4 Fritz and Sonnentag (2009)</td>
<td>Trait affectivity</td>
<td>High-activated negative</td>
<td>Enacted Behaviour</td>
<td>+</td>
</tr>
<tr>
<td>5 Hakanen, Perhoniemi, &amp; Toppinen-Tanner (2008)*</td>
<td>Trait affectivity</td>
<td>High-activated positive</td>
<td>Enacted Behaviour</td>
<td>ns</td>
</tr>
<tr>
<td>6 Parker, Collins, &amp; Grant (2008)</td>
<td>Trait affectivity</td>
<td>High-activated positive</td>
<td>Enacted Behaviour</td>
<td>+</td>
</tr>
<tr>
<td>7 Schaufeli and Schaufeli (2008)*</td>
<td>Trait affectivity</td>
<td>High-activated positive</td>
<td>Enacted Behaviour</td>
<td>+</td>
</tr>
<tr>
<td>8 Schaufeli, Taris, &amp; Bakker (2006)*</td>
<td>Trait affectivity</td>
<td>High-activated positive</td>
<td>Enacted Behaviour</td>
<td>+</td>
</tr>
<tr>
<td>9 Sonnentag (2003)*</td>
<td>Moods</td>
<td>High-activated positive</td>
<td>Enacted Behaviour</td>
<td>+</td>
</tr>
</tbody>
</table>

*These are studies that investigated constructs similar to, albeit not identical with, affect; Association between affect and proactivity: + (significantly positive relationship), ns (non-significant relationship); in Den Hartog & Belschak (2007): S1-2 (Studies 1 and 2 in the DenHartog & Belschak, 2007, paper).
3.5 Research Questions on the Relationship between Affect and Proactivity

Overall, there appears to be good evidence that high-activated positive moods as well as positive trait affectivity are positively associated with proactive behaviours. However, based on limitations of past research below I formulate five research questions that will be addressed in the present thesis:

Firstly, past research mainly focused on studying the role of affect for one particular type of proactivity or, in a study by Parker and colleagues (2008), on a selection of different proactive behaviours. However, past research did not systematically compare the importance of affective experience for proactive behaviours in relation to proficient behaviours at work (a taxonomy of positive behaviours at work, that conceived of proactivity and proficiency at two distinct ways of behaving, was introduced and validated by Griffin et al., 2007).

Similarly, past research that investigated the importance of affective experience for proficient behaviours at work did not include direct comparisons with proactive behaviours (e.g., Staw et al., 1994; Totterdell, 2000). Whilst there is good evidence that high-activated positive moods are positively associated with proactive behaviours (see Table 3.1), one question that is thus posed in this thesis is whether high-activated positive moods are particularly important for employees’ engagement in self-initiated and change-oriented behaviours at work when systematically compared to employees’ fulfilment of their core job tasks (Griffin et al., 2007).

Research Question 1: Are work-related moods (particularly high-activated positive moods) more important for proactive as compared to proficient work behaviours?

Secondly, past research on the role of affect for proactivity (the energised to pathway, see Section 3.3.2) almost exclusively focused on investigating it as a unique antecedent. However, plenty of evidence in a different research stream on cognitive-motivational antecedents of proactivity suggests that can do and reason to motivational pathways also play a role (for an overview, see Tables 2.1 and 2.2). In one of the only studies to combine affect-related and cognitive-motivational pathways, Den Hartog and Belschak (2007) found preliminary evidence of independent effects of high-activated positive affect (energised to) and affective...
organisational commitment (reason to) motivational pathways for personal initiative at work. However, whether affective experience influences proactivity over and above indicators of both reason to as well as can do motivation, as postulated in the model of proactive motivation by Parker and colleagues (2010), remains unclear.

Research Question 2: Is affective experience an influencing factor of proactive work behaviours over and above the influence of can do and reason to cognitive-motivational factors?

Thirdly, past research on affect and proactivity focused on examining a direct causation model, in which affect immediately impacts on proactivity. However, research suggests that the role of affect for behaviours is rather indirect, via influencing cognitive processes, as opposed to direct causation (Baumeister, et al., 2007; Isen & Baron, 1991). Similarly, self-regulation theory suggests that behaviours are preceded and followed by cognitions (Frese & Zapf, 1994; Gollwitzer, 1990). In this vein, proactivity has been conceived as a process in which employees set a proactive goal, plan for its implementation, enact on the proactive goal as well as monitor and revise progress on the proactive goal (Frese & Fay, 2001; Grant & Ashford, 2008). However, past empirical research on proactivity almost exclusively focused on investigating the role of affect for enacted proactive behaviours. The extent to which a model of proactive goal regulation can be empirically meaningfully measured in order to facilitate more comprehensive insights into the relationship between affect and proactivity remains unclear.

Research Question 3: Can proactivity be empirically conceived as a goal regulation process that comprises cognitive as well as behavioural components?

Fourthly, proactivity researchers, and indeed organisational researchers in general (Brief & Weiss, 2002), have mainly drawn on the PANAS measure (Watson et al., 1988) when measuring affective experience. As noted earlier in this chapter, this measure comprises the two more activated quadrants of affective experience, whilst neglecting the two low-activated ones (Tellegen, et al., 1999). Thus, no research to my knowledge has investigated the roles of low-activated positive affect or low-activated negative affect for proactivity (see Table 3.1). Insights into how all four types of affective quadrants relate to the different elements of proactive goal regulation are also missing in current proactivity research.
Research Question 4: How are unique combinations of activation and valence in work-related moods influence proactive goal regulation?

Finally, previous research on affect and proactivity has mainly emphasised the role of moods and trait affectivity for proactivity (see Table 3.1). Thus, to my knowledge no research on proactivity has investigated the role of emotions for proactivity at work. As outlined earlier in this chapter (Section 3.2.1), emotions are more intense and directional and can immediately influence ways of behaving (e.g., Parkinson et al., 1996). Additionally, in a goal regulation perspective, perceived success or failure of progress towards goals gives rise to emotional experiences (e.g., Carver & Scheier, 1990a), indicating possible reversed causal relationships between proactivity and affective experience. Whether emotions differ in their association with proactive goal regulation as compared to more general moods and trait affectivity remains unclear in current proactivity research.

Research Question 5: What is the role of emotions in the proactive goal regulation process?

Next, I will turn to the first empirical study of my thesis in Chapter 4.
Chapter 4: The Role of Moods for Proactive Behaviours

4.1 Outline

In this chapter I set out to investigate Research Questions 1 and 2 regarding the overall relevance of moods for proactive behaviours at work. Specifically, Research Question 1 concerns the differential importance of various types of moods, conceptualised in the affective circumplex model, for employees proactive and proficient work behaviours (Griffin et al., 2007; see Figure 4.1, path RQ1). To date, proactivity researchers have mainly focused on the high-activated ends of the circumplex model (see Chapter 3). Thus, this chapter sets out to provide more comprehensive insights into the differential roles of activation and valence in moods for proactive behaviours whilst simultaneously comparing the relevance of moods for proactivity versus proficiency at work. Research Question 2 concerns the role of mood in predicting proactivity over and above well-established, cognitive-motivational predictors. Specifically, I operationalise the motivational framework of proactive behaviours, introduced in Chapter 2, comprising can do, reason to, and energised to mechanisms (Parker et al., 2010; see Figure 4.1, path RQ2).

Figure 4.1
Overview of Research Questions 1 and 2
4.2 Work-related Moods and Work Performance

Seminal conceptual research in the field indicates that affective experiences at work influence subsequent work behaviours in various ways (see e.g., Ashforth & Humphrey, 1995; Brief & Weiss, 2002; Isen & Baron, 1991). Empirically, positive affective experiences at work have been shown to facilitate organisational behaviours such as helping colleagues (Belschak & Den Hartog, 2009; Lee & Allen, 2002; Tsai, et al., 2007) or the overall organisation (Dalal, et al., 2009), improved customer service (George, 1991), higher levels of creativity (Estrada, Isen, & Young, 1997b; Isen, Daubman, & Nowicki, 1987; Madjar, Oldham, & Pratt, 2002), improved negotiation strategies (Forgas, 1998) and higher overall work performance (Staw, et al., 1994; Totterdell, 2000).

Likewise, negative affective experiences at work have been shown to sometimes spark positive behaviours such as creativity (George & Zhou, 2002) and to substantially inhibit others such as organisational citizenship (Kaplan, Bradley, Luchman, & Haynes, 2009) and prosocial behaviours (George, 1990). To summarise, evidence suggests that affect has an essential influence on organisational behaviours. In this chapter, I compare and contrast the influence of different types of work-related moods for proactive vs. proficient work behaviours (Griffin et al., 2007). As I argue next (in Section 4.2.1), these two ways of behaving positively at work form ends of a continuum that can be described by employees setting their own goals versus carrying out goals that have been mainly set by their organisation. I then integrate this goal-related view on proficient vs. proactive behaviours by arguing how different types of moods should relate to these positive work behaviours (in Section 4.2.2).

4.2.1 A goal-related view on work performance: Self-set vs. organisation-set

Griffin and colleagues (2007) proposed a taxonomy that comprises three main types of positive work behaviours: proficiency, adaptivity and proactivity. Firstly, proficiency is characterised by the fulfilment of prescribed role requirements, such as a call centre agent who effectively answers incoming calls following formally prescribed guidelines. Such proficient behaviour, which has received the most attention in the literature (Griffin, et al., 2007), was especially important in the
past when the working environment was rather predictable and job tasks were clearly defined (Bridges, 1995; Ilgen & Pulakos, 1999). However, with increasing globalisation, mergers and dynamic changes in businesses, which make work places more unpredictable and uncertain, it has become increasingly important for the viability of organisations to maintain employees who engage not only in proficient, but also in adaptive and proactive behaviours (Campbell, 2000; Frese & Fay, 2001; Frohman, 1997; Parker, 2000). Adaptivity refers to employees’ responding to changes at work and proactivity relates to employees actively changing their work. For instance, as well as answering calls (proficiency), a call centre agent can respond to changing customer requirements in an efficient manner (adaptivity) and suggest improved ways of dealing with customer queries (proactivity).

Whilst there have been general arguments that positive affective experience should promote positive ways of behaving (Forgas & George, 2001; Staw, et al., 1994; Tsai, et al., 2007), these arguments lack theoretical precision in part because distinctions have not been made between different types of behaviours. By viewing behaviours as goal-directed action (Hacker, 1985), a distinction can be made as to the extent to which employees enact on behaviours that are based on self-set goals, or rather represent the implementation of pre-set goals by the organisation. Proactivity is per definition self-initiated, that is generated by employees’ themselves (Frese & Fay, 2001; Parker, et al., 2010).

Proficiency, in contrast, is characterised by carrying out organisation-prescribed procedures effectively. Whilst employees might still engage in self-setting goals regarding precisely how to execute these procedures, proficient behaviours focus on implementing set procedures rather than initiating changes in them (Griffin, et al., 2007). Adaptivity is about adapting to organisational changes that are happening. To the extent that organisational change processes produce ambiguity in procedures, adaptivity more so than proficiency requires individuals to self-determine the avenues of implementation within the overall organisation-prescribed procedures. Nevertheless adaptivity is less self-set than proactivity, with the latter being defined in terms of individuals initiating change and taking charge of situations in a self-initiated way.

Thus, proficiency, adaptivity and proactivity are likely spread across a continuum of self-set vs. organisational set-goals, with proactivity constituting the
mainly self-set, more internalised end of the goal continuum, and proficiency the mainly organisation-set, externalised end (De Charms, 1968; Ryan & Deci, 2000; see Figure 4.2).

**Figure 4.2**

*Positive Work Behaviours (based on Griffin et al., 2007)*

Next, I turn to elaborating how the relationship between work-related moods and positive work behaviours should differ depending on whether these work behaviours represent mainly self or rather mainly organisation-set goals. I focus on comparing proficiency with proactivity, as these two ways of behaving at work form the ends of the conceptual continuum of organisation-set versus self-set goals.

### 4.2.2 The roles of activation and valence in moods for self-set and organisation-set goals

Positive affective experience has been associated with a wide array of positive ways of behaving at work, such as offering colleagues help with difficult tasks (George, 1991), fulfilling job-related responsibilities well (Tsai, et al., 2007) and defending the reputation of the organisation (Dalal, et al., 2009). Conceptually, these associations should prevail because positive affect facilitates individuals’ focus on positive outcomes of their behaviours (Mayer et al., 1992; Mayer, Gayle, Meehan, & Haarman, 1990). Positive affect thus generates higher expectancy judgments for outcomes (Wegener & Petty, 1996), than do negative affective states (e.g., Johnson & Tversky, 1983).

Although it might be expected that positive feelings leads to unrealistic expectancy judgments that, in turn, might hamper performance, a large body of
literature indicates this is not the case (e.g., Estrada, Isen, & Young, 1997a; Isen & Daubman, 1984; Isen, Nygren, & Ashby, 1988). Instead, evidence suggests that positive feelings have mainly positive effects on performance by fostering an optimistic outlook (Kluemper, Little, & Degroot, 2009; Luthans, Avolio, Avey, & Norman, 2007; Schwarz & Bless, 1991) and strengthening effort and persistence in behaviours (George & Brief, 1996). Consistent with this theory, positive feelings at work have been linked with higher levels of proficient behaviours. For instance, in a study of insurance sales agents, Tsai and colleagues (2007) showed that high-activated positive affect at work led to higher levels of task performance by promoting self-efficacy beliefs and task persistence. In further support of a link between positive affect and overall performance, Totterdell (1999, 2000) showed that professional cricketers’ feelings of energy, enthusiasm, and focus predicted higher performances in competitive games.

Positive moods should be particularly relevant for proficient behaviours when social helping is required (Isen, 1984). Thus, organisation citizenship behaviours (e.g., Carlson, Charlin, & Miller, 1988) may be facilitated by the experience of positive affect (Belschak & Den Hartog, 2009; Dalal, et al., 2009; George, 1991; George & Brief, 1992; Tsai, et al., 2007). For instance, job satisfaction (which represents the low-activated positive affective quadrant) appears to be linked with higher levels of behaviours such as organisational citizenship and social helping behaviours at work (Bateman & Organ, 1983; Iaffaldano & Muchinsky, 1985; Smith, Organ, & Near, 1983). These behaviours might be carried out proactively to some extent, although they have been conceptualised and empirically measured in past research as overall reactive and proficient rather than self-initiated and proactive (Griffin et al., 2007).

Despite the above research, for a number of reasons, I propose that the way individuals feel should be more relevant in shaping employees’ proactivity than their proficiency at work. Firstly, proactivity is characterised by high levels of self-initiative. In other words, individuals seek out and initiate proactive behaviours under their own discretion. Positive affect can influence individuals’ tendency to choose generative vs. defensive behaviours (Seo, Feldman Barrett, & Bartunek, 2004). In this vein, individuals who experience positive affect are likely to orient themselves towards “exploring and achieving anticipated positive outcomes, by taking risks and
being willing to incur loss in the process” (p.425). In contrast, individuals who do not experience positive affect likely orient themselves towards avoiding negative outcomes (Seo et al., 2004). Positive affect, in turn, has been shown to promote individuals’ setting of higher and more challenging goals (Ilies & Judge, 2005), to foster approach behaviours (Cacioppo, Gardner, & Berntson, 1999; Watson, et al., 1999) and to promote confidence to achieve positive outcomes (Baron, 1990; Kramer, Newton, & Pommerenke, 1993). This mechanism should be particularly relevant for proactive behaviours, which are challenging because these behaviours are not always appreciated by the organisation (Frese & Fay, 2001) and yield possible image costs for the individual (De Stobbeleir, et al., 2010).

Secondly, because proactive behaviours are change-oriented and self-initiated, they likely require more effortful and complex self-regulation processes than do routine proficient work behaviours (Muraven & Baumeister, 2000). Thus, research indicates that affect may have a greater role in influencing judgments that involve heuristic and systematic, as opposed to simple, requirements for cognitive processing (Forgas, 1995). Positive affect in particular has been found to facilitate decision-making processes and cognitive flexibility (Fredrickson, 2001; Isen, 2000a). Positive affect has also been shown to promote persistency with goals (Erez & Isen, 2002; Seo et al., 2004) and to yield motivational potential for behaviours (George & Brief, 1996). Thus, positive affect also facilitates an upward spiral of self-regulatory advantage that should help individuals sustain their self-initiated action against resistance from using their self-initiative in changing the work environment (Martin, Ward, Achee, & Wyer, 1993).

Further, positive affect improves the efficiency by which employees process information, especially mood-congruent information (Matthews, 1992) and should also enhance individuals’ capacity to respond effectively to dynamic situations, and to reach effective decisions under situational ambiguity (Baron, 2008). Individuals who experience high levels of positive affect thus likely find it easier to decide on strategies to implement proactive goals.

In support of these arguments for the important role of affect in shaping proactivity, evidence suggests that high-activated positive affect is associated with higher levels of self-reported personal initiative (Den Hartog & Belschak, 2007) and with taking-charge behaviours on the same and the following working day (Fritz &
Sonnentag, 2009) (for a more complete overview, see Table 3.1 in Chapter 3). To summarise, because proactivity consists of self-set goals by the employees that are aimed at changing the environment or oneself (Frese & Fay, 2001; Parker et al., 2010), and thus likely require greater effort and cognitive resources (Muraven & Baumeister, 2000), moods should play a larger role for proactive rather than for proficient behaviours.

Moreover, the activation element within positive moods should be particularly beneficial for proactivity as it provides feelings of energy (Shraga & Shirom, 2009) and thus facilitate engagement and persistence in activities (Fredrickson, 1998; Tsai et al., 2007). In contrast, low-activated positive moods should prompt individuals to savour current circumstances (Izard, 1977) and have been linked with inactivity (Frijda, 1986). I thus expect the degree of activation in positive valence to additionally matter in the relationship of moods and proactivity. Specifically, I expect the following relationships:

**H1:** High-activated positive moods will be positively associated with proactive work behaviours.

**H2:** High-activated positive moods will be more strongly positively associated with proactive than with proficient work behaviours.

The role of negative moods for proactivity and proficiency at work is more ambivalent. Overall, because affect shapes behaviours with a similar evaluative tone (Forgas & George, 2001; Staw et al., 1994; Tsai et al., 2007), negative affective experience should be associated with lower levels of positive work behaviours (Kaplan et al., 2009). However, negative affect could have an influence on proactive behaviours as it likely indicates a gap between a present and desired situation (Carver & Scheier, 1982), thus potentially stimulating change-oriented, proactive behaviours. In contrast, negative affect can also signal a lack of progress towards a goal and thus inhibit effective goal pursuit (Carver & Scheier, 1990a; Easterbrook, 1959). It also likely depletes self-regulatory resources (Hobfoll, 1989) that are needed to engage in discretionary behaviours (Muraven & Baumeister, 2000).

Not surprisingly, previous studies on the role of high-activated negative affect for proactivity have found non-consistent (Den Hartog & Belschak, 2007) or non-significant (Fritz & Sonnentag, 2009) relations. Thus, I do not assume overall associations between negative moods and proactive behaviours. However, in
Chapters 6 and 7 I will discuss how negative *emotions* might influence proactivity indirectly, by providing a motivating or feedback mechanism to cognitions that subsequently influence the enactment of proactive behaviours.

4.3 *Reason to, Can do and Energised to Motivational Pathways to Proactivity*

Proactive behaviours at work should be influenced by three types of proximal motivational states: Firstly, *can do* motivational states that comprise perceptions of capability to engage in proactive actions; secondly, *reason to* motivational states that constitute an individuals’ perception that it is worthwhile to engage in proactive actions; thirdly, *energised to* motivational states, comprising affective experience that fuels individuals into engaging in proactivity (Parker et al., 2010). The model by Parker and colleagues (2010) suggests that each of the pathways influences proactivity uniquely. However, to date there is no empirical evidence for the overall model since pathways tend to be examined one at a time. In order to show that affective experience is relevant for proactivity over and above more established, cognitive-motivational factors, I thus empirically test the *can do, reason to, energised to* model. I use constructs for the *can do* and *reason to* pathways that have been previously established as important predictors of proactivity (for overviews, see Tables 2.1 and 2.2 in Chapter 2). I elaborate these next.

4.3.1 *Role breadth self-efficacy beliefs (can do)*

Role breadth self-efficacy is one’s perceived capability of carrying out a range of proactive, interpersonal and integrative activities beyond the prescribed technical core (Parker, 1998). Theoretically, role breadth self-efficacy beliefs should promote proactivity in employees for several reasons.

Firstly, self-efficacy leads individuals to set more challenging goals for themselves (Bandura & Cervone, 1986; Wood, Bandura, & Bailey, 1990) and to persist in the face of challenges (Peake & Cervone, 1989; Schunk, 1984). Thus, I expect that those employees with high self-efficacy will be more likely to set proactive goals, and more likely to plan for them. Secondly, confident individuals cope more effectively with change (Hill, Smith, & Mann, 1987) and have more mental resources available for reflection on their actions (Bandura, Cioffi, Taylor, & Brouillard, 1988). Because proactivity is likely to require persistence in bringing
about changes (Frese & Fay, 2001), self-efficacious employees should be more likely to engage and persist in their proactive actions.

In support of these arguments, role breadth self-efficacy has been found to be an important antecedent of individuals’ engaging in proactivity (Ohly & Fritz, 2007). Role breadth self-efficacy has been linked to higher levels of proactive problem solving (Parker et al., 2006), the suggestion of improvements (Axtell et al., 2000) as well as different foci of proactive behaviour (Griffin et al., 2007; Ohly & Fritz, 2007). Thus, I expect a positive association of role breadth self-efficacy beliefs and employee proactivity.

4.3.2 Affective organisational commitment (reason to)

Proactivity is characterised by employees’ self-initiated setting of goals. As such, employees should have a reason to engage in such actions at work. Affective commitment towards the organisation is one such factor (for an overview, see Table 2.2 in Chapter 2). Seminal work by Meyer and Allen (1991) distinguished between three forms of commitment: Normative, continuance and affective. Whilst the former two are about employees’ perceptions that they are either obligated to remain in the organisation (normative commitment) or that their costs of leaving the organisation would be too high (continuance commitment), affective organisational commitment represents employees’ attachment to the organisation. As such, committed employees should be likely to engage in discretionary actions that are meant to benefit the organisation (Meyer, Becker, & Vandenberghe, 2004; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002).

Thus, affective organisational commitment may set the frame for employees’ goals to engage in proactive behaviours at work. In support for this argument, previous research in proactivity found that affective organisational commitment was associated with higher levels of proactive service performance (Rank et al., 2007) or task-related proactivity aimed at improving the effectiveness of the organisation (Griffin et al., 2007). To summarise, I expect affective organisational commitment to be positively associated with proactivity at work.

4.3.3 Energised to pathway over and above can do and reason to

For the reasons outlined in the previous section (Section 4.2; Hypothesis 1), I expect high-activated positive moods to be positively associated with proactivity at
work. Previous empirical findings suggest that this association of affective experience and behaviour holds even when controlling for the influence of cognitive precursors to behaviour. For instance, in a simulated stock investment task, high-activated positive affect and self-efficacy beliefs independently of each other facilitated superior performance outcomes (Seo & Ilies, 2009). In the context of proactivity at work, Den Hartog and Belschak (2007) found that high-activated positive affect was positively associated with personal initiative over and above a positive influence of affective organisational commitment. No studies, however, have examined all three pathways at one time when predicting proactivity.

To summarise, I expect that high-activated positive moods are a predictor of proactive behaviour when controlling for main effects of role breadth self-efficacy (an indicator of the can do pathway) and affective organisational commitment (an indicator of the reason to pathway to proactivity):

\[ H3: \text{High-activated positive moods will be uniquely positively associated with proactive behaviours over and above role breadth self-efficacy and affective organisational commitment.} \]

4.4 Methods

4.4.1 Organisational context

I conducted a study with employees working in the retail section of a UK-based, multinational organisation in a call centre environment. The participating organisation was a leading energy supplier in the UK, supplying electricity, gas and Home Energy Services to an estimated eight million electricity and gas customer accounts, covering domestic and industrial clients at the time of investigation.\(^6\)

The study was embedded in a project that the Institute of Work Psychology was asked to conduct, which emphasised the question of how to develop proactive behaviours amongst baseline call centre employees. The overall rationale for the project, as communicated by the management of the organisation in meetings with myself and other collaborators on the project, was related to strategic changes in the organisation. Specifically, management perceived the overall end product of energy supply as foremost regulated outside the discretion of the organisation. Thus, in order to set the organisation apart from competitors, managers sought to improve customer

\(^6\) These data are based on public information provided by the organisation on their corporate website.
service in connection with selling energy. This strategy emphasised an active role of baseline employees in showing self-initiative to help customers manage their bills in light of increasing energy costs and to make customers aware of the impacts of energy use on the environment. This strategic aim of the organisation was, for instance, already highlighted as part of their mission statement. Thus, the mission statement emphasised the importance for the company to initiate change and improve processes:

"We are never satisfied with the status quo. We look to the future and the opportunities it brings. We promote constructive change and we readily accept such change when it comes. Innovation is the key to improvement and we will constantly seek ways to improve what we do. We value creativity and seek ways to build solutions ahead of crisis." [corporate website]

The main aim of the study conducted by the Institute of Work Psychology was thus to provide insights to the organisation into how to encourage baseline employees to proactively work with customers and colleagues in improving and maintaining service quality.

The goal of the organisation to promote proactivity in baseline call centre employees was situated against the backdrop of working conditions in call centre environments. At their worst, call centres have been described as 'electronic sweatshops' in so far as the work is highly monotonous and stressful for front-line staff (Holman & Wood, 2002; Metcalf & Fernie, 1998). However, within the general context of a call centre environment, organisations have found diverse ways of organising work and managing human resources. In the following paragraphs, I briefly outline and contrast several stereotypical elements of two management models that are at opposite ends of the spectrum of human resource management in call centres, including how the here investigated organisation corresponded with elements of either model:

At one end of the spectrum, some call centres operate within a mass service model. Under this approach, employees tend to have low levels of job control, minimal variety, and low skill utilisation in their jobs. Particularly employees in lower hierarchies encounter, as a tendency, no or only little career structure and promotion prospects. Frontline staff typically has encounters with customers rather
than seeks to build relationships with them (Holman, 2005). At the opposite end of the spectrum is the high commitment service model. In such a model front line staff seeks to provide a high level of customer service and aims to develop relationships with their customers. High customer service is structurally facilitated by providing employees with high levels of discretion in their jobs that allows them to deal with different customer needs individually. Training and development of employees, as well as competitive salaries, too, form part of the high commitment service model (Holman, 2005; Sprigg, Smith, & Jackson, 2003).

Within these two management models, my analysis of the job designs, payment systems and relationships between hierarchical levels suggested that the organisation was strategically closer to the high commitment service end of the continuum. Specifically, I and two other investigators in the project followed 15 baseline employees and their direct supervisors in their jobs and listened to their customer calls. We further analysed HR-related internal documents, such as job descriptions and pay schemes, and interviewed 39 employees from across four hierarchical levels. In correspondence to the high commitment service approach, we found that salaries were comparatively high, and employees at all hierarchical levels were given the possibility to internally apply for positions across sites in different countries where the organisation was present. Interviews with employees also informed us that management offered incentives that were aimed at fostering emotional involvement of employees with the organisation, such as theme days, where employees were asked to dress up in the corporate colour, and were invited to bring their families.

Employees' discretion in the job was, to some extent, constrained as they were encouraged to follow process maps that outlined how to deal with customer queries. However, in several site visits, we identified issue boards that were located at each site, where employees could post ideas for improvements of these process maps, or any other processes they identified as suboptimal. Senior management also aimed to move away from a highly restrictive monitoring culture, typical of strategies based on the mass service model (Holman, 2005) towards providing employees higher extents of discretion in their jobs: Thus, employees could independently chose when to be available for taking new customer calls by pressing a switch that connected or disconnected their phone from any incoming calls. In
contrast, in other regards we learned that monitoring was high. For instance, team managers were required to take a lunch break jointly with their team, so that at no time baseline employees were working unsupervised. Similarly, monetary discretion was perceived by employees as rather too low, to the extent that in cases of customer complaints up to three hierarchy levels of employees needed to get involved in order to authorise the transaction.

Overall, the organisation provided a suitable work setting to investigate the role of affective experience for proactive and proficient work behaviours to the extent that it was possible, however not per se obvious, for employees to engage in proactive behaviours. Whilst top management explicitly welcomed proactive efforts and organisational structures, such as issue boards and team meetings, additionally facilitated such behaviours to a certain extent, the nature of the work environment with its high levels of protocols and monitoring facilities did not naturally encourage proactivity. As such, I expected a clear distinction as to what constituted proactive, as compared to proficient, work behaviours of call centre employees to the extent that self-initiated efforts aimed at improving customer service should be different to the core task of answering customer calls following organisation-set process maps. I will turn to outlining the overall procedure of data collection, with an emphasis on the quantitative study design that forms the basis for this chapter next.

4.4.2 Procedure

The quantitative study used to test research questions pertinent to this chapter forms part of the larger project with the above-described energy supplier. Ethical approval for the study was obtained from the University of Sheffield. Prior to the beginning of the quantitative study, myself and other collaborators by the Institute of Work Psychology conducted job analyses and 39 interviews with employees across four hierarchical levels, including baseline customer service representatives and three direct managerial levels (the procedure I followed in conducting the interviews will be separately outlined in Chapter 7).

This approach had a two-fold aim with regards to the quantitative study: Firstly, it enabled me to familiarise myself in depth with the specific work of customer service representatives in the participating organisation, in advance of designing the survey. This was particularly relevant in order to ensure face validity of measures for respondents (Hinkin, 2005). It also aimed to promote the willingness
of employees to voluntarily participate in our study to the extent that our presence in the company increased awareness and visibility of our study amongst employees.

The main data collection was conducted with baseline employees (customer service representatives; N = 694) who were invited to take part in the questionnaire that was introduced to them as helping identify key issues to improve the quality of their working life. I additionally conducted surveys for the managerial positions above the customer service representative, mainly with a focus to collect direct supervisor-ratings of baseline employees' work performance.7 All participants completed online questionnaires during working hours and were entered into a prize draw if they completed it. It was emphasised to employees that participation was voluntary and that confidentiality of responses was assured. Names of respondents were initially inquired in order to be able to link self-report data with supervisor ratings. All identifying information was, however, deleted in the final dataset, prior to analysing the data.

For this chapter I drew exclusively on self-report data from customer service representatives. Only questionnaires in which all measures of interest were fully completed were included in the study. The response rate was 32% (N = 227). According to our main contact person in the organisation, this rate was rather large, as compared to the ones of regularly conducted internal surveys by the organisation. Respondents ranged from 18 to 61 years (M = 33.62, SD = 11.22), with organisational tenure ranging from less than one year to 34 years (M = 4.41, SD = 5.23). 66% of the respondents were female and 78% were full-time rather than part-time employed. These figures were representative of those in the organisation as a whole at the time of the investigation.

4.4.3 Measures

Control variables. In line with previous research on affect and proactivity at work (e.g., Den Hartog & Belschak, 2007; Fritz & Sonnentag, 2009), I controlled for gender and age in order to account for possible confounding effects. I further chose to control for positive and negative affectivity in order to avoid systematic trait

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7 Team Managers, who were direct supervisors to customer service representatives, were invited to indicate self-report measures as well as rate their subordinates (N=32). Data from the two respectively higher hierarchical levels of Section Managers (N=12) and Customer Service Managers (N=4) was not analysed in the context of this thesis, due to overall low sample sizes.
influences in the response to the measures investigated (see e.g., Podsakoff et al., 2003). Gender and age were each measured with one item (gender: 0 = female, 1 = male; age: in years). Positive and negative affectivity were assessed by using the respective five highest loading items from the PANAS scale (Watson et al., 1988). Respondents were asked to what extent they in general felt enthusiastic, interested, determined, excited, and inspired (positive affectivity; α = .92) as well as scared, afraid, upset, distressed, and nervous (negative affectivity; α = .89). Anchors ranged from 1 = very slightly or not at all to 5 = extremely.

**Work Performance.** I measured proactive work behaviours by using the validated measure of task proactivity (Griffin et al., 2007). The scale comprised 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? (α = .89; 1 = not at all to 5 = a great deal). I measured task proficiency with a scale from the same study (Griffin et al., 2007), asking respondents “Thinking about how you have carried out your core job over the past month, to what extent have you” ... carried out the core parts of your job well?, completed your core tasks well using the standard procedures?, and ensured your tasks were completed properly? (α = .84; 1 = not at all to 5 = a great deal). I asked employees to report on their work behaviours over the past month, which is the same time frame that was used for inquiring about work-related moods.

**Cognitive-motivational factors.** I measured role breadth self-efficacy by the four highest loading items from Parker’s (1998) scale. Respondents were asked, to which extent they felt comfortable ... designing new procedures for your work area?, ... analysing a long-term problem to find a solution?, ... representing your work area in meetings with senior management?, ... making suggestions to management about ways to improve the working of your section? (α = 0.88; 1 = not at all confident to 5 = very confident). I measured affective organisational commitment with the four highest loading items from Meyer et al.’s (1993) measure. Respondents were asked to indicate to which extent they agreed with the following statements: ... I do not feel a strong sense of 'belonging' to [name of the organisation] , ... I do not feel 'emotionally' attached to [name of the organisation], ...I do not feel like 'part of the family' at [name of the organisation] and ... [name of
I measured moods at work on a 7-point Likert scale with four items per quadrant based on an extended measure of Warr (1990). High-activated positive moods were measured by the following items: enthusiastic, excited, inspired, and joyful ($\alpha = .89$). Low-activated positive moods were measured with: at ease, calm, laid-back, relaxed ($\alpha = .82$). High-activated negative moods were measured with the following items: anxious, nervous, tense, and worried ($\alpha = .80$), and low-activated negative moods with dejected, depressed, despondent, and hopeless ($\alpha = .84$). I asked respondents to indicate their feelings when at work over the past month ($1 = never$ to $7 = always$). I carried out a confirmatory factor analysis using MPlus, version 6 (Muthen & Muthen, 1998-2010), to test whether the hypothesised four-factor structure of four distinct affective quadrants most aptly represented the data.

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, I additionally used two incremental fit indices: the standardised 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. I further report the comparative fit index (CFI), for which Schermelleh-Engel and colleagues (2003) recommend values of .95 or greater.

I started with Baseline Model 1, which assumed that all types of affect loaded onto one overall factor. This would be the case if work-related moods reflect a universal feeling, non-separated by pleasant versus unpleasant, or high-activated versus low-activated feelings at the workplace. Theoretically, it could be possible that individuals encounter differences in their work-related moods along the dimension of activation only. I accounted for this possibility in Model 2: This would signify that individuals differentiate between high-activated feelings regardless of valence on the one hand (e.g., feelings of anxiety and enthusiasm, and low-activated feelings regardless of valence, on the other (e.g., feelings of depression and relaxation). More commonly, organisational researchers have distinguished the
dimension of valence, regardless of activation in past organisational behaviour research - although, for instance, the widely used PANAS scale by Watson, Clark, & Tellegen (1988) has been suggested to cover more of the high-activated parts of the affective circumplex only (Tellegen et al., 1999). I thus measured Model 3, which separated between positive feelings, regardless of activation (e.g., feelings of enthusiasm and relaxation) and negative feelings, regardless of activation (e.g., feelings of anxiety and depression).

Finally, I introduced the hypothesised four factor model, in which the activation and valence dimension of the affective circumplex yield four unique categories of affect: High-activated positive moods (e.g., feelings of enthusiasm), low-activated positive moods (e.g., feelings of relaxation), low-activated negative moods (e.g., feelings of depression), and high-activated negative moods (e.g., feelings of anxiety).

As expected, the hypothesised four-factor model (Model 4) had a significantly better fit than models 1 - 3 (see Table 4.1). Further, the fit indices revealed an overall good fit: RMSEA was .07, SRMR was .07, and the ratio of chi-square divided by degrees of freedom was 2.19. The value for CFI was .94, which is slightly below the recommended .95, however values between .90 through .94 have been suggested to be of acceptable fit (Bentler, 1990; Hu & Bentler, 1999). In combination with the excellent values for all other fit indices, I was thus assured to proceed with testing Hypotheses 1 and 2. The results are displayed in the next section.
Table 4.1

Comparison of Alternative Factor Structures for Work-related Moods

<table>
<thead>
<tr>
<th>Model</th>
<th>Descriptives</th>
<th>$\chi^2$/df</th>
<th>Ratio $\chi^2/df$</th>
<th>$\Delta \chi^2$, $\Delta$df† (model of comparison)</th>
<th>CFI</th>
<th>RMSEA</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>One factor baseline model: Total Affect (HAPA, LAPA, 1002.14, 104 HANA, and LANA)</td>
<td>9.63</td>
<td>---</td>
<td>.521 .195 .145</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 2</td>
<td>Two factors: 1. High-Activated Affect (HAPA and HANA) and 2. Low-Activated Affect (LAPA and LANA)</td>
<td>895.07, 103</td>
<td>8.69</td>
<td>107.07, 1* .578 .184 .188</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 3</td>
<td>Two factors: 1. Positive Affect (HAPA and LAPA) and 2. Negative Affect (HANA and LANA)</td>
<td>630.87, 103</td>
<td>6.12</td>
<td>264.20, 0* .719 .150 .120</td>
<td></td>
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<td></td>
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<tr>
<td>Model 4</td>
<td>Four factors: Each of the four quadrants as a factor - 1. HAPA, 2. LAPA, 3. HANA, 4. LANA</td>
<td>214.95, 98</td>
<td>2.19</td>
<td>415.92, 5* .938 .073 .066</td>
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</tbody>
</table>

Note. N=227; * model improvement significant at $p < 0.05$ level; †change assessed vs. previously best model. HAPA: High-activated positive affect; HANA: High-activated negative affect; LAPA: Low-activated positive affect; LANA: Low-activated negative affect.
4.5 Results

4.5.1 Moods and work performance

Zero-order correlations (see Table 4.2) supported Hypotheses 1 and 2 in that they showed a significant association of high-activated positive moods with proactivity \( r=.39, p<.01 \) that appeared larger than the association of high-activated positive moods with proficiency \( r=.15, p<.05 \). However, significant zero-order correlations also prevailed between low-activated positive moods and proactivity \( r=.16, p<.05 \), high-activated negative moods and proficiency \( r=-.13, p<.05 \) and low-activated negative moods and proficiency \( r=-.14, p<.05 \).

In order to test for Hypotheses 1 and 2 more rigorously and in order to investigate unique relationships of each of the four affective quadrants, I compared alternative models of relationships between moods and positive work behaviours using MPlus, version 6, software (Muthen & Muthen, 1998-2010). All models were controlled for trait affectivity (positive and negative), age and gender of respondents in order to account for possible systematic influences within these variables.
Table 4.2
Means, Standard Deviations, and Correlations

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
<th>9.</th>
<th>10.</th>
<th>11.</th>
<th>12.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gender (0 = female, 1 = male)</td>
<td>0.34</td>
<td>0.47</td>
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<tr>
<td>2. Age</td>
<td>33.63</td>
<td>11.22</td>
<td>-.12</td>
<td></td>
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<tr>
<td>3. Positive Affectivity</td>
<td>3.44</td>
<td>0.94</td>
<td>-.14*</td>
<td>.07</td>
<td></td>
<td></td>
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<tr>
<td>4. Negative Affectivity</td>
<td>1.62</td>
<td>0.72</td>
<td>-.18*</td>
<td>.06</td>
<td>.02</td>
<td></td>
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</tr>
<tr>
<td>5. Task Proactivity</td>
<td>2.98</td>
<td>1.08</td>
<td>-.05</td>
<td>-.16*</td>
<td>.33**</td>
<td>.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Task Proficiency</td>
<td>4.42</td>
<td>0.55</td>
<td>-.12</td>
<td>-.05</td>
<td>.26**</td>
<td>-.14*</td>
<td>.12*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. High-activated Positive Moods</td>
<td>3.43</td>
<td>1.33</td>
<td>-.18**</td>
<td>-.05</td>
<td>.63**</td>
<td>.01</td>
<td>.39**</td>
<td>.14*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Low-activated Positive Moods</td>
<td>3.88</td>
<td>1.19</td>
<td></td>
<td>.08</td>
<td>.00</td>
<td>.30**</td>
<td>-.28**</td>
<td>.16*</td>
<td>.01</td>
<td>.43**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. High-activated Negative Moods</td>
<td>2.33</td>
<td>1.00</td>
<td></td>
<td>.00</td>
<td>.04</td>
<td>-.09</td>
<td>.55**</td>
<td>.02</td>
<td>-.13*</td>
<td>-.08</td>
<td>-.41**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Low-activated Negative Moods</td>
<td>2.24</td>
<td>1.14</td>
<td></td>
<td>.11</td>
<td>-.03</td>
<td>-.37**</td>
<td>.33**</td>
<td>-.06</td>
<td>-.14*</td>
<td>-.42**</td>
<td>-.31**</td>
<td>.56**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Role breadth self-efficacy beliefs</td>
<td>3.39</td>
<td>0.99</td>
<td></td>
<td>.20**</td>
<td>-.10</td>
<td>.27**</td>
<td>-.17**</td>
<td>.41**</td>
<td>.20**</td>
<td>.15*</td>
<td>.21**</td>
<td>-.10</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>12. Affective organisational Commitment</td>
<td>3.05</td>
<td>1.00</td>
<td>-.13*</td>
<td></td>
<td>.05</td>
<td>.50**</td>
<td>.01</td>
<td>.30**</td>
<td>.11</td>
<td>.53**</td>
<td>.21**</td>
<td>-.12</td>
<td>-.48**</td>
<td>.04</td>
</tr>
</tbody>
</table>

Note. Internal consistency values (Cronbach’s Alphas) appear across the diagonal in parentheses. *p < .05, **p < .01. N=227.
Firstly, I modelled a freely estimated baseline model (model 1) in which each affective quadrant was modelled as a predictor of proficiency and of proactivity. Affect quadrants were allowed to correlate, as were the two work behaviours. In support of Hypothesis 1, high-activated positive moods were positively associated with proactivity (β=.52, p<.05). No other type of mood was uniquely associated with proactivity. Further, no type of mood was uniquely associated with proficiency. Because proactivity was significantly associated with high-activated positive moods, yet proficiency was not associated with any of the affective quadrants, Hypothesis 2 was indirectly supported in that work-related moods were significantly more strongly related to proactivity than to proficiency.

In order to test for Hypothesis 2 in a more direct manner, I introduced additional constraints to the baseline model that set the relationship between high-activated positive moods with proactivity and with proficiency to be equal (model 2). If high-activated positive was equally important for both types of positive work behaviours, the resulting model fit of model 2 should not be significantly different from the model fit of the freely estimated model 1. As proposed in Hypothesis 2, model fit of Model 2 was significantly poorer than model fit of the baseline model (Δχ², Δdf: 4.89, 1*). In order to further contrast the importance of high-activated positive moods for proactivity versus proficiency, as compared to other affective quadrants, I further compared the baseline model to competing models in which I constrained low-activated positive moods (model 3), low-activated negative moods (model 4), and high-activated negative moods (model 5) to be equally related to proficient and proactive behaviours.

As expected, none of these three models (models 3-5) differed significantly from the freely estimated baseline model (see Table 4.3). In summary, Hypotheses 1 and 2 were supported. Results indicated that high-activated positive affect were positively associated with proactivity (Hypothesis 1) and it was more strongly related to proactivity than with proficiency (Hypothesis 2). I proceed to testing Hypothesis 3 next.
Table 4.3

*Goodness-of-Fit Measures for Competing Structural Models*

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>$\chi^2$, df</th>
<th>Ratio $\chi^2$/df</th>
<th>$\Delta\chi^2$, $\Delta$df</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>CFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>Baseline: Freely estimated model</td>
<td>0.00, 0*</td>
<td>.000</td>
<td>---</td>
<td>.000</td>
<td>.000</td>
<td>1.00</td>
</tr>
<tr>
<td>Model 2</td>
<td>Constraining paths between high-activated positive moods and all behaviours to be equal</td>
<td>4.89, 1</td>
<td>4.89</td>
<td>4.89, 1*</td>
<td>.131</td>
<td>.010</td>
<td>0.992</td>
</tr>
<tr>
<td>Model 3</td>
<td>Constraining paths between low-activated positive moods and all behaviours to be equal</td>
<td>0.00, 1</td>
<td>.000</td>
<td>0.00, 1</td>
<td>.000</td>
<td>.000</td>
<td>1.00</td>
</tr>
<tr>
<td>Model 4</td>
<td>Constraining paths between low-activated negative moods and positive behaviours to be equal</td>
<td>1.53, 1</td>
<td>1.53</td>
<td>1.53, 1</td>
<td>.048</td>
<td>.006</td>
<td>0.999</td>
</tr>
<tr>
<td>Model 5</td>
<td>Constraining paths between high-activated negative moods and positive behaviours to be equal</td>
<td>0.186, 1</td>
<td>.186</td>
<td>0.19, 1</td>
<td>.000</td>
<td>.002</td>
<td>1.00</td>
</tr>
</tbody>
</table>

*Note. N = 227. * = model improvement significant at $p < .05$ level. †change assessed in relation to Model 1.*

---

*The baseline model was a fully identified model and thus had a perfect model fit. Whilst it could thus not be interpreted on its own, it served as a benchmark of comparison against models 2-5 in which I introduced several constraints to the baseline model.*
4.5.2 Can do, reason to, and energised to pathways to proactivity

In this part of the thesis I focus on the incremental validity of mood in predicting proactivity over and above established predictors. Table 4.2 shows the descriptive statistics and zero-order correlations for the major variables. Zero-order correlations of proactivity with can do, reason to and energised to factors were all significantly positive: role breadth self-efficacy (can do) – proactivity: \( r = .41, p < .01 \); affective organisational commitment (reason to) – proactivity: \( r = .30, p < .01 \); and high-activated positive affect (energised to) – proactivity: \( r = .39, p < .01 \).

In order to obtain information on unique relationships of the above measures, I however additionally conducted hierarchical regression analyses to test Hypothesis 3. The dependent variable was proactivity. In Step 1, I entered the control variables (positive and negative affectivity, gender and age). In Step 2, I entered the can do and reason to factors (role breadth self-efficacy and affective organisational commitment), and in Step 3 I entered the energised to factor (high-activated positive moods). The results of these analyses are shown in Table 4.4.

In support of Hypothesis 3, the change from Steps 2 to 3 was significant (\( \Delta \) Adjusted \( R^2 = 0.02** \)). Further, high-activated positive moods predicted higher levels of proactivity after controlling for indicators of can do and reason motivational pathways (affective organisational commitment and role breadth self-efficacy; \( \beta = .23, p < .01 \)). The associations of role breadth self-efficacy and of affective organisational commitment with proactivity did additionally remain significant, thus indicating independent main effects of can do (role breadth self-efficacy), reason to (affective organisational commitment) and energised to (high-activated positive moods) factors on proactivity at work.
Table 4.4

Hierarchical Regression of Can do, Reason to and Energised to Pathways to Proactivity

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td>Gender</td>
<td>-.05</td>
<td>.15</td>
</tr>
<tr>
<td>Age</td>
<td>-.02</td>
<td>.01</td>
</tr>
<tr>
<td>Positive Trait Affectivity</td>
<td>.39</td>
<td>.07</td>
</tr>
<tr>
<td>Negative Trait Affectivity</td>
<td>.08</td>
<td>.09</td>
</tr>
<tr>
<td>Affective organisational</td>
<td></td>
<td>.24</td>
</tr>
<tr>
<td>Commitment</td>
<td></td>
<td>.44</td>
</tr>
<tr>
<td>Role breadth self-efficacy</td>
<td></td>
<td>.44</td>
</tr>
<tr>
<td>High-activated positive</td>
<td></td>
<td>.18</td>
</tr>
<tr>
<td>Moods</td>
<td></td>
<td>.13***</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td></td>
<td>.16***</td>
</tr>
<tr>
<td>Δ Adjusted R-squared</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* The dependent variable is task proactivity. Test of Hypothesis 3 appear in bold. * p<.05, ** p<.01, *** p<.001.
4.6 Discussion

In this chapter, I investigated the role of work-related moods for proactive versus proficient work performance in a call centre environment. Several findings resulted. Firstly, a confirmatory factor analysis indicated that work-related mood was best represented in terms of four distinct quadrants as compared to a two factor solutions along only the valence or the activation dimensions. Thus, unique combinations between the activation and valence dimensions in the affective circumplex appear to be empirically meaningfully distinguished. This finding corresponds with past research which has found that each of the conceptual affective circumplex quadrants merits empirical attention (Burke et al., 1989). It thus adds to the ongoing debate on the underlying factor structure of affect (see Warr, 2007, for a comprehensive review) by suggesting that valence and activation are bipolar rather than uni-polar constructs.

Secondly, in this chapter I distinguished positive work behaviours based on the degree to which they represented mainly self-set or mainly organisation-set goals. Specifically, based on the taxonomy of Griffin and colleagues (2007), I conceptualised proactivity as a positive work behaviour that is mainly internalised (De Charms, 1968; Ryan & Deci, 2000) to the extent that employees set proactivity-related goals on their own (see Frese & Fay, 2001; Parker et al., 2010). Proficiency, in contrast, constitutes more externalised ways of behaving to the extent that employees mainly carry out organisation-set goals following standard procedures at work (Griffin et al., 2007).

Against this background, I found empirical support for my first two hypotheses of a positive association of high-activated positive moods with proactivity (Hypothesis 1), and of an overall greater association between high-activated positive moods with proactivity as compared to with proficiency (Hypothesis 2). Thirdly, I found empirical support for Hypothesis 3, which predicted a positive association of high-activated positive moods and proactivity over and above the roles of breadth self-efficacy and affective organisational commitment, which were indicative of can do and reason to motivational pathways to proactivity (Parker et al., 2010).
4.6.1 Implications

Several implications for research and practice can be identified. Firstly, the findings of the present study indicate that unique combinations of activation and valence in work-related moods are empirically meaningfully distinguishable, and relate to work behaviours in differential ways. Only a combination of high activation with positive valence in work-related moods predicted proactivity at work (Hypothesis 1). This finding supports previous research on affect and proactivity (e.g., Den Hartog & Belschak, 2007; Fritz & Sonntag, 2009), that implicitly focused on the high-activated quadrant of positive affective experience by drawing on the PANAS scale (Watson et al., 1988). It adds to this previous research by systematically showing that it is indeed only the high-activated quadrant of positive moods that is associated with proactivity at work.

Practically, these results indicate that high-activated positive moods, such as feeling energetic and enthused, rather than low-activated positive moods, such as feeling comforted and relaxed, are positively associated with employees' engagement in proactive behaviours. My findings also indicate that high-activated positive moods were positively associated with proactivity over and above dispositional affective influence (which was controlled for in all analyses). As such, organisations wishing to cultivate proactivity could aim to provide a work environment that instils activated types of positive moods in employees, in order to promote employees' engagement in proactive behaviours (I will return to this point in the overall discussion of practical implications from my thesis in Chapter 8).

Secondly, my findings indicated that high-activated positive moods were more importantly uniquely associated with proactivity rather than proficiency. Past research has mainly focused on either the role of affect for proficiency (see e.g., Staw et al., 1994; Totterdell, 2000) or on the role of affect for proactivity (see e.g., Den Hartog & Belschak, 2007; Fritz & Sonntag, 2009) without systematic comparisons of the role of affect for both types of behaviours. The present study indicates that a comprehensive measurement of different types of affect and different types of work performance provides more detailed insights into specific relationships underlying affect and behaviours.
Finally, this is, to my best knowledge, the first study of its kind to offer preliminary empirical support for the \textit{can do, reason to, energised to} proactive motivation model by Parker and colleagues (2010). In support of Hypothesis 3, findings indicated that work-related moods were associated with proactivity over and above indicators of \textit{can do} and of \textit{reason to} pathways. These findings build on and extend previous studies which showed that high-activated positive moods and affective organisational commitment were independently positively associated with proactivity (e.g., Den Hartog & Belschak, 2007). Practically, the present findings indicate that perceptions of self-efficacy, affective commitment and high-activated positive moods all played a significant role in motivating proactivity amongst call centre employees. These findings support Frese and colleagues' (1996) call for developing employees' capability to engage in proactive behaviours (e.g., Axtell & Parker, 2003) as compared to focusing on selecting dispositionally proactive employees into the organisation (Bateman & Crant, 1993).

\subsection*{4.6.2 Limitations and future research}

There are several limitations to the present study, and avenues for future research. Firstly, in this study I did not include investigations on the role of moods for adaptivity, the third generic type of positive work behaviours in Griffin et al.'s (2007) model. Conceptually, adaptivity should be in between proficiency and proactivity. First results from a multi-employer study by Warr and colleagues (Bindl, Warr, Parker, & Inceoglu, 2010) indicated that adaptivity was closer to proficiency in its relationship with different work-related moods, although the roles of jobs might influence what is perceived as adaptivity, and what is not. I also focused on the concept of task proactivity, which is a rather generic type of proactivity conceptualised by Griffin and colleagues (2007). Future research needs to extend the here found relationships between affect and proactivity to different types of proactivity. I will do so in Chapter 6 of this thesis, where I will investigate the role of moods for career-related types of proactivity, a type of proactivity that is mainly related to changing oneself, as opposed to changing the work environment, as is the case in task proactivity. Further, in Chapter 7 I will explore all types of proactivity call centre employees reported, in order to account for yet a
broader range of proactive behaviours at work in my investigations on the role of affect for employee proactivity.

Secondly, a limitation of the present study is that I focused on affective organisational commitment and role breadth self-efficacy beliefs as markers for reason to and can do paths, respectively. I chose these measures because they were the most relevant ones within these categories in previous proactivity research (for an overview, see Tables 2.1 and 2.2 in Chapter 2). Future research could investigate alternative indicators of reason to and can do motivational pathways, such as a prosocial motivation (Grant et al., 2009; reason to) and control aspirations (Fay & Frese, 2001; can do). Further, because affective organisational commitment does contain an affective element, the here presented test on the role of moods for proactivity is likely highly conservative, in that variance of the energised to path is taken up by a measure from the reason to path. If a less affective measure was chosen for the reason to path, an even greater role of high-activated positive moods for proactivity should be expected.

I also focused on examining the main effects of can do, reason to and energised to for proactivity. These three motivational pathways likely influence each other such that, for instance, affect influences can do and reason to states (Seo et al., 2004) and thereby additionally boosts individuals’ proactivity through these pathways. Positive affect influences can do pathways because it leads individuals to focus on positive outcomes of behaviours (e.g., such as via mood congruence recall effect), thereby generating higher expectancy judgments for these outcomes (Wegener & Petty, 1996) as well as higher self-efficacy (Tsai et al., 2007). Affect has also been shown to predict higher levels of affective organisational commitment, which constitutes a reason to pathway (Fisher, 2002). Future research could now investigate the dynamic relationships between can do, reason to and energised to motivations.

Thirdly, the present study is a cross-sectional study, and as such no causality can be assumed. I will strengthen the here presented findings on affect and proactivity by using a longitudinal design in Chapter 6 and by drawing on retrospect descriptions of proactive process by informants in Chapter 7. The study also consists of self-reported moods and behaviours only, lending itself to systematic biases. However, as recommended in such a situation, I controlled for trait affectivity in all analyses in order
to account for individuals' stable tendencies in reporting to measures (Podsakoff et al., 2003) as well as in order to account for the influence of more general affective disposition in shaping proactivity, which was not part of my hypothesis. Lastly, results indicate that common method bias should not be a problem here for the following reason: I showed that high-activated positive moods were positively associated with proactivity, albeit not with proficiency. If there was a bias in that, for instance, employees who rated their moods higher also rated their work performance higher due to response style (Podsakoff et al., 2003), then high-activated positive moods should also have predicted ratings of proficiency.

Finally, the context of this study is limited to a call centre environment. Call centres are characterised by high levels of monitoring and formalisation in work procedures (Holman, 2005). As such, there should be a clear cut separation of what constitutes proficiency, adaptivity and proactivity. Indeed, in interviews I conducted for Chapter 7 later in this thesis, I found that baseline employees very easily identified instances where they changed procedures, as opposed to following them. However, this separation might not easily translate into other work contexts. For instance, in jobs that are characterised by project character, e.g. an architect building a house, the job might be inherently dynamic and no routine task performance might be defined (Vough, 2008). Thus, the here found results are representative for a limited context of white-collar employees working for a large organisation that is characterised by high levels of standardisation and is set in a service environment. I will enhance this context by investigating into the role of affect for proactivity in medical students at a UK-based University to examine whether the findings from the call centre environment replicate in a higher education learning environment.

Despite the above outlined limitations, the current study adds to the extant literature of affect and proactivity in several ways: Firstly, by systematically investigating combinations of activation and valence in affective experience and their roles for proactivity. Secondly, findings from this study indicate that affective experience is more strongly related to proactive, than to proficient work behaviours. Thirdly, this study shows that affective experience is relevant for employees' proactivity at work over and above known cognitive-motivational influences.
Chapter 5: Proactivity as a Goal-regulation Process

5.1 Overview

Proactive behaviours, because they are self-initiated ways of behaving, comprise self-set, rather than organisation-set, goals. In this chapter, I extend the focus to investigate proactivity as a goal regulation process that includes its self-initiated conception, planning and reflection as well as the actual implementation. Thus, in Research Question 3 (see Figure 5.1, path RQ3) I introduce and validate a model with distinct self-regulatory elements that individuals iteratively focus on in order to be proactive. The model includes the setting of a proactive goal (envisioning), the preparation to engage in proactive behaviour (planning), the actual proactive behaviour itself as measured in previous empirical studies on proactivity (enacting) and the individuals' efforts to understand the effects of their proactive behaviour (reflecting).

Figure 5.1
Overview of Research Question 3
5.2 Introduction

On a few occasions if there’s something that’s not working or is causing a duplication of work then I’ve challenged it. One particular incident is that there was a process not so long back where we’d send out a letter to a customer, then also leave a message on their phone. So what we did - we evaluated that - so to leave a message first then, if there’s no response, send a letter rather than doing both at the same time. I know it’s only a little thing, but it saves a lot of time. [Call centre representative, energy provider]

Proactivity has been investigated in many contexts. Employees can be proactive in their socialisation into the organisation (Kammeyer-Mueller & Wanberg, 2003), actively seeking feedback on their performance (Ashford, 1986), building networks (Lambert, Eby, & Reeves, 2006), initiating role expansions (Parker et al., 1997), voicing work-related concerns (Van Dyne & LePine, 1998), scanning strategic issues (Parker & Collins, 2010) and taking charge to bring about change (Morrison & Phelps, 1999), to name just a few of the proactive concepts that have been considered (Bindl & Parker, 2010c).

Whilst previous research on proactivity has investigated mainly the implementation of proactivity, I extend the focus to investigate proactivity as a goal regulation process that includes its conception, planning and reflection as well as the actual implementation. To identify these elements, I drew on self-regulation theory (Frese & Zapf, 1994; Gollwitzer, 1990), and considered previous conceptual work that has adopted a process perspective of proactivity (Frese & Fay, 2001; Grant & Ashford, 2008).

I propose a self-regulatory model with four elements that individuals iteratively focus on in order to be proactive effectively. The proposed model includes the setting of a proactive goal (envisioning), the preparation to engage in proactive behaviour (planning), the actual proactive behaviour itself as measured in previous empirical studies on proactivity (enacting), and the individuals’ efforts to understand the effects of their proactive behaviour (reflecting). For instance, in the above quote a call centre representative, whose job it is to sell energy-related products, reported to me that he
recognised the need to be proactive "if there's something that's not working or causing a duplication of work", which implies a goal to make things work or prevent duplication (envisioning). Upon recognising this situation, he checked with his colleagues how to best improve the process: "so what we did - we evaluated that" (planning) and ultimately changed the process "to leave a message first then, if there's no response, send a letter rather than doing both at the same time" (enacting). The call centre representative finished by reflecting on the outcomes of his past proactive actions: "I know it's only a little thing, but it saves a lot of time."

The objective of this chapter is to show that a more comprehensive process view on proactivity is empirically useful and important. Firstly, I aim to show that the elements can be distinguished from each other. This step is important because if individuals cannot distinguish amongst the different elements of proactivity then it calls into question the empirical value of a more fine-grained model. Secondly, I investigate the importance of the elements of proactive behaviour in predicting supervisor perceptions of proactive performance. Supervisor judgments of performance are important in and of themselves, but they also likely play a vital role in the advancement of employees' careers (e.g., Judge & Ferris, 1993).

Importantly, I investigate whether all elements of proactive goal regulation (envisioning, planning, enacting, and reflecting) contribute in predicting supervisors' assessments of employees' proactive performance. Through this analysis, I establish that envisioning, planning and reflecting make a difference to the outcomes of proactivity beyond enacting, which has been the traditional focus in proactivity research.

### 5.2.1 Self-regulatory model of proactivity: Four distinct elements

To identify a self-regulatory model of proactive behaviour, I draw on self-regulation theory (Frese & Zapf, 1994; Gollwitzer, 1990). For instance, action theory proposes that individuals are active in "shaping their environment" (Frese & Zapf, 1994, p.275). The focus is also on individuals setting goals in anticipation of achieving later results. Thus, individuals develop goals and decide amongst competing goals. They orient themselves by considering future outcomes of their goals. Individuals generate, and decide on, a particular plan. They execute their plans, and process feedback on their
progression towards the original goal (Frese & Zapf, 1994). Other self-regulatory models of motivation identify similar elements (e.g., Austin & Vancouver, 1996; Karoly, 1993; Vancouver & Day, 2005; Zimmermann, 2000).

The proposed model builds on, and extends, earlier efforts to develop a self-regulatory model of proactivity. Frese and Fay (2001), drawing on action theory, proposed four self-regulatory elements of personal initiative, including redefining one’s tasks given at work into goals, information collection/prognosis, planning/execution and monitoring/feedback. The researchers suggested that each of these elements involves being self-starting, proactive, and overcoming barriers. For instance, they suggest that monitoring is carried out proactively, with an emphasis on anticipating the need to monitor an issue at work prior to its existence.

In contrast, I define proactive behaviour as comprising a proactive goal which is self-initiated, anticipatory and change-oriented, such as a focus on improving the work setting. A proactive goal is translated into proactive action by complementary planning and/or reflecting processes that are relevant to the proactive goal or action, and are thought of as supportive in terms of preparing proactive action or facilitating learning about past proactive action respectively. However, I do not suggest that all of the elements are proactive in their own right. For instance, reflecting might involve few efforts to bring about change, however when applied to a proactive goal it is an important part of the overall proactive goal regulation process. Thus, I understand proactivity to be a self-initiated, change oriented and anticipatory goal (Parker et al., 2010), and diverse self-regulatory processes are employed by individuals to plan, implement and evaluate progress on this specific goal (Gollwitzer & Bayer, 1989).

Likewise, Grant and Ashford (2008) conceptualised multiple elements of proactive behaviour (anticipation, planning and action directed toward future impact). However, their model excluded any goal revision. The model proposed here therefore extends Grant and Ashford (2008) by proposing a reflection element, emphasising that employees will try to understand the outcomes of their proactive behaviour, and will base future goal developments on their evaluation. The proposal for including reflection is consistent with previous models on self-regulation, especially with Gollwitzer’s (1990) model of action phases that suggests a distinction between goal establishment,
planning, goal striving, and goal evaluation/revision. Gollwitzer’s (1990) model, although not specified for the context of proactive behaviours in organisations, corresponds most closely with the here proposed model of proactive goal regulation (for an overview of all relevant models, see Table 5.1).

Based on this prior theoretical development, I propose a self-regulatory model of proactivity at work that includes envisioning, planning, enacting, and reflecting. When envisioning, individuals set and decide on proactivity-related goals. Proactive goals are self-initiated, anticipatory, and change-oriented. An example of envisioning is an employee realising that the way a task is completed is inefficient and, therefore, identifying ways to improve the process of completing this task. When planning, individuals mentally prepare to engage in behaviour that is related to their proactive goal. For instance, employees might go through different scenarios in their mind of how to bring about the desired change. Enacting comprises overt proactive behaviour. 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, consequences or implications of their proactive behaviour. These efforts ultimately serve as information that can lead an individual to sustain or modify the 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.

Whilst the enacting element is outward-focused and observable, the other three elements of envisioning, planning and reflecting are likely to be mostly, even though not necessarily fully, internalised. The elements might also co-occur to some degree (e.g., planning might occur at the same time as envisioning). The elements can also occur on their own, such as when an individual engages in envisioning but with no subsequent follow-up action. Thus, although the four elements are logically sequential, they will not always be stringently sequential in an applied context.
### Table 5.1

**Model of Proactive Goal Regulation**

<table>
<thead>
<tr>
<th>Proposed proactive goal regulation model</th>
<th>Envisioning</th>
<th>Planning</th>
<th>Enacting</th>
<th>Reflecting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proactivity Process</strong>&lt;br&gt;(Grant &amp; Ashford, 2008)</td>
<td>1. Anticipation</td>
<td>2. Planning</td>
<td>3. Action directed toward future impact</td>
<td>n/a</td>
</tr>
</tbody>
</table>
Chapter 5

The current study thus applies self-regulation theories, particularly action theory, to the topic of proactive behaviour at work, and it extends existing self-regulatory theories that have been proposed for proactivity at work (Frese & Fay, 2001; Grant & Ashford, 2008). Importantly, I empirically investigate previous conceptual ideas developed in the field of proactivity research. Work by Brandstätter and colleagues (2003), Raabe, Frese and Beehr (2007) and by De Vos, De Clippeleer and Dewilde (2009) – rare empirical studies of career-related proactive goal regulation – indicated that the sequencing mainly occurred in the conceptualised order.

Thus, in Raabe et al.’s (2007) study, goal generation and information collection (envisioning) predicted higher levels of planning, and that planning, in turn, predicted more proactive career behaviour (enacting) three months later. Raabe et al.’s (2007) study is promising in suggesting that different elements of proactivity can be meaningfully tested. Similarly, the study by De Vos and colleagues (2009) study showed that career progress goals (envisioning) led to higher levels of networking (enacting) via the engagement in more career planning. Career planning, in turn, only related positively with positive outcomes, such as salary levels and career satisfaction, upon enacting network activities. These results suggest that, ultimately, an implementation of proactive goals and plans is needed in order to achieve the desired positive outcomes. However, the more cognitive goal and planning phases appear to influence overall outcomes beneficially. Thus, Brandstätter et al. (2003) found that goal intention (envisioning) led to more successful education initiative (enacting) when it was accompanied by implementation intention (planning). These results suggest the importance of investigating all elements of proactive goal regulation, rather than just the enacting element.

To summarise, these earlier studies were thus promising in indicating the usefulness of a self-regulatory approach to proactivity, but they did not develop or test a comprehensive measure of these self-regulatory elements of work proactivity, nor did they include the reflecting element of learning from past proactive outcomes. I build on this previous conceptual and empirical work, and propose the following hypothesis:

HI: Envisioning, planning, enacting, and reflecting can be identified as four distinct elements of proactive goal regulation.
5.2.2 Relations between the elements of proactivity and supervisor-rated proactive performance

Past research has shown that proactive behaviour can be beneficial for individual work outcomes. Higher levels of proactivity at work have, for example, been linked with increased levels of sales (Crant, 1995), greater task mastery (Morrison, 1993a), and superior overall job performance (Morrison, 1993b; Thompson, 2005; Van Dyne & LePine, 1998). However, I argue that the success of proactivity - at least in so far as it is observed by supervisors - is dependent on the degree of enacting of proactive behaviour (as has already been established) as well as on the extent to which employees engage in all of the distinct, self-regulatory elements of proactivity at work. I elaborate these arguments next.

There is good reason to believe that enacting proactive behaviour will predict supervisor perceptions of proactive performance. To some extent, such an association is obvious: overt proactive action (enacting) should be positively related with supervisor-rated proactive performance as its more externalised character should facilitate matching supervisor-ratings (see e.g., Furnham & Stringfield, 1998). Past research on proactivity has suggested self-ratings of proactive behaviour are significantly positively linked to supervisors' views of proactive performance (e.g., Den Hartog & Belschak, 2007; Parker et al., 2006). The more interesting and pertinent question is then whether the other goal-regulatory elements are important for proactive performance, over and above the enacted proactive behaviour.

Proactive goals, as decided on in the envisioning process, function as a guide to the action process (Hacker, 1986; as cited in Frese & Zapf, 1994) and motivate individuals' efforts to reduce the discrepancy between an existing situation and the situation that is implied by the set goal (Locke & Latham, 1990), thus facilitating proactive performance. Planning is the translation of a proactive goal into action. When individuals plan actions, they are less likely to become distracted from engaging in the action (Gollwitzer, 1999), and more likely to take up opportunities for engaging in the planned action (Gollwitzer & Brandstätter, 1997). Planning should thus enhance the efficiency of enacted behaviour (Gollwitzer, 1996). Finally, reflecting comprises the monitoring and revision of proactive goals and should therefore be beneficial for
learning and improvement of repeatedly enacted behaviour (Gollwitzer, 1990). Reflecting should thus enhance effectiveness of proactive action. I thus argue:

\[ H2: \text{All four goal-regulatory elements are important for supervisor perceptions of proactive performance.} \]

In the following, I describe the methods used to test the hypotheses.

5.3 Methods

5.3.1. Procedure and sample

I tested the model of proactive goal regulation in a sample of employees working for a UK-based, multinational organisation in a call centre environment. Employees (N = 694) and their direct supervisors (N = 91) were invited to take part in a questionnaire that would help identify key issues to improve the quality of their working life (employee self-reports from this study were also analysed in Chapter 4). The response rate was 32% (N=227) amongst baseline employees, and 35% (N=32) amongst supervisors. Respondents amongst baseline employees ranged from 18 to 61 years (M=33.63, SD=11.22), with tenure ranging from less than one year to 34 years (M=4.41, SD=5.23). 66% of them were female, and 78% were full-time rather than part-time employed. Respondents amongst the supervisors ranged from 23 to 61 years (M=35.97, SD=9.83), with tenure ranging from less than one year to 24 years (M=6.95, SD=5.26). 65.6% of the supervisors were female, and 87.5% were full-time employed. The supervisor questionnaire was different from the baseline employees' questionnaire and, for example, included a section on employee performance ratings.

In the analyses for this chapter, I used: data from all baseline employees (N = 227) to assess the factor structure of the items in order to assess content validity of the elements of proactive goal regulation, the sample of supervisor self-ratings (N=32) in order to test for discriminant and convergent validity of the elements of proactive goal regulation, and a subsample (n=57) of baseline employees, for whom I obtained supervisor ratings of work performance, to assess criterion validity of the proactive goal regulation. I used all three types of data to test Hypothesis 1 and I used the subsample of baseline employees for whom I had obtained supervisor ratings for, in order to test Hypothesis 2.
5.3.2 Measures

**Work-related proactive goal regulation.** Measures currently exist to assess the *enacting* component of proactive goal regulation, but not the other three components. For the enacting element of proactivity, I 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?* (α = .89; 1 = not at all to 5 = a great deal).

I developed new measures to assess the additional three elements of envisioning, planning and reflecting because measures do not currently exist. In doing so, I followed Hinkin’s (2005) overall recommendations for scale development, regarding procedures for item generation, survey administration, initial item reduction, confirmatory factor analysis, convergent and discriminant validity and, finally, replication. Below, I outline my approach to item generation, survey administration and initial item reduction. In the next section I outline the exploratory and confirmatory factor analyses I conducted. The validity checks follow in the results section of this chapter. A replication of the overall structure of the proactive goal regulation measure is conducted in Chapter 6, using an independent sample of medical students in the context of career proactivity.

Firstly, based on the theoretical conceptualisation of the elements of proactivity described earlier, I 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 organisation, I selected 16 items for final inclusion in the survey (see Table 5.2). 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 the discriminatory power between the goal regulation elements, I reduced each element subscale 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 the 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 behaviour, 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 ($\alpha = .91$). Since the elements of envisioning, planning and reflecting were identified as primarily internal cognitive processes rather than observable behaviours, I did not obtain supervisory assessments of these phases.

**Supervisor ratings of work performance.** In order to arrive at the supervisor ratings, I asked the respondents to indicate who their main supervisor was, and equally asked the supervisors to rate all their direct reports on the same items, albeit with the employee as the target.

I used the Griffin et al. (2007) measures to investigate supervisor-reported proficiency and proactivity of baseline employees. Specifically, supervisors were asked: *Thinking about how this person has carried out his/her job over the past month, to what extent has he/she:... carried out the core parts of his/her job well?, ... ensured his/her tasks were completed properly?, ... and avoided mistakes and errors when completing core tasks?* ($\alpha = 0.94$, for task proficiency) as well as *initiated better ways of doing his/her core tasks?, ... come up with ideas to improve the way in which his/her core tasks are done?, and ... made changes to the way his/her core tasks are done?* ($\alpha = 0.91$, for task proactivity).

### 5.4 Results

#### 5.4.1 Distinctiveness of elements of proactive goal regulation

The first goal of the study was to investigate whether the four proposed elements of proactive goal regulation were indeed distinct from each other. As an initial step, I explored the underlying factorial structure of all sixteen items by performing exploratory factor analyses, using principal axis factoring with oblique rotation. The screeplot
suggested that a four factor solution was appropriate. All factors loaded to the four phases as theorised.

In order to enhance the discriminatory power between the phases even further, I reduced each phase to comprise just three items, based on theoretical considerations as well as on factor loadings and communalities. The complete list of items and their factor loadings, plus an indication of which items were chosen for final measurement, is presented in Table 5.2. The overall coherent factor loadings indicate that the full list of items may be usefully implemented in further studies. I chose to focus on the shorter measure in this study because it was the cleanest solution. Eigen values for the original vs. the revised list of items were the following respectively: Envisioning (.98/1.04), Planning (1.05/ .75), Enacting (1.54/ 1.39) and Reflecting (1.46/ 6.66). The revised measure yielded 82.18% of total variance explained, as compared to 76.52% in the original measure.

Although an exploratory factor analysis is a good test of a new measure, I also conducted a confirmatory analysis with MPlus, version 6 (Muthen & Muthen, 1998-2010), so that I could investigate whether the four theoretically derived self-regulatory elements of proactivity represented a significantly better solution to the data than theoretically possible alternative solutions. I used the same fit indices as outlined in Chapter 4: A chi-square ratio (i.e., chi-square divided by degrees of freedom) ≤ 3; an SRMR (standardised root mean square residual) < .10; an RMSEA (root-mean-square error of approximation) < .08; and finally a CFI (comparative fit index) value ≥ .95 (Schermelleh-Engel et al., 2003).
### Table 5.2

**Original and Revised Measure for Proactive Goal Regulation**

<table>
<thead>
<tr>
<th>Envisioning</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
<th>F4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time/effort spent...Thinking about ways to improve services to customers?</td>
<td>.871</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Time/effort spent...Thinking about ways to improve how the team works together?</em></td>
<td>.763</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time/effort spent...Thinking about ways to save costs or increase efficiency at work?</td>
<td>.823</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time/effort spent...Thinking about how to better perform your tasks?</td>
<td>.786</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Time/effort spent...Thinking about voicing a concern about a work issue to your supervisor or to colleagues?</em></td>
<td>.595</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Planning</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Time/effort spent...Going through different scenarios in your head about how to best bring about a work change?</td>
<td>.764</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time/effort spent...Getting yourself into the right mood before trying to make a change or put forward a suggestion?</td>
<td>.708</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time/effort spent...Thinking about a change-related situation from different angles, before deciding how to act?</td>
<td>.791</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Time/effort spent...Gathering information on how to change a work procedure?</em></td>
<td>.612</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Time/effort spent...Considering when or how to approach someone with your suggestions for improvements?</em></td>
<td>.718</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Time/effort spent...Sounding out your ideas for doing things differently with a few people first?</em></td>
<td>.849</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Enacting</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you... Initiated better ways of doing your core tasks?</td>
<td>.744</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you... Come up with ideas to improve the way in which your core tasks are done?</td>
<td>.991</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you... Made changes to the way your core tasks are done?</td>
<td>.754</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reflecting</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Time/effort spent...Considering the outcomes of the change-related actions you took?</em></td>
<td>-.687</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time/effort spent...Monitoring the effects of your change-related behaviour?</td>
<td>-.822</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time/effort spent...Seeking feedback from others regarding the effects of your change-related actions?</td>
<td>-.741</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Time/effort spent...Pondering whether engaging in change-related behaviour was worth the effort it took?</em></td>
<td>-.752</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time/effort spent...Extracting lessons for the future from the change-related actions you engaged in?</td>
<td>-.839</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* F1 – F4: Factor loadings from an exploratory factor analysis, using principal axis factoring with oblique rotation; *a* Items discarded from revised measure; factor loadings <0.3 were omitted from the graphical presentation. N=227.
I 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 behaviour. Alternatively, there may be no meaningful differences between the more cognitive elements of envisioning, planning and reflecting and the overt behavioural element of enacting. I therefore accounted for this possibility by constructing Model 3, which comprised two factors – proactive behaviour (enacting) vs. pre-and post-elements of proactive behaviour (envisioning, planning, and reflecting). Another possibility is that there is not a meaningful distinction between responses to envisioning and planning proactive behaviour vs. actually engaging and then reflecting on this engagement of behaviour. I accounted for this possibility by including Model 4 which distinguished the two factors of pre-proactive behaviour (envisioning and planning) as well as during and after-proactive behaviour (enacting and reflecting). Finally, in line with the theory-based deduction of the four self-regulatory elements, I constructed Model 5 which distinguished four factors, one for each of the four elements of proactivity.

As expected, the hypothesised four-factor model (Model 5) had a significantly better fit than models 1 - 4 (see Table 5.3). Further, the fit indices revealed an excellent fit. The CFI was .99, the RMSEA was .05, the SRMR was .03 and the ratio of chi-square divided by degrees of freedom was 1.59.
Table 5.3

*Study 1 – Comparison of Alternative Factor Structures for Proactive Goal Regulation*

<table>
<thead>
<tr>
<th>Model</th>
<th>Descriptives</th>
<th>$\chi^2_{,df}$</th>
<th>Ratio</th>
<th>$\Delta \chi^2, \Delta df$ (model of comparison)</th>
<th>CFI</th>
<th>RMSEA</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>Baseline model: All items uncorrelated</td>
<td>2096.00, 66</td>
<td>31.76</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Model 2</td>
<td>One factor: Envisioning, planning, enacting, reflecting</td>
<td>619.68, 54</td>
<td>11.47</td>
<td>1476.32, 12*</td>
<td>.721</td>
<td>.215</td>
<td>.094</td>
</tr>
<tr>
<td></td>
<td>(model 1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 3</td>
<td>Two factors: Pre-and post elements (envisioning, planning, reflecting) vs. proactive behaviour (enacting)</td>
<td>365.63, 53</td>
<td>6.90</td>
<td>254.05, 1*</td>
<td>.846</td>
<td>.161</td>
<td>.069</td>
</tr>
<tr>
<td></td>
<td>(model 2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 4</td>
<td>Two factors: Pre-elements (envisioning and planning) vs. during and after-elements (enacting and reflecting)</td>
<td>463.23, 53</td>
<td>8.74</td>
<td>-97.60, 0</td>
<td>.798</td>
<td>.185</td>
<td>.082</td>
</tr>
<tr>
<td></td>
<td>(model 3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 5</td>
<td>Four factors: All goal regulation elements as theorised (envisioning, planning, enacting, reflecting)</td>
<td>76.24, 48</td>
<td>1.59</td>
<td>289.39, 5*</td>
<td>.986</td>
<td>.051</td>
<td>.030</td>
</tr>
<tr>
<td></td>
<td>(model 3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* N = 227; * model improvement significant at $p < .05$ level; | change assessed vs. previously best model.
To summarise, the CFA results indicated that the four elements of proactive goal regulation were indeed distinct from each other. To further establish the construct validity of the new measures, I checked whether the goal-regulatory elements of proactivity discriminated between hierarchical categories. In managerial positions, because of the nature of their role, one would expect that all phases of proactivity should be higher than at the baseline employee level (Mischel & Shoda, 1995).

As expected, employees in higher hierarchical levels (the sample of 32 supervisors) self-reported the highest levels of the phases of proactivity: envisioning (M = 3.78, SD = 0.82), planning (M = 3.27, SD = 0.81), enacting (M = 3.30, SD = 0.88) and reflecting (M = 3.25, SD = 0.72) as compared to the baseline employees who self-reported the following levels: envisioning (M = 2.93, SD = 1.02), planning (M = 2.54, SD = 1.08), enacting (M = 2.98, SD = 1.08) and reflecting (M = 2.53, SD = 1.07). A one-way analysis of variance revealed that the differences in all phases but task proactivity (enacting) were significant at the p < 0.05 level, although supervisors as a tendency also scored higher on the enacting phase.

In response to this latter result, I carried out further analyses regarding the validation of employee self-ratings of the enacting phase (task proactivity) against supervisor-rated measures of task proactivity (convergent validity) and task proficiency (discriminant validity). As shown in Table 5.4, baseline employees’ self-rated task proactivity correlated significantly with baseline employees’ supervisor-rated proactivity (r = 0.36, p < .01), but not with baseline employees’ supervisor-rated task proficiency (r = 0.09). These findings of a modest correlation between self- and supervisor ratings at r = 0.36 correspond with the findings by Harris and Schaubroeck (2006), who showed that correlations between self- and supervisor ratings typically do not exceed r = 0.35.

Finally, the four elements of proactive goal regulation were moderately and positively correlated, which one would expect because they all link into an action process, in which individuals may go back and forth from one phase to another (see e.g. King, 1992). To summarise, Hypothesis 1, on envisioning, planning, enacting, and reflecting representing four distinct elements of proactive goal regulation, was supported.
Table 5.4
Study 1 – Means, Standard Deviations, and Correlations

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Envisioning</td>
<td>3.06</td>
<td>1.00</td>
<td>(.86)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Planning</td>
<td>2.54</td>
<td>1.09</td>
<td>.63**</td>
<td>(.88)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Enacting (Task Proactivity)</td>
<td>2.99</td>
<td>1.09</td>
<td>.52**</td>
<td>.48**</td>
<td>(.89)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Reflecting</td>
<td>2.35</td>
<td>1.09</td>
<td>.57**</td>
<td>.69**</td>
<td>.58**</td>
<td>(.91)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Supervisor-rated task proficiency</td>
<td>4.04</td>
<td>0.74</td>
<td>.12</td>
<td>.19</td>
<td>.09</td>
<td>.17</td>
<td>(.94)</td>
<td></td>
</tr>
<tr>
<td>6. Supervisor-rated task proactivity</td>
<td>2.95</td>
<td>1.01</td>
<td>.25</td>
<td>.35**</td>
<td>.36**</td>
<td>.30*</td>
<td>.29*</td>
<td>(.91)</td>
</tr>
</tbody>
</table>

Note. Internal consistency values (Cronbach’s Alphas) appear across the diagonal in parentheses. * p < .05, ** p < .01. Variables 1 - 4: N = 227; 5 - 6: N = 57.

5.4.2 Elements of proactive goal regulation and supervisor-rated proactive performance

Table 5.4 shows the zero-order correlations for the elements of proactivity and supervisor-rated proactive performance. I expected a positive relationship between the four elements of proactive goal regulation and supervisor-related proactive performance (PP) and this expectation was supported, albeit in the case of envisioning only as a statistical tendency (envisioning – PP: .25, p<.10; planning – PP: .35, p<.01; enacting – PP: .36, p<.01; reflecting – PP: .30, p<.05).

I did not expect the elements of proactive goal regulation to uniquely predict proactive performance, as the goal-regulatory elements, although conceptually distinct, are all part of the same process. I thus tested Hypothesis 2 on the importance of each element of proactive goal regulation for proactive performance via relative importance analyses. Currently, two state-of-the-art procedures for relative importance analysis exist: dominance analysis (Budescu, 1993) as well as relative weights analysis (Johnson, 2000). Both procedures effectively determine the relative contribution of predictors to the explained variance of a criterion by taking into account its direct effect, as well as its effect in combination with the other predictors (Johnson & LeBreton, 2004) and have been recommended especially when correlations amongst predictors are prevalent (LeBreton, Hargis, Griepentrog, Oswald, & Ployhart, 2007).
To determine the relative importance of each predictor, I obtained the following macros and syntaxes: In order to run dominance analysis, I used a macro for MS Excel, developed by James LeBreton (2004), which calculates the importance weights from user-provided model $R^2$ values. In order to run relative weights analysis, I used an SPSS syntax command developed by Jeff Johnson and provided by LeBreton (2004), which operates by calculating the importance weights from the original raw data.

Results were, as expected, almost identical between dominance analysis and relative weight analysis (see LeBreton, Ployhart, & Ladd, 2004, for a Monte Carlo comparison between the two procedures) and are indicated in brackets for dominance analysis (DA) and relative weights analysis (RWA). Relative importance analyses indicate the relative weight of each predictor in percentage, that is the recalculated absolute contribution of each predictor to the explained variance of the criterion (the Raw Importance Estimate, see Table 5.5 first two columns), divided by model $R^2$ (here $R^2 = .16$).

### Table 5.5
**Relative Importance of the Elements of Proactivity for Supervisor-rated Proactive Performance**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Raw Importance Estimate (DA)</th>
<th>Raw Importance Estimate (RWA)</th>
<th>Relative Importance Estimate (DA)</th>
<th>Relative Importance Estimate (RWA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Envisioning</td>
<td>.02</td>
<td>.02</td>
<td>11.3%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Planning</td>
<td>.05</td>
<td>.05</td>
<td>32.3%</td>
<td>31.2%</td>
</tr>
<tr>
<td>Enacting</td>
<td>.06</td>
<td>.06</td>
<td>39.6%</td>
<td>40.7%</td>
</tr>
<tr>
<td>Reflecting</td>
<td>.03</td>
<td>.03</td>
<td>16.8%</td>
<td>17.6%</td>
</tr>
<tr>
<td>Totals</td>
<td>.16</td>
<td>.16</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Note. Dependent variable = Supervisor-rated proactive performance ($R^2 = .16$). DA = Dominance Analysis, RWA = Relative Weights Analysis. Raw Importance Estimate represents the contributions of each predictor to the explained variance of the criterion (supervisor-rated proactive performance). Relative Importance Estimate represents the relative contributions of each predictor to the explained variance of the criterion, as calculated by dividing raw dominance by model $R^2$. Due to rounding error, the values for the raw importance estimates may not sum to the model $R^2$, and the relative estimates may not sum to 100%.*
Specifically, results indicate that relative importance weight was greatest for enacting (39.6% / 40.7%, for DA and RWA, respectively), followed by planning (32.3% / 31.2%), reflecting (16.8% / 17.6%) and envisioning (11.3% / 10.6%). If any of the elements of proactive goal regulation had not been relevant for explaining supervisor-rated proactive performance, the relative percentage would have dropped towards zero. Thus, Hypothesis 2 was supported in that all elements of proactive goal regulation contributed to explained variance in supervisor-rated proactive performance.

5.5 Discussion

This chapter aimed to enhance understanding of the goal-regulatory structure underlying proactive work behaviour. In line with this objective, I found empirical support for four distinct elements of proactive goal regulation. The present study thus suggests it is possible for research to empirically meaningfully distinguish between different elements of proactivity, over and above the actual implementation of proactive behaviours. The following chapters of this thesis will build on this finding, in investigating the role of moods and emotions at work for different elements of proactive goal regulation.

5.5.1 Implications

Importantly, this chapter showed that not only can different elements of proactive goal regulation be meaningfully distinguished, but engagement in each of them is associated with superior proactive performance, as rated by supervisors. Relative importance analyses suggest all four elements - envisioning, planning, enacting and reflecting - contribute to supervisor-rated proactive performance. The dominant role of enacting for supervisor-rated proactive performance could mean that mainly overt, observable behavioural facets are more readily recognised as performance-relevant (Furnham & Stringfield, 1998).

However, planning, although mostly internalised, was nearly as important as enacting. More concise planning might provide individuals with more efficient strategies for proactive actions (Gollwitzer & Brandstätter, 1997) which are accredited by supervisors. Reflecting might contribute by facilitating learning processes (Gollwitzer, 1990), thus increasing efficiency of proactive self-regulation processes as appreciated by supervisors.
Finally, envisioning emerged as the comparatively least important element of proactive goal regulation, as compared to the other elements. It could be that envisioning, apart from signalling the start of the proactive goal regulation process, does not have a strong benefit in its own right. The importance of all elements of proactive goal regulation for supervisor-rated performance corresponds to what Chen and Gogus (2008) refer to as a 'complete roadmap for action'. In this vein, more complete engagement in all elements of proactive goal regulation should provide the individual with mindful and effective approaches to proactivity that are not solely intended to be beneficial for the organisation, but indeed have the intended positive consequences for the organisation (Grant & Ashford, 2008).

Practically, organisations may use the measure to investigate the more internalised elements of envisioning, planning and reflecting amongst their workforce, and design targeted interventions to facilitate employee engagement in proactive goal regulation. I will return to this point when outlining practical implications of thesis in Chapter 8. The subsequent chapters highlight the importance of affective experiences at work in preventing or promoting engagement in the identified elements of proactive goal regulation.

5.5.2 Limitations and future research

In discussing the findings of Chapter 5, there are limitations to this study that need to be considered. Firstly, the study is cross-sectional, thereby precluding causal implications. It would have been beneficial to obtain measurements from the predictors and outcomes at different points in time in order to capture a dynamic development of the different self-regulatory processes of proactivity over time. However, in this first empirical study in my thesis that introduced the proactive goal regulation measure I focused on investigating the underlying factorial structure of the proactive goal regulation measure. For this, it appeared sensible to provide respondents with the same point of reference for each element of proactivity (in the case of my study, the same month of work). In Chapter 6 I will additionally investigate the measurement of proactive goal regulation over time, and in Chapter 7 I will explore employees' accounts of retrospect and ongoing accounts of proactive goal regulation as it unfolded over time.

Secondly, the first part of the study (distinctiveness of measures) was single-source and self-report. Inflations of relationships due to common method variance...
are therefore a threat to the validity of my findings, although the identification of four clear and distinct factors speaks against this possibility. In addition, past research confirmed that self-ratings in general (Conway & Lance, 2010) and in particular of proactive behaviours at work (Frese, Fay, Hilburger, Leng, & Tag, 1997; Parker et al., 2006) may be used as valid measurements.

The elements of envisioning, planning and reflecting mainly represent cognitive processes that may not be readily observed by peers or supervisors. Self-reported engagement in each of these elements thus appeared as the most promising avenue of measurement. I also conducted analyses that validated the self-report measures against supervisor perceptions of proactivity. Firstly, I overcame self-report bias by showing convergent validity between self-and supervisor rated enacting. Further, I showed that all elements of proactive goal regulation added to explain variance in supervisor-rated proactive performance, thus strengthening the validity of the present research approach.

As a third limitation, the response rate in my study was 32%, whereas a response rate closer to 100% would have been optimal. However, the level of response rate encountered here is not unusual for an online survey. For example, Shih and Fan (2009) in a meta-analytic comparison between online and paper and pencil surveys found that online surveys on the average had lower response rates (mean = 33%) than did paper and pencil surveys (mean = 53%). Future research on a goal regulation view of proactivity might thus consider focusing on paper and pencil surveys to achieve higher response rates. In the second study of my thesis, amongst medical students, I use paper and pencil surveys to measure proactive goal regulation over time.

One issue with my study, given that participation was both voluntary and advertised as a project aimed at improving quality of working life, is that the 32% of employees that participated might have been the more motivated ones (e.g., Spitzmüller, Glenn, Sutton, Barr, & Rogelberg, 2007) and therefore possibly more proactive. This, in turn, might have yielded a range restriction that inhibits finding significant results.

As a final limitation, the present findings are constrained to proactive work behaviours of employees in a call centre environment, which involves highly customer-focused, interaction-based work tasks. Future research is needed in order to
generalise these findings beyond this context. In the second study of my thesis (Chapter 6), I will replicate the findings of four distinct elements of proactive goal regulation, drawing on a sample of medical students in the context of career-related proactivity in order to show that the present findings extend beyond the context of call centre employees and the concept of task proactivity.
Chapter 6: The Role of Moods for Proactive Goal Regulation

6.1 Outline

In the present chapter, I combine the research questions described in Chapters 4 and 5 to investigate the role of different work-related moods for proactive goal regulation (see Figure 6.1, path RQ4). Specifically, I build on and extend previous research by investigating proactivity in a wider goal regulation framework that includes cognitive, as well as behavioural, elements (see Chapter 5).

Thus, individuals set and decide on proactivity-related goals (envisioning). They prepare to engage in behaviour that is related to their proactive goal (planning). They enact on their proactive goal by engaging in proactive behaviour and, finally, they seek to understand implications of their proactive behaviour (reflecting). Using this framework, I draw on a large body of affect research to argue that moods should have different influences at different stages of proactive goal regulation, depending on the type of mood that is involved.

Figure 6.1
Overview of Research Question 4
6.2 The Role of Moods in Proactive Goal Regulation

As outlined in Chapter 3 (Section 3.5), previous studies on the relationship between moods and proactivity, whilst promising in indicating the relevance of such relationships, leave several important issues unresolved. Firstly, research has investigated the role of positive versus negative valence but in doing so has neglected the role of the activation level of moods. There is good evidence that moods can be represented by the independent dimensions of valence and activation, as described in the circumplex model of affect (Russell, 1980, 2003).

Accordingly, unique combinations of the dimensional poles 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. A systematic investigation of the role of low-activated positive and low-activated negative moods is currently missing in proactivity research. This is problematic because, as I will propose, the effect of mood will depend not only on its positive valence, but also on its level of activation. Thus, disregarding activation will lead to an under-specification of the role of moods for proactivity.

Secondly, research has focused only on engagement in proactive behaviours, thereby neglecting the role mood has for proactivity-related cognitive processes that in turn shape proactive behaviours. As I will argue below, the previously found contradictory findings concerning the association between negative moods and proactivity (Den Hartog & Belschak, 2007; Fritz & Sonnentag, 2009) could be explained by adopting a more comprehensive approach that includes these cognitive processes in conceptualising proactivity as a proactive goal regulation process. Next, I turn to elaborating the proposed role of positive moods for proactive goal regulation.

6.2.1 The role of positive moods in proactive goal regulation

Drawing on my conceptual work with Sharon Parker and Karoline Strauss (Parker et al., 2010), I proposed an energised to mechanism of positive moods for proactivity in Chapter 3.3 and found empirical evidence for the importance of high activation in positive valence (Chapter 4, Hypothesis 1). Below, I summarise the main arguments made by this energised to pathway to proactive behaviours and I extend it to argue why high-activated positive moods should relate to all four
elements of proactive goal regulation: envisioning, planning, enacting (proactive behaviours), and reflecting.

Current theoretical understanding suggests that positive moods should be beneficial for proactivity on a number of counts. Firstly, positive moods can influence individuals' expectancies with regards to behavioural outcomes (Mayer et al., 1990) as well as signal that sufficient resources are available to engage self-regulatory efforts (Aspinwall, 1998; Trope & Pomerantz, 1998) and thus generate positive expectancy judgments for these outcomes (Wegener & Petty, 1996). This expectancy effect should be particularly beneficial for self-initiated, rather than compliant, actions at work because they are likely to require high levels of confidence in pursued outcomes (Frese et al., 1997). Positive moods should thus promote individuals' setting of proactive goals through increasing envisioning.

Further, mood 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 behaviours likely require such evaluations as part of their planning processes. Because affective experiences shape thoughts and actions that have a similar evaluative tone (Forgas & George, 2001), positive moods should be particularly beneficial in forming positive cognitive evaluations, that facilitate the planning and implementation of proactive goals.

Further, positive moods should facilitate an approach motivation (Higgins, 1997) and increase one's persistence for achieving challenging goals (Clore, 1994; George & Brief, 1996). As such, I expect positive moods to facilitate the enacting element of proactivity. Because positive moods facilitate intrinsic motivation and promotes responsible behaviours (Isen & Reeve, 2005), they should facilitate individuals' following through and reflecting on the outcomes of past proactive efforts. Likewise, positive moods can influence goal revision during proactive goal regulation by increasing openness to feedback (Gervey, Igou, & Trope, 2005). Thus, I expect positive moods to be positively related to each element of proactive goal regulation.

However, I expect this effect of positive affect to apply only to high-activated rather than low-activated positive moods. Proactivity is essentially a self-initiated way of behaving. Thus, I suggest an energising mechanism of positive moods for proactive goal regulation, which fuels the engagement in each phase of proactive
goal regulation. Low-activated positive moods should not promote activity (Frijda, 1986). In contrast, high-activated positive moods should provide energy and thus facilitate the engagement and persistence in activities (Fredrickson, 1998; Tsai et al., 2007). In this vein, work by Seo, Bartunek, and Feldman Barrett (2009) indicated that high activation levels in affect were directly positively associated with individuals' amounts of effort in activities. In contrast, the researchers found that positive affect with neutral activation levels was only indirectly positively associated with effort in activities via promoting expectancy judgments towards efforts.

Similarly, Foo and colleagues (2009) showed that high-activated positive affect facilitated effort over and above what was immediately required. Given the self-initiated and change-oriented nature of proactive behaviours I thus argue that high-activated positive moods provide energising potential for the sustainment of all elements of proactive goal regulation. I thus hypothesise:

\[ H1: \text{High-activated positive moods will be positively related to all elements of proactive goal regulation (envisioning, planning, enacting, and reflecting).} \]

6.2.2 The role of negative moods in proactive goal regulation

Negative affect can signal to an individual that the present situation needs changing (Carver & Scheier, 1990a), and can thus act as a stimulus for initiating proactive behaviours. Specifically, negative affect signals a potential threat to the self and thereby likely induces contemplation for changing a situation so that it can be made to fit with the individual's desired direction.

However, I expect different activation levels in negative valence to lead to different outcomes for proactive goal regulation. As Gollwitzer (1990) pointed out, the more cognitive self-regulatory elements of envisioning, planning and reflecting phases are characterised by mindsets in which individuals are receptive to diverse ideas and thoughts. Recent research on negative affect indicates that low-activated negative moods broaden cognitions, whereas high-activated negative moods narrow attentional focus (Gable & Harmon-Jones, 2010). Another process through which low-activated negative affect could lead to higher levels of contemplating about proactivity is rumination (Martin & Tesser, 1996). Thus, low-activated negative affective experiences, such as depressive moods, might lead individuals to contemplate of how to change their present situation (Verhaeghen, Joormann, &
Khan, 2005). Thus, low-activated negative moods should be overall positively related to the more cognitive elements of envisioning, planning and reflecting.

In contrast, high-activated negative affective experience, such as feeling threatened, should focus individuals’ attention narrowly on the situation that is connected with the high-activated negative feelings (Easterbrook, 1959). High-activated negative feelings could prompt envisioning, planning or reflecting to the extent that proactivity is directly related to a situation that causes these feelings. However, because moods are experienced as unrelated to an object (Parkinson et al., 1996), overall high-activated negative feelings at work should not per se prompt proactive goal regulation. I will, however, argue in Chapter 7 how the experience of high-activated emotions towards a specific issue might promote proactivity towards solving that issue.

Further, because proactivity is about improving the organisation or the fit between oneself and the environment, and as such the proactive individual intends it to be a positive way of engaging with his or her environment. Therefore, given that affective states normally facilitate behaviours with the same evaluative tone (Forgas & George, 2001), I propose that negative moods will not per se facilitate engagement in proactive behaviours. Negative affective experiences are also likely to derail the self-regulatory focus away from the goal to be implemented (Beal et al., 2005) and yield an avoid rather than approach orientation (Carver, 2006; Higgins, 1997; Rodell & Judge, 2009). They signal poor progression towards a goal (Carver & Scheier, 1990a) and ultimately lead 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 behaviours (Muraven & Baumeister, 2000; Schmeichel & Baumeister, 2004). Negative moods should therefore inhibit the translation of proactive contemplation into overt behaviours. Consequently, I don’t expect negative moods to be associated with the enactment of proactive behaviour.

**H2: Low-activated negative moods will be positively associated with the more cognitive elements of proactive goal regulation (envisioning, planning, and reflecting).**
My first two hypotheses are summarised in Figure 6.2.

**Figure 6.2**

*Overview of Hypotheses*

<table>
<thead>
<tr>
<th>Proactive Goal Regulation</th>
<th>Envisioning</th>
<th>Planning</th>
<th>Enacting</th>
<th>Reflecting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Work-related Moods</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HANA 0</td>
<td>+ (H1)</td>
<td>HANA 0</td>
<td>HANA 0</td>
<td>+ (H1)</td>
</tr>
<tr>
<td>LANA + (H2)</td>
<td>0</td>
<td>LANA + (H2)</td>
<td>0</td>
<td>+ (H2)</td>
</tr>
</tbody>
</table>

Note. HANA: high-activated negative affect; HAPA: high-activated positive affect; LANA: low-activated negative affect; LAPA: low-activated positive affect; H1 – H2: Hypotheses 1 – 2; 0: no hypothesised relationship, h+: hypothesised positive relationship.

**6.2.3 Temporal relationships between affect and proactivity**

The hypotheses have, thus far, not specified assumptions with regards to the temporal relationships between moods and proactivity. The consideration of time in relationships between measures is however important in order to gain insights into the causal order underlying the studied relationships (Zapf, Dormann, & Frese, 1996). I thus followed Mitchell and James’ (2001) call for an integration of time into organisational theories and specify below the expected temporal associations between mood and proactivity.

The previous two hypotheses assumed a prevalent role of high-activated positive moods for all elements of proactive goal regulation. To the extent that engagement in all elements of self-regulation is important for effective performance outcomes (Chen & Gogus, 2008), it follows from Hypotheses 1 and 2 that high-activated positive moods will have the most important relationship with overall proactive goal regulation. In the following, I thus focus on and extend Hypothesis 1 on the role of high-activated positive moods for proactive goal regulation to include a time perspective.
Affect researchers have argued that the relationship between affective experience and behaviour is rather immediate in time (Isen et al., 1976; Weiss & Cropanzano, 1996). Lagged, building effects of affect on cognitive and social resources which, in turn, facilitate subsequent behaviours, are additionally possible (Fredrickson, 1998, 2001). However, the intensity of affect likely diminishes as time passes (Zohar, Epstein, & Tzischinsky, 2003) and with it the expected motivational intensity (Seo et al., 2009; Seo et al., 2004) that should facilitate self-starting behaviours at work. I thus expected the relationship between work-related moods and proactive goal regulation to be rather concurrent, as compared to lagged in time.

With regards to the direction of influence, as I argue below, moods should mainly influence proactive goal regulation, as compared to the opposite direction. A reverse relationship in which engagement in proactive behaviours elicits positive feelings at work is however plausible. For instance, Baumeister and colleagues (2007) argued that individuals may choose to engage in an action in order to reach anticipated emotional outcomes in the future. Similarly, even without anticipation, successful completion of tasks may elicit positive feelings (Ilies & Judge, 2005).

However, as I elaborated earlier, I expect high-activated positive moods to exercise an influence on proactivity via several strong mechanisms: Firstly, through facilitating the setting of proactive goals (Ilies & Judge, 2005; Martin, Ward, Achee, & Wyer, 1993), secondly through facilitating proactive decision processes (George & Brief, 1996; Weiss, Ashkanasy, & Beal, 2004), thirdly through facilitating persistence in the engagement in proactive behaviours (Tsai et al., 2007) and fourthly through motivating reflection and learning processes on past proactive action (Isen & Reeve, 2005).

To my knowledge, only one previous study has examined the causal relation between moods and proactivity and it found an influence of moods on subsequent enacting in proactivity (Fritz & Sonnentag, 2009). Longitudinal research on related constructs such as employee engagement (Hakanen, Perhoniemi, & Toppinen-Tanner, 2008) and recovery from work (Binnewies et al., 2009; Binnewies et al., 2010; Sonnentag, 2003) also lent empirical evidence for a positive influence of mood on proactivity, although typically in these studies the reverse causal relationship remained untested. One exception is Hakanen et al.’s (2008) research who showed in a sample of dentists that trait engagement was significantly positively associated with
personal initiative three years later, and that, additionally, there was a weakly positive association of initial personal initiative with higher levels of trait engagement for the same time frame.

Results from a further study that systematically investigated temporality between positive affect and creative thought - a construct that is similar, albeit not identical, to the envisioning phase in the proactive goal regulation model - indicated that positive affect was associated with subsequent creative thoughts, rather than the reverse (Amabile, Barsade, Mueller, & Staw, 2005). To summarise, comprehensive tests of alternative causal relationships between moods and proactivity are missing, as are examinations of temporal relations in the context of the wider construct of proactive goal regulation. Thus, I hypothesise:

**H3:** The relationship between high-activated positive moods and overall proactive goal regulation will be better represented by concurrent temporal associations than by lagged temporal associations.

**H4:** To the extent that there are lagged associations of high-activated positive moods and overall proactive goal regulation, they will be stronger between moods and subsequent proactivity than the reverse.

In Study 1, I test Hypotheses 1 and 2 and in Study 2 I replicate and extend analyses to test all Hypotheses (1 through 4). The two studies also focus on different types of proactivity: Study 1 on work-related proactivity and Study 2 on career-related proactivity.

### 6.3 Study 1

#### 6.3.1 Methods

##### 6.3.1.1 Sample and procedure

This study analyses data previously referred to in Chapters 4 and 5. Thus, I draw on the sample of baseline employees working for a UK-based, multinational organisation in a call centre environment. Customer service representatives (N = 694) were invited to take part in a questionnaire 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 if they completed it. Senior management endorsed the survey. Only questionnaires in which all measures of interest were fully completed were included. The response rate was
32% (N = 227). Respondents ranged from 18 to 61 years (M = 33.63, SD = 11.22), with tenure ranging from less than one year to 34 years (M = 4.41, SD = 5.23). 66% of the respondents were female and 78% were full-time rather than part-time employed.

6.3.1.2 Measures

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

**Work-related moods.** I measured moods at work on a 7-point Likert scale with four items per quadrant based on an extended measure of Warr (1990). I found previous support for the four-factor structure of this measure in Chapter 4. High-activated positive moods were measured by the following items: enthusiastic, excited, inspired, and joyful (α = .89). Low-activated positive moods were measured with: at ease, calm, laid-back, relaxed (α = .82). High-activated negative moods were measured with the following items: anxious, nervous, tense, and worried (α = .80), and Low-activated negative moods with dejected, depressed, despondent, and hopeless (α = .84). I asked respondents to indicate their feelings when at work over the past month (1 = never to 7 = always).

**Work-related proactive goal regulation.** I initially developed and validated this measure of proactive goal regulation, comprising the elements of envisioning, planning, enacting, and reflecting, in Chapter 5. For the enacting element of proactivity, I 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? (α = .89; 1 = not at all to 5 = a great deal). The same time frame was used for inquiring about work-related affective experiences.

For envisioning, planning and reflecting, 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), on various cognitive activities. The items were as follows: 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 (α = .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 (α = .88); Reflecting - monitoring the effects of your change-related behaviour, 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 (α = .91).

6.3.2 Results

Table 6.1 shows the descriptive statistics and zero-order correlations for the major variables. In order to obtain information on the relationships for each of the affect quadrants with different elements of proactive goal regulation whilst adjusting for other elements of proactive goal regulation, I ran general linear models in SPSS to test the hypotheses. I controlled all elements of proactive goal regulation as well as all affect quadrants, for each other respectively in order to arrive at insights into the unique relationships between each affect quadrant with each element of proactive goal regulation. I additionally controlled for employees' general tendencies to perceive situations as either positive or negative, and controlled for effects of age and gender in all analyses. The results of these analyses are shown in Table 6.2.
Table 6.1
Study I – Means, Standard Deviations, and Correlations

<table>
<thead>
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<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
<th>9.</th>
<th>10.</th>
<th>11.</th>
<th>12.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gender (0 = female, 1 = male)</td>
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<td>0.47</td>
<td>---</td>
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<tr>
<td>2. Age</td>
<td>33.63</td>
<td>11.22</td>
<td>-.12</td>
<td>---</td>
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<tr>
<td>3. Positive Affectivity</td>
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<td>0.94</td>
<td>-.14*</td>
<td>.07</td>
<td>(.92)</td>
<td></td>
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<tr>
<td>4. Negative Affectivity</td>
<td>1.62</td>
<td>0.72</td>
<td>-.18*</td>
<td>.06</td>
<td>.02</td>
<td>(.89)</td>
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</tr>
<tr>
<td>5. Envisioning</td>
<td>3.06</td>
<td>1.00</td>
<td>-.09</td>
<td>.39**</td>
<td>.82</td>
<td>(.86)</td>
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<tr>
<td>6. Planning</td>
<td>2.54</td>
<td>1.09</td>
<td>-.15*</td>
<td>.29**</td>
<td>.84</td>
<td>.63**</td>
<td>(.88)</td>
<td></td>
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<tr>
<td>7. Enacting (Task Proactivity)</td>
<td>2.99</td>
<td>1.09</td>
<td>-.16*</td>
<td>.33**</td>
<td>.05</td>
<td>.52**</td>
<td>.48**</td>
<td>(.89)</td>
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<tr>
<td>8. Reflecting</td>
<td>2.35</td>
<td>1.09</td>
<td>-.11</td>
<td>.34**</td>
<td>.10</td>
<td>.57**</td>
<td>.69**</td>
<td>.58**</td>
<td>(.91)</td>
<td></td>
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</tr>
<tr>
<td>9. High-activated Positive Moods</td>
<td>3.43</td>
<td>1.33</td>
<td>-.18**</td>
<td>-.05</td>
<td>.63**</td>
<td>.01</td>
<td>.39**</td>
<td>.30**</td>
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<td>.39**</td>
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</tr>
<tr>
<td>10. Low-activated Positive Moods</td>
<td>3.88</td>
<td>1.19</td>
<td>.08</td>
<td>.00</td>
<td>.30**</td>
<td>-.28**</td>
<td>.20**</td>
<td>.03</td>
<td>.16*</td>
<td>.08</td>
<td>.43**</td>
<td>(.82)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. High-activated Negative Moods</td>
<td>2.33</td>
<td>1.00</td>
<td>.04</td>
<td>-.09</td>
<td>.55**</td>
<td>.03</td>
<td>.12</td>
<td>.02</td>
<td>.09</td>
<td>-.08</td>
<td>-.41**</td>
<td>(.80)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Low-activated Negative Moods</td>
<td>2.24</td>
<td>1.14</td>
<td>.11</td>
<td>-.03</td>
<td>-.37**</td>
<td>.33**</td>
<td>.02</td>
<td>.02</td>
<td>-.06</td>
<td>-.04</td>
<td>-.42**</td>
<td>-.31**</td>
<td>.56**</td>
<td>(.84)</td>
</tr>
</tbody>
</table>

Note. Internal consistency values (Cronbach’s Alphas) appear across the diagonal in parentheses. *p < .05, **p < .01. N=227.
Table 6.2  
*General Linear Models on Affect Quadrants and Work-related Proactive Goal Regulation*

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Parameter</th>
<th>B</th>
<th>SE</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work-Envisioning</td>
<td>Low-activated positive moods</td>
<td>.24</td>
<td>.06</td>
<td>3.63***</td>
</tr>
<tr>
<td>Work-Planning</td>
<td></td>
<td>-.10</td>
<td>.07</td>
<td>-1.51</td>
</tr>
<tr>
<td>Work-Reflecting</td>
<td></td>
<td>-.07</td>
<td>.07</td>
<td>-1.03</td>
</tr>
<tr>
<td>Work-Enacting</td>
<td>High-activated positive moods</td>
<td>.26</td>
<td>.07</td>
<td>3.52**</td>
</tr>
<tr>
<td>Work-Reflecting</td>
<td></td>
<td>.29</td>
<td>.07</td>
<td>3.92***</td>
</tr>
<tr>
<td>Work-Planning</td>
<td>Low-activated negative moods</td>
<td>.15</td>
<td>.08</td>
<td>1.83</td>
</tr>
<tr>
<td>Work-Reflecting</td>
<td></td>
<td>.14</td>
<td>.08</td>
<td>1.72</td>
</tr>
<tr>
<td>Work-Enacting</td>
<td></td>
<td>.14</td>
<td>.08</td>
<td>1.69</td>
</tr>
<tr>
<td>Work-Reflecting</td>
<td>High-activated negative moods</td>
<td>.03</td>
<td>.10</td>
<td>0.29</td>
</tr>
<tr>
<td>Work-Planning</td>
<td></td>
<td>-.01</td>
<td>.10</td>
<td>-0.15</td>
</tr>
<tr>
<td>Work-Reflecting</td>
<td></td>
<td>.00</td>
<td>.10</td>
<td>0.09</td>
</tr>
</tbody>
</table>

*Note.* All parameters are controlled for age, gender, positive and negative affectivity, and the respective three further affect quadrants. *p< .05, **p< .01, ***p<. 001. N=227.

Hypothesis 1 predicted that high-activated positive moods would be a predictor of all elements of proactive goal regulation, even when controlling the elements for one another. Results supported this hypothesis (B = .24, SE = .06, p < .001 for envisioning, B = .25, SE = .07, p < 0.01 for planning; B = .26, SE = .07, p < .01 for enacting and B = .29, SE = .07, p < .001 for reflecting). As predicted in Hypothesis 2, low-activated negative moods were positively related to the envisioning element of proactive goal regulation (B = .28, SE = .07, p < .001), but contrary to prediction it was not associated with planning or reflecting. Also as expected, low-activated negative moods were not a significant predictor of the...
enacting element of proactivity, and low-activated positive moods and high-activated negative moods were not related to any elements of proactive goal regulation. Findings thus indicated a prevalent role of high-activated positive moods for all elements of proactive goal regulation, with an additional positive association of low-activated negative moods with envisioning.

Study 1 focused on proactivity that is related to changing mainly the work context. However, proactivity is by definition also concerned with mainly changing oneself to achieve a better fit with the work environment i.e. career-related proactivity. My expectation was that affective experiences would show similar relations with the four elements of career-related proactivity. I therefore conducted a second study (Study 2) in order to determine whether the findings from Study 1 could be replicated using a different sample and using career-related proactivity. In addition, Study 2 was conducted in order to extend the findings from Study 1 by investigating temporal relationships between mood and proactivity.

6.4 Study 2

6.4.1 Methods

6.4.1.1 Sample and procedure

Participants in Study 2 were 250 first-year undergraduate students in a British medical school. The study was set against the objective of the medical school to promote career-related proactivity in their medical students. This objective had been inspired by research that suggested that proactive medical students were more successful in their later careers (Buddeberg-Fischer, Stamm, & Buddeberg, 2009). The objective of the project was also in line with recommendations of the Tomorrow's Doctors report (General Medical Council, 2003) that outlined:

"Attitudes and behaviour that are suitable for a doctor must be developed. Students must develop qualities that are appropriate to their future responsibilities to patients, colleagues and society in general" (p.5).

As such, for the first year of undergraduate medical studies, the course curriculum aimed to develop a professional attitude towards public health and epidemiology. Historically, the focus of the course was more on developing attitudes of students towards achieving the future qualifications of a doctor, such as
internalisation of ethical values and empathy towards patients' needs (Jha, Bekker, Duffy, & Roberts, 2006). However, course directors aimed to find out about how to best promote actual behaviours of students that were future-oriented and self-directed towards achieving a future career as a medical doctor. For instance, they should actively ask for clarifications if course requirements remain unclear (voice; Van Dyne & LePine, 1998) and actively seek out information with respect to their future careers as medical professionals such as talking to medical professionals (career initiative; Tharenou & Terry, 1998).

The study was carried out over four nearly equidistant time points (however ranging between four weeks and twelve weeks of time distance between time points) spanning the entire first year of their academic training. Time points were chosen in a way to maintain as close as possible equidistant intervals, whilst also fulfilling several criteria that were important to the overall study design: Firstly, because mood and proactivity measures asked respondents to indicate responses over the course of a month, there was a need of a minimum time frame between studies of four weeks in order to avoid methodological overlap. Secondly, the time points were chosen in a way that the past month that measures referred to covered attendance at the University — for instance I chose not to conduct wave 2 directly after the students' return from their two weeks' winter holidays, but rather decided to choose a time point by which students had experienced regular university attendance again.

Demographic information and more stable character traits were additionally measured at the onset of the study in an online survey. The four surveys across the year were paper and pencil surveys that were administered, completed and collected at the end of lectures. Participation in these surveys was voluntarily. Ethical approval to conduct the study was obtained from the medical school.

The starting point of the study had a conceptual zero starting point, because it began measuring study-related affective experiences and proactivity at the very onset of University education. The study ended with data collection at one of the last lectures that students attended at the end of their first academic year, thus providing a natural ending point for measuring their career proactivity during their first academic year (a timeline of the study against the academic year is provided in Figure 6.3).
Figure 6.3

*Overview of Timeline – Study 2*

![Timeline Diagram](image)

Start of Academic Year & first lecture (week 7)  
Baseline Survey  
Survey 1  
Survey 2  
Survey 3  
Survey 4  
End of lectures (week 28)  
End of Academic Year (week 32)

**Note.** The figure does not intend to depict exact proportions of time difference of the surveys.

Students received individualised feedback at the end of the study and were entered into a prize draw upon participation in the survey. 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 3 142 students responded (57% response rate) and at time 4 there were 165 responses to the survey (68% response rate). Average response rate across time was 68%.

The current study was based on a subsample of n= 132 students (representing a 53% response rate) who had responded to demographic and trait measures in the baseline survey at the start of the study and to all measures of interest at time point one, and who had provided their names in order to enable matching of surveys over time. In order to analyse cross-lagged effects over time, individual missing responses at later time points were estimated by the MPlus, version 6, software using maximum likelihood (ML) estimation. Age for the present subsample of students ranged from 18 to 30 years (M = 19.15, SD = 1.74). 71% of the students were female.

### 6.4.1.2 Measures

**Control variables.** I controlled for the same variables that I did in Study 1. Thus, I controlled for gender and age (gender: 0 = female, 1 = male; age: in years) as well as positive and negative affectivity. Affectivity was again measured by using the five highest loading items for positive and negative trait affectivity from the PANAS scale, respectively (Watson et al., 1988). Respondents were asked to what extent they in general felt *enthusiastic, interested, determined, excited* and *inspired* (positive affectivity; $\alpha = .79$) as well as *scared, afraid, upset, distressed, and nervous* (negative affectivity; $\alpha = .85$). Anchors ranged from 1= ‘very slightly or not at all’ to 5=...
Independent sample t-tests showed no significant differences in the controls for the longitudinal subsample compared to the full sample.

**Study-related moods.** I used the same measure as in Study 1, measuring the respondents' affective experiences during their studies on a 7-point Likert scale with four items per quadrant based on an extended measure of Warr (1990). High-activated positive moods were measured by the following items: *enthusiastic, excited, inspired,* and *joyful* (Time 1–4: α = .77; .86; .87; .90). Low-activated positive moods were measured with: *at ease, calm, laid-back,* and *relaxed* (Time 1–4: α = .84; .86; .86; .87). High-activated negative moods were measured with the following items: *anxious, nervous, tense* and *worried* (Time 1–4: α = .86; .84; .87; .90). Low-activated negative moods with *dejected, depressed, despondent* and *hopeless* (Time 1–4: α = .82; .80; .81; .92). Respondents were asked to indicate their feelings when carrying out their studies over the past month (1 = *never* to 7 = *always*).

**Career-related proactive goal regulation.** Measures currently exist to assess the 'enacting' component of career-related proactive goal regulation, but not the other three components. For the enacting element of career-related proactivity, I used a composite measure of career initiative (Tharenou & Terry, 1998) and feedback seeking (Ashford, 1986). The scale comprised 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? and discussed your career aspirations with doctors or other professionals? (Time 1–4: α = .80; .85; .84; .74; 1 = *not at all* to 5 = *a great deal*).

I adjusted the measure of work-related proactivity (see Chapter 5) to fit the focus of career-related proactivity in a learning environment. In designing this career-related proactive goal regulation measure, the objective was to keep it as constant to the previous measure as possible, whilst adapting it in a sensible way to the higher education environment in order to maintain face validity (Hinkin, 2005). In adapting the items, my choice of words was informed by the official course handbook of the medical students that were going to be part of the study as well as by feedback from one of the lecturers in the course. The measure was piloted with
eight PhD students at the Institute of Work Psychology and all items appeared clear and relevant to the students, thus no further changes to the final measure were made after the pilot test.

In the career-related proactive goal regulation measure, students were asked to indicate how much time and effort they had spent over last month, ranging from 1 (not at all) to 5 (a great deal), on various cognitive activities. Initial four item solutions for the elements of envisioning and reflecting were reduced to a final selection of three items per subscale, following conceptual considerations.  

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: α = .81; .81; .84; .85);

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: α = .84; .89; .86; .86);

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: α = .80; .81; .90; .90). For the cross-lagged analyses I additionally used a composite score of envisioning, planning, enacting and reflecting to represent overall proactive goal regulation at each time point (Time 1-4: α = .92; .93; .94; .93).

I tested the factorial structure of the career-related proactive goal regulation measure by conducting confirmatory factor analyses at each time point, following the

---

9 An anonymous reviewer at the Journal of Applied Psychology, where I submitted this Chapter 6 as a full paper, pointed out the more task compliant nature of some of the items that dealt with seeking feedback about the course performance. In response to the reviewer, I deleted the following items from the final measure: ...thinking about ways to improve your performance in your course? (envisioning), ...sought information from your class mates about your performance in the course? (enacting), and asking others about the effects of your activities aimed at increasing your performance on your course? (reflecting). The overall factor structure slightly improved following this adjustment.
same procedure as in Chapter 5 when investigating work-related proactive goal regulation. The results are depicted in Table 6.3. As expected, at each time point the hypothesised four factor solution of envisioning, planning, enacting and reflecting as four distinct factors (model 5) had a significantly better fit to the data than competing models that assumed no correlations between measures (model 1), only one overall factor (model 2), enacting versus the more cognitive goal regulation elements of envisioning, planning and reflecting (model 3) and pre-enacting (envisioning and planning) versus during and post-enacting (enacting and reflecting) goal regulation elements (model 4). Further, the fit indices of the hypothesised model 5 had an overall acceptable fit\textsuperscript{10} at each time point - for time point 1: $\chi^2/df = 2.18$, CFI = .90, RMSEA = .09, SRMR = .09; for time point 2: $\chi^2/df = 2.34$, CFI = .90, RMSEA = .11, SRMR = .07; for time point 3: $\chi^2/df = 1.83$, CFI = .93, RMSEA = .09, SRMR = .06; for time point 4: $\chi^2/df = 2.72$, CFI = .87, RMSEA = .12, SRMR = .08.

6.4.2 Results

I assessed whether there were systematic differences in all measures used in this study between the longitudinal subsample and the full sample for each time point. Table 6.4 shows the means and SD for both samples, respectively. T-tests indicated there were no systematic differences between the longitudinal and the full sample at any occasion, thus justifying the use of the longitudinal subsample.

In order to test for measurement properties of measures over time I further conducted longitudinal confirmatory factor analyses, following the steps outlined by Brown (2006). Thus, I 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 6.5). 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, AIC values (Akaike, 1987) were lower for the more parsimonious models in which factor loadings were restricted to be equal over time. I thus assumed measurement invariance across time.

\textsuperscript{10} I followed Schermelleh-Engel et al.'s (2003) recommendations for indications of good model fit: A chi-square ratio $\leq 3$; an SRMR (standardised root mean square residual) $< .10$; an RMSEA (root-mean-square error of approximation) $< .08$; and a CFI (comparative fit index) value $\geq .95$. 

132
### Table 6.3

**Study 2 – Comparison of Alternative Factor Structures for Proactive Goal Regulation**

<table>
<thead>
<tr>
<th>Time Point</th>
<th>Model</th>
<th>Descriptives</th>
<th>$\chi^2$</th>
<th>$df$</th>
<th>Ratio $\chi^2/df$</th>
<th>$\Delta \chi^2$, $\Delta df$ (model of comparison)</th>
<th>CFI</th>
<th>RMSEA</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Baseline model: All items uncorrelated</td>
<td>1123.39</td>
<td>105</td>
<td>10.69</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Model 2</td>
<td>One factor: Envisioning, planning, enacting, reflecting</td>
<td>315.51</td>
<td>90</td>
<td>3.50</td>
<td>807.88, 15* (model 1)</td>
<td>0.779</td>
<td>0.138</td>
<td>0.085</td>
</tr>
<tr>
<td>Time Point 1</td>
<td>Model 3</td>
<td>Two factors: Pre-and post elements (envisioning, planning, reflecting) vs. proactive behaviour (enacting)</td>
<td>263.40</td>
<td>89</td>
<td>2.95</td>
<td>52.11, 1* (model 2)</td>
<td>0.829</td>
<td>0.122</td>
<td>0.091</td>
</tr>
<tr>
<td></td>
<td>Model 4</td>
<td>Two factors: Pre-elements (envisioning and planning) vs. during and after-elements (enacting and reflecting)</td>
<td>245.99</td>
<td>89</td>
<td>2.76</td>
<td>17.44, 0* (model 3)</td>
<td>0.846</td>
<td>0.116</td>
<td>0.079</td>
</tr>
<tr>
<td></td>
<td>Model 5</td>
<td>Four factors: All goal regulation elements as theorised (envisioning, planning, enacting, reflecting)</td>
<td>183.05</td>
<td>84</td>
<td>2.18</td>
<td>62.94, 5* (model 4)</td>
<td>0.903</td>
<td>0.095</td>
<td>0.086</td>
</tr>
<tr>
<td></td>
<td>Model 1</td>
<td>Baseline model: All items uncorrelated</td>
<td>1216.23</td>
<td>105</td>
<td>11.58</td>
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<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Model 2</td>
<td>One factor: Envisioning, planning, enacting, reflecting</td>
<td>385.26</td>
<td>90</td>
<td>4.28</td>
<td>830.97, 15* (model 1)</td>
<td>0.734</td>
<td>0.167</td>
<td>0.084</td>
</tr>
<tr>
<td>Time Point 2</td>
<td>Model 3</td>
<td>Two factors: Pre-and post elements (envisioning, planning, reflecting) vs. proactive behaviour (enacting)</td>
<td>330.21</td>
<td>89</td>
<td>3.71</td>
<td>55.05, 1* (model 2)</td>
<td>0.783</td>
<td>0.152</td>
<td>0.093</td>
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<tr>
<td></td>
<td>Model 4</td>
<td>Two factors: Pre-elements (envisioning and planning) vs. during and after-elements (enacting and reflecting)</td>
<td>304.92</td>
<td>89</td>
<td>3.42</td>
<td>25, 29, 0* (model 3)</td>
<td>0.806</td>
<td>0.144</td>
<td>0.086</td>
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<tr>
<td></td>
<td>Model 5</td>
<td>Four factors: All goal regulation elements as theorised (envisioning, planning, enacting, reflecting)</td>
<td>197.07</td>
<td>84</td>
<td>2.34</td>
<td>107.85, 5* (model 4)</td>
<td>0.898</td>
<td>0.107</td>
<td>0.075</td>
</tr>
<tr>
<td>Time Point</td>
<td>Model</td>
<td>Descriptives</td>
<td>$\chi^2, df$</td>
<td>Ratio $\chi^2/df$</td>
<td>$\Delta \chi^2, \Delta df$ (model of comparison)</td>
<td>CFI</td>
<td>RMSEA</td>
<td>SRMR</td>
<td></td>
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<td>-----------</td>
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<td>--------------------------------------------------------------------</td>
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<td></td>
</tr>
<tr>
<td><strong>Model 1</strong></td>
<td>Baseline model: All items uncorrelated</td>
<td>1166.98, 105</td>
<td>11.11</td>
<td>---</td>
<td>0.837</td>
<td>0.138</td>
<td>0.068</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Model 2</strong></td>
<td>One factor: Envisioning, planning, enacting, reflecting</td>
<td>263.08, 90</td>
<td>2.92</td>
<td>903.90, 15* (model 1)</td>
<td>0.875</td>
<td>0.121</td>
<td>0.071</td>
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<td></td>
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<tr>
<td><strong>Model 3</strong></td>
<td>Two factors: Pre-and post elements (envisioning, planning, reflecting) vs. proactive behaviour (enacting)</td>
<td>221.56, 89</td>
<td>2.48</td>
<td>41.52, 1* (model 2)</td>
<td>0.880</td>
<td>0.119</td>
<td>0.062</td>
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<tr>
<td><strong>Model 4</strong></td>
<td>Two factors: Pre-elements (envisioning and planning) vs. during and after-elements (enacting and reflecting)</td>
<td>216.85, 89</td>
<td>2.43</td>
<td>4.71, 0* (model 3)</td>
<td>0.933</td>
<td>0.092</td>
<td>0.064</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Model 5</strong></td>
<td>Four factors: All goal regulation elements as theorised (envisioning, planning, enacting, reflecting)</td>
<td>155.48, 84</td>
<td>1.85</td>
<td>61.37, 5* (model 4)</td>
<td>0.933</td>
<td>0.092</td>
<td>0.064</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time Point</th>
<th>Model</th>
<th>Descriptives</th>
<th>$\chi^2, df$</th>
<th>Ratio $\chi^2/df$</th>
<th>$\Delta \chi^2, \Delta df$ (model of comparison)</th>
<th>CFI</th>
<th>RMSEA</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model 1</strong></td>
<td>Baseline model: All items uncorrelated</td>
<td>1199.66, 105</td>
<td>11.42</td>
<td>---</td>
<td>0.783</td>
<td>0.155</td>
<td>0.085</td>
<td></td>
</tr>
<tr>
<td><strong>Model 2</strong></td>
<td>One factor: Envisioning, planning, enacting, reflecting</td>
<td>328.04, 90</td>
<td>3.64</td>
<td>871.62, 15* (model 1)</td>
<td>0.783</td>
<td>0.156</td>
<td>0.084</td>
<td></td>
</tr>
<tr>
<td><strong>Model 3</strong></td>
<td>Two factors: Pre-and post elements (envisioning, planning, reflecting) vs. proactive behaviour (enacting)</td>
<td>327.07, 89</td>
<td>3.67</td>
<td>0.97, 1 (model 2)</td>
<td>0.783</td>
<td>0.156</td>
<td>0.084</td>
<td></td>
</tr>
<tr>
<td><strong>Model 4</strong></td>
<td>Two factors: Pre-elements (envisioning and planning) vs. during and after-elements (enacting and reflecting)</td>
<td>278.02, 89</td>
<td>3.13</td>
<td>50.02, 1* (model 1)</td>
<td>0.827</td>
<td>0.139</td>
<td>0.084</td>
<td></td>
</tr>
<tr>
<td><strong>Model 5</strong></td>
<td>Four factors: All goal regulation elements as theorised (envisioning, planning, enacting, reflecting)</td>
<td>228.73, 84</td>
<td>2.72</td>
<td>49.29, 5* (model 4)</td>
<td>0.868</td>
<td>0.125</td>
<td>0.078</td>
<td></td>
</tr>
</tbody>
</table>

*Note:* N for Time Points (TP) 1 -4, respectively: TP1: 132, TP2: 117, TP3: 101, TP4: 110.; * model improvement significant at $p < .05$ level; † change assessed vs. previously best, or alternatively most parsimonious, model.
Table 6.4

Comparison of Means for Longitudinal Sample and Full Sample at Times 1 to 4

<table>
<thead>
<tr>
<th></th>
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Note. N = 101 – 226. There were no significant differences at .05 probability level between longitudinal sample and full sample for the corresponding time period.
Table 6.5

Longitudinal Confirmatory Factor Analyses

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*Note: n = 132; $\Delta$ change assessed vs. respective configural invariance model; * model improvement significant at $p < .05$ level.
6.4.2.1 Relationships between moods and career-related proactive goal regulation

Table 6.6 shows the descriptive statistics and zero-order correlations for the major variables. In order to obtain information on the unique relationships for each affect quadrant with different elements of career-related proactive goal regulation, I analysed general linear models at Time 1 in which all affect quadrants were simultaneously entered as independent variables and all elements of proactive goal regulation as dependent variables. I controlled for systematic influences of age, gender, positive and negative affectivity in all analyses. The results of these analyses are shown in Table 6.7.

Hypothesis 1 was supported. High-activated positive moods were positively associated with all elements of career-related proactive goal regulation (B = .25, SE = .10, p < .05, for envisioning; B = .22, SE = .10, p < .05, for planning; B = .23, SE = .07, p < .01 for enacting and B = .29, SE = .08, p < .01, for reflecting). Further, in support of Hypothesis 2, there was a positive relationship between low-activated negative moods and the envisioning (B = .30, SE = .12, p < .05), planning (B = .36, SE = .12, p < .01) and reflecting (B = .27, SE = .10, p < .05) elements of career-related proactive goal regulation. Notably, however, low-activated negative moods were not a significant predictor of the enacting element of proactivity (B = -.02, SE = .09, ns). As expected, low-activated positive moods and high-activated negative moods were not associated with career-related proactive goal regulation.
Table 6.6

Study 2 – Correlations

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<td>.45**</td>
<td>(.94)</td>
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<tr>
<td>18. T4 High-activated</td>
<td>.14</td>
<td>.16</td>
<td>.40**</td>
<td>-.14</td>
<td>.21*</td>
<td>.13</td>
<td>.20*</td>
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<td>.22*</td>
<td>.57**</td>
<td>.32**</td>
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<td>-.09</td>
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<td>.30**</td>
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<td>Positive Moods</td>
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<tr>
<td>19. T4 Overall Proactive</td>
<td>.16</td>
<td>.11</td>
<td>.35**</td>
<td>.19*</td>
<td>.61**</td>
<td>.41**</td>
<td>.44**</td>
<td>.45**</td>
<td>.59**</td>
<td>.32**</td>
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<td>.72**</td>
<td>.39**</td>
<td>(.93)</td>
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<td>Goal Regulation</td>
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*Note. Internal consistency values (Cronbach's Alphas) appear across the diagonal in parentheses. *p < .05, **p < .01. N = 110 - 192.*
Table 6.7

**General Linear Models on Affect Quadrants and Career-related Proactive Goal Regulation**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Parameter</th>
<th>B</th>
<th>SE</th>
<th>T</th>
</tr>
</thead>
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<tr>
<td>Career-Envisioning</td>
<td></td>
<td>0.04</td>
<td>0.08</td>
<td>0.44</td>
</tr>
<tr>
<td>Career-Planning</td>
<td>Low-activated positive moods</td>
<td>0.08</td>
<td>0.08</td>
<td>0.93</td>
</tr>
<tr>
<td>Career-Enacting</td>
<td></td>
<td>-0.04</td>
<td>0.06</td>
<td>-0.60</td>
</tr>
<tr>
<td>Career-Reflecting</td>
<td></td>
<td>0.01</td>
<td>0.07</td>
<td>0.20</td>
</tr>
<tr>
<td>Career-Envisioning</td>
<td></td>
<td>0.25</td>
<td>0.10</td>
<td>2.60*</td>
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<tr>
<td>Career-Planning</td>
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<td>0.22</td>
<td>0.10</td>
<td>2.26*</td>
</tr>
<tr>
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<td></td>
<td>0.23</td>
<td>0.07</td>
<td>3.20**</td>
</tr>
<tr>
<td>Career-Reflecting</td>
<td></td>
<td>0.29</td>
<td>0.08</td>
<td>3.45**</td>
</tr>
<tr>
<td>Career-Envisioning</td>
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<td>0.30</td>
<td>0.12</td>
<td>2.46*</td>
</tr>
<tr>
<td>Career-Planning</td>
<td>Low-activated negative moods</td>
<td>0.36</td>
<td>0.12</td>
<td>2.99**</td>
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<td>-0.02</td>
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<td>2.74*</td>
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<td>Career-Envisioning</td>
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<td>0.12</td>
<td>0.67</td>
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<tr>
<td>Career-Planning</td>
<td>High-activated negative moods</td>
<td>0.08</td>
<td>0.12</td>
<td>0.69</td>
</tr>
<tr>
<td>Career-Enacting</td>
<td></td>
<td>0.17</td>
<td>0.08</td>
<td>1.95</td>
</tr>
<tr>
<td>Career-Reflecting</td>
<td></td>
<td>0.08</td>
<td>0.10</td>
<td>0.74</td>
</tr>
</tbody>
</table>

*Note.* All parameters are controlled for age, gender, positive and negative affectivity, and the respective three further affect quadrants. *p < .05, **p < .01, ***p < .001.

n = 132.

6.4.2.2 Cross-lagged structural models

Cross-sectional findings from Time 1 in Study 2 indicated that high-activated positive moods were positively associated with overall proactive goal regulation. I used a four time-point cross-lagged design (similar to the one introduced in Frese et al., 2007) over the course of the first full academic year of medical students to assess whether this relationship replicated over time. Specifically, I compared a Structural Equation Model in which high-activated positive moods and overall proactive goal regulation were not related to each other (see Figure 6.4, Model 1, baseline stability) with the hypothesised model in which high-activated positive moods predicted
proactive goal regulation at each time point, whilst controlling for previous levels of both measures (see Figure 6.4, Model 2, synchronous effects). I additionally controlled for systematic influences of age and gender, as well as positive and negative affectivity at each time point. In addition, I explored time-lagged effects. Specifically, I tested whether high-activated positive moods at Time X predicted subsequent levels of proactive goal regulation at Time X + 1 (see Figure 6.4, Model 3, lagged effects of moods on proactivity), and I tested this cross-lagged model against the counterhypothesis in which proactive goal regulation at Time X influenced subsequent affective experiences at Time X + 1 (see Figure 6.4, Model 4, reversed lagged effects of proactivity on mood).

In order to keep the responses to parameter estimates ratio to reasonable levels I tested a model with observed mean scale scores. I corrected for the measurement error by estimating \([1 - \text{internal consistency reliability}]\) multiplied by the observed variance of the scale. I used the cut-off criteria of \(\chi^2 / df < 3\), SRMR < .10, RMSEA < .08, and CFI ≥ .95 for comparing nested models and AIC values for comparing the fit of non-nested models (Schermelleh-Engel et al., 2003). I additionally accounted for the number of nested model comparisons by adjusting the \(p\) - value for the number of comparisons made (Shaffer, 1995).

Results are shown in Table 6.8. Hypothesis 1 which proposed a positive association of high-activated positive moods with proactive goal regulation, was further supported in the analyses. Model 2, which assumed an association between moods and proactive goal regulation at all times, had a significantly better fit to the data than Model 1, which assumed that there were no associations between high-activated positive moods and proactive goal regulation (\(\Delta \chi^2 = 37.66, \Delta df 4^*\)). Additionally, Model 2 showed an excellent fit to the data with \(\chi^2 (23, n = 132) = 37.51, \chi^2 / df = 1.63, \text{RMSEA} = .07, \text{SRMR} = .04, \text{and CFI} = .98\). The associations between high-activated positive moods and proactive goal regulation were for Time 1: \(\beta = .33, p < .001\), for Time 2: \(\beta = .09, p < .05\), for Time 3: \(\beta = .13, p < .01\) and for Time 4: \(\beta = .06, \text{ns}\) (see Figure 6.5). In support of Hypothesis 3, Model 2 had smaller AIC values than either of the two lagged models (Model 3 and 4). The synchronous relationship between moods and proactive goal regulation appeared stronger than the one of lagged effects between the two constructs.
## Cross-lagged Structural Equation Models

<table>
<thead>
<tr>
<th>Model 1: Baseline Stability</th>
<th>T1</th>
<th>T2</th>
<th>T3</th>
<th>T4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mood</td>
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<tr>
<td>Proactivity</td>
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</table>

<table>
<thead>
<tr>
<th>Model 2: Synchronous effects of high-activated positive moods on proactive goal regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
</tr>
<tr>
<td>Mood</td>
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<tr>
<td>Proactivity</td>
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</table>

<table>
<thead>
<tr>
<th>Model 3: Lagged effects of high-activated positive moods on proactive goal regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
</tr>
<tr>
<td>Mood</td>
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<tr>
<td>Proactivity</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Model 4: Reversed lagged effects of proactive goal regulation on high-activated positive moods</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
</tr>
<tr>
<td>Mood</td>
</tr>
<tr>
<td>Proactivity</td>
</tr>
</tbody>
</table>

*Note. T1-T4 = Time points 1-4; Mood = High-activated positive moods; Proactivity = Overall proactive goal regulation.*
Table 6.8

Comparison of Alternative Cross-lagged Structural Equation Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Descriptives</th>
<th>$\chi^2, df$</th>
<th>Ratio $\frac{\chi^2}{df}$</th>
<th>$\Delta \chi^2, \Delta df$</th>
<th>CFI</th>
<th>AIC</th>
<th>RMSEA</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>Baseline stability model: High-activated positive moods and overall proactive goal regulation uncorrelated</td>
<td>75.17, 27</td>
<td>2.78</td>
<td>---</td>
<td>.927</td>
<td>3089.29</td>
<td>.116</td>
<td>.172</td>
</tr>
<tr>
<td>Model 2</td>
<td>Synchronous associations of high-activated positive moods and overall proactive goal regulation</td>
<td>37.51, 23</td>
<td>1.63</td>
<td>37.66, 4*</td>
<td>.978</td>
<td>3059.64</td>
<td>.069</td>
<td>.042</td>
</tr>
<tr>
<td>Model 3</td>
<td>Lagged associations of high-activated positive moods at Time X and overall proactive goal regulation at Time X+1</td>
<td>60.26, 24</td>
<td>2.51</td>
<td>14.91, 3*</td>
<td>.945</td>
<td>3080.39</td>
<td>.107</td>
<td>.116</td>
</tr>
<tr>
<td>Model 4</td>
<td>Reversed lagged associations of overall proactive goal regulation at Time X and high-activated positive moods at Time X+1</td>
<td>70.53, 24</td>
<td>2.93</td>
<td>4.64, 3</td>
<td>.930</td>
<td>3090.65</td>
<td>.121</td>
<td>.144</td>
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</table>

Note. n = 132; * model improvement significant at $p < .05$ level; †change assessed vs. model 1 (baseline model).
Figure 6.5

*Structural Equation Model with Synchronous Effects of High-activated Positive Moods on Overall Proactive Goal Regulation*

![Diagram showing the structural equation model]

Note. T1 - T4 = Time points 1 - 4. *p < .05, **p < .01, ***p < .001. Model fit: $\chi^2 (23) = 7.51, \chi^2 /df 1.63; \text{RMSEA} = .069; \text{SRMR} = .042; \text{CFI} = .978$. Control variables are omitted for parsimony. n = 132.

Because the synchronous model did not allow for investigating any order of influence between affect and proactive goal regulation, I additionally compared the two models with the weaker, lagged effects, in order to extend analyses to the order of influence of the investigated relationships. I expected that any lagged associations would be from high-activated positive moods to subsequent proactive goal regulation, as opposed to the reversed direction (see models 3 and 4; Hypothesis 4). I tested this hypothesis in a two-step approach.

Firstly, I compared models 3 and 4 with the nested baseline model 1. Model 3 had a significantly better fit than the baseline model ($\Delta \chi^2 = 14.91, \Delta df 3^*). In contrast, Model 4 did not vary significantly from the baseline model ($\Delta \chi^2 = 4.64, \Delta df 3). In other words, lagged effects of moods on subsequent proactive goal regulation had a better fit to the data than a model in which no relationships between affect and proactivity were assumed. In contrast, lagged effects of proactivity on subsequent moods did not differ significantly from the model in which no relationships between the two constructs were assumed. Secondly, I compared Models 3 and 4 directly by comparing their AIC values. As expected, Model 3 (mood influencing subsequent proactivity) had a lower AIC value than the competing Model 4 (proactivity influencing subsequent moods). Hypothesis 4 was thus supported.
6.5 Discussion

In the present chapter I aimed to enhance understanding of the role of affective experiences at work for promoting proactivity. Findings showed that, as hypothesised, different types of moods influenced different elements of proactive goal regulation. Thus, how moods prompt future-focused and self-initiated efforts to change the self or situation is more complex than considered thus far. I suggest some core implications of my findings next.

6.5.1 Implications

An initial and key finding of the two studies concerns the positive role of high-activated positive moods for proactivity. High-activated positive moods, such as feelings of being inspired, energised and enthused, emerged as a consistent positive predictor across all elements of proactive goal regulation, across two independent investigations with rather diverse samples (call centre employees and medical students), and across two different types of proactivity (work- vs. career-related). Importantly, based on an investigation of the temporality of relationships over time-points, my studies provided evidence that high-activated positive moods prompt higher levels of proactive goal regulation rather than the reverse causal association. Moreover, ruling out the possibility that personality is driving the findings, high-activated positive moods were important even after controlling for trait affectivity.

All together, in extension of my analyses in Chapter 4, findings in this present chapter show strong evidence that feeling positive in an activated way is important in prompting forward-thinking, change-oriented behaviour. The importance of positive moods as a driver of proactivity is consistent with previous findings on a positive relationship of positive moods and the enacting element of proactivity (Den Hartog & Belschak, 2007; Fritz & Sonnentag, 2009), although the present studies goes further than existing work because they show that it is high-activated positive moods, not low-activated positive moods that are important. Theoretically, my findings are consistent with Parker, Bindl, and Strauss’s (2010) assumption of an energised to pathway for proactivity in which affect-related motivational states predict proactivity. Practically, my findings suggest the importance of generating high-activated positive moods if one wants to promote proactivity in the work place. Thus, organisations can shape employee proactivity by providing a work environment that
provides emotional experiences such as feeling inspired or enthused. This could involve creating new and challenging tasks for employees, or increasing emotional attachment to the organisation (I will return to this point in the overall discussion in Chapter 8 of my thesis).

Importantly, these studies are one of the first to differentiate between high-activated positive moods and low-activated positive moods. 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). The present studies support the value of a more differentiated approach to affect. In extension to my analyses in Chapter 4, these studies further show that relationships extend to all elements of the proactive goal regulation process, not only to the implementing, behavioural aspect of it. The findings clearly show it is the combination of positive valence and high activation - in the form of feelings like enthusiasm - that motivates proactive goal regulation. Whereas previous research on affect and behaviours mainly highlighted the importance of positive affect 'in general' for broadened cognitions and behaviours (e.g., Isen, 2000b), at least when it comes to proactive behaviours, it is not positive moods per se that are important, but high-activated positive moods. My findings therefore suggest the need for the development of theory regarding the different consequences of positive moods with varying levels of activation. Practically, organisations should carefully consider which type of affective experience is measured in employee surveys. Not differentiating, for instance, between high and low-activated positive moods, may mask substantive relationships.

A further important finding is the role of low-activated negative moods, or feelings such as being depressed or sad. These feelings were positively related to the envisioning element of proactive goal regulation for both work-related and career-related proactivity, and with the planning/reflecting elements of 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 (see Martin & Tesser, 1996). However, it is important to also observe that low-activated negative moods were consistently unrelated with actual engagement in proactive behaviours. Thus, feelings of depression are not beneficial in terms of spurring actual changes. Although I did not test this, extensive rumination or
contemplation of proactive change without action could ultimately be disruptive, from both an organisational perspective (e.g., ‘wasted’ time) and an individual perspective (e.g., discontent as a result of unfulfilled aspirations; see Seligman’s (1975) model on ‘helplessness’).

Unexpectedly, low-activated negative moods were not associated with the planning and reflecting elements of work-related proactive goal regulation, whereas it was associated with both elements in the context of career-related proactive goal regulation. These differential findings could be due to differences in the meaning of work- and career-related proactivity for depressed individuals: Changing the self to achieve a better fit to the environment (career-related proactivity) could be more highly relevant to the self (Markus & Nurius, 1986), prompting more depressed individuals to not only set proactive goals but also to plan and to ruminate about these goals more extensively as they would do when thinking about improving the organisation (work-related proactivity).

I found no associations between high-activated negative feelings, such as anxiety or tension, and proactivity. This finding is interesting given that prior research has shown that stressors such as time pressure can activate proactive behaviours like personal initiative (Fay & Sonnentag, 2002; Ohly, Sonnentag, & Pluntke, 2006). My findings suggest, in line with Ohly and Fritz’ (2007) work on time pressure and proactivity, that it is unlikely that time pressure has its effects through prompting anxiety. Instead, time pressure could lead to higher levels of proactivity via reappraisal mechanisms of the job incumbents eliciting high-activated, positive feelings such as excitement in the job.

Over and above the implications of the present research for understanding how mood influences proactivity, a further significant contribution of my research concerns a goal regulation approach to investigating proactivity. Studies have rarely looked at proactivity in this way, yet I showed in Chapter 5 that four elements of proactivity – envisioning, planning, enacting and reflecting – can usefully be distinguished from each other. These elements were not only factorially distinct, but also operated in differential ways. For instance, whereas depression was an important correlate of envisioning, these low-activated negative feelings had no implications for actual enacting of proactivity. Although not the emphasis of this thesis, further investigation could analyse proactivity and its antecedents using a goal regulation
perspective to gain more comprehensive insights into the mechanisms by which employees become proactive. For instance, Bindl and Parker (2010b) found empirical evidence of a synergy effect of employees’ perceived job control for the relationship between high-activated positive moods and envisioning. Thus, employees who experienced activated positive moods and perceived their job as providing them with possibilities to carry it out rather freely set the highest amount of proactive goals.

6.5.2 Limitations and future research

The present studies have several limitations. Firstly, study 1 was single-source and self-report, which means that inflated relationships due to common method variance are a threat to the validity of the findings. However, past research confirmed that self-ratings of proactive behaviours at work may be used as valid measurements (Frese et al., 1997; Parker et al., 2006). Additionally, as recommended by Podsakoff and colleagues (2003) I controlled for general tendencies of individuals in completing surveys by adding trait affectivity as a control. I additionally replicated the findings in a further, independent sample in Study 2, which employed a longitudinal design.

Secondly, in regard to generalisability, my findings are constrained to proactive work behaviours of employees in a call centre environment, which involves highly customer-focused, interaction-based work tasks and my findings on career-related proactive goal regulation are confined to the context of an academic learning environment. The consistency in findings across these very different contexts bodes well for the generalisability of the findings, although further research is needed to generalise findings more broadly.

Lastly, the approach I used in the current chapter to test an overall model of self-regulatory elements of work- and career-related proactivity has both strengths and weaknesses (as pointed out earlier in Chapter 5). The approach involved asking individuals to report on the various elements simultaneously, which had the advantage of providing respondents with the same point of reference for each element, and thereby enabled us to establish the factorial distinctiveness of multiple self-regulatory elements of proactivity at work. Further, the study design on career-related proactivity 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. One advantage of this approach is that it will allow the investigation of situational antecedents or contingencies, such as high levels of job control or of supervisor support (see Parker et al., 2006), that might differentially relate to the self-regulatory elements. For instance, leader vision might be most important for envisioning, whereas job control might be most important for enacting. The present measures and conceptual framework provide the platform for such investigations, and also suggest that investigating self-regulatory elements of proactivity at work is a fruitful avenue. However, this approach did not enable the tracking of one specific proactive goal across the four elements. In the following Chapter 7, I will build on and extend the present approach to qualitatively exploring emotions and proactive goal regulation based on respondents’ past experienced proactive events.
Chapter 7: An Explorative Investigation into the Role of Emotions in the Proactive Goal Regulation Process

7.1 Outline

In the present Chapter 7 (Research Question 5), I will contribute with a more fine-grained perspective of affective experiences at work in relation to employees’ proactivity. Individuals not only experience overall moods at work (the focus of the previous chapters), but they also experience emotions that are more intense and are related to a specific object or event (Parkinson et al., 1996). In an extension to the previous empirical Chapters 4 and 6, this final empirical chapter adds to research on proactivity in organisations by exploring how employees’ emotions are associated with the process of proactive goal regulation (see Figure 7.1, path RQ5).

Figure 7.1
Overview of Research Question 5

7.2 Introduction

As argued in earlier chapters, proactivity at work is characterised by self-initiated goals that are pursued by an individual with an anticipatory and change-oriented focus (Grant & Ashford, 2008; Frese & Fay, 2001; Parker et al., 2010). As a goal process, feelings are likely to play a powerful role throughout proactive goal
regulation and, in turn, one's performance throughout the goal process will influence feelings. I elaborate theory and research concerning the dynamic relationship between feelings, goal setting and goal pursuit.

Past research indicates that feelings can influence such substantial decisions as whether to persist or to abandon goal-related efforts. In this vein, Carver and Scheier (1990a) pointed out the role of velocity in goal achievement for eliciting affective experience. Thus, progress towards achieving a goal at a faster rate than expected is likely to elicit positive feelings, whereas progress at a slower than expected rate is likely to cause negative feelings. Similarly, research by Zohar and colleagues (2003) suggests that goal-disruptive events lead to immediate, within-person increases in negative affect and fatigue and that goal-enhancing events lead to immediate, within-person increases in positive affect.

The goal-relatedness of emotions appears to additionally play a role in their function for self-regulation: Beal and colleagues (2005) presented a model of episodic task performance, in which task performance goal-unrelated emotions (positive and negative) appeared to distract individuals from completing the goal, whereas task performance goal-related positive emotions had a motivating effect on pursuing the goal. The type of goal also matters: In a study of college students, Pekrun and colleagues (2006) found that mastery goals (i.e., goals that are related to the individuals' desire to learn new skills) were positively associated with the emotions of hope, and pride and were negatively associated with boredom and anger. Performance-approach goals (i.e., goals that are related to demonstrating to other individuals one's own competency) were positively related only with pride. A third type, performance-avoidance goals (i.e., goals that are related to individuals' desire to prevent negative judgments from others about own competency) were positively associated with the emotions of anxiety, hopelessness and shame.

Further, difficulty of goals appears to relate to the intensity of experienced emotions: The more difficult a task, the more intense are the positive or negative emotional outcomes upon succeeding or failing (Lewis, Alessandri, & Sullivan, 1992). The extent to which individuals attribute the cause of an outcome as internally or externally caused, also shapes affective experience. For instance, internal attributions of unfavourable outcomes can lead to feelings of guilt or shame, whereas
external attributions of unfavourable outcomes can prompt feelings of anger and frustration (Perrewe & Zellars, 1999).

The point in time as well as the intensity with which emotions occur, seem to play a role for the overall assessment of episodes of affective experience. Thus, the peak-and-end rule of emotions suggests that individuals evaluate their past affective episodes on the grounds of assessing what their most intense feeling was (peak affective experience) and how they felt at the very end of the affective episode (end affective experience; Fredrickson, 2000). Ultimately, emotions in relation to goal outcomes should thus serve as a learning outcome to facilitate future decisions of individuals as to whether to engage in a similar behaviour in the future or not (Baumeister et al., 2007).

Together, the above research suggests that emotions that are felt in association with a goal can have a substantial impact on the outcomes of that goal as well as on future goals. To summarise, these studies provide considerable insight into how emotions influence self-regulation of behaviours and into how self-regulation elicits emotional experience. However, there is little known about the role that emotions play in the context of proactivity which represents a special type of goal: a self-initiated, change-oriented and anticipatory, future-focused goal (Parker et al., 2010). Some previous research should be applicable to the context of proactive goals in parts: for instance, one would expect that proactive goals, because they may be difficult to achieve as they are not always welcomed in the organisation (Frese & Fay, 2001), evoke salient positive emotional experience, such as feelings of pride when successfully completed (Lewis et al., 1992). Because proactive goals are per definition self-set, and thus rather internalised (Parker et al., 2010), the type of emotions experienced as a function of the outcome of proactive goal regulation should reflect more internally attributed as opposed to externally attributed types of emotions (Perrewe & Zellars, 1999).

However, the hallmark of proactive goals is that they require persistence and initiative to overcome barriers (Frese & Fay, 2001) which may restrict the applicability of some of the research on the role of emotions for goal setting and pursuit. For instance, according to Carver and Scheier (1990a), less than desired progress with goals produces negative feelings, which eventually leads to abandoning the goal. However, in the context of proactivity, employees sustain in
proactivity upon experiencing negative emotions, for instance when proactivity is not welcomed by the organisation (Frese & Fay, 2001). It thus requires an investigation directly in the context of proactive goal regulation to examine the extent to which previous research on the role of emotions for goal regulation translates into the context of proactive goal regulation. Additionally, as argued earlier in this thesis, it is important to understand how affect plays a role during each stage of the proactive goal regulation process. Thus, previous research suggests that the stage of goal regulation where an emotion occurs should matter for subsequent goal progression (Carver & Scheier, 1990a; Fredrickson, 2000). Accordingly, and based on the above review of relevant literature that suggests that emotions are relevant for goal regulation processes, in this study I seek to explore two interrelated research questions:

**Research Question 1:** Which types of emotions are important at which stages of the proactive goal regulation process?

**Research Question 2:** What are the roles of emotions across different stages of the proactive goal regulation process?

In this study I use a qualitative approach in order to explore the relationship between emotions and proactive goal regulation. This approach yielded three avenues of extension to the previous empirical chapters of this thesis:

Firstly, in asking informants about their past proactive efforts, and their feelings experienced in these efforts, this approach links affective experience (emotions) directly to proactive goals. In contrast, in the previous studies, I asked about general feelings at work and, separately, about proactivity, and then examined the link between the two variables. Secondly, by choosing an explorative approach, the focus of investigation was extended to any type of proactive behaviour informants reported (on top of work-related proactivity and career proactivity, which had been the foci in the past chapters). Thirdly, in this explorative study the experience of affect was broadened to any discrete emotions informants reported, as opposed to being confined to the affect items specified in the survey measure of affect used in the quantitative-based Chapters 4 and 6. I thus followed Brief and Weiss's (2002) call for investigations between discrete emotions and organisational behaviours.
7.3 Methods

In order to address the role of emotions within the proactive goal regulation process, I performed a qualitative case study of call centre employees. This research approach allows for rich, in-depth investigation of organisational processes (Eisenhardt, 1989; Yin, 1994). The purpose was to elaborate theory on the pre-existing understanding of the proactive goal regulation process (Lee, Mitchell, & Sablynski, 1999; Vaughan, 1992). I also followed Eisenhardt and Graebner’s (2007) recommendation to aim to mitigate the influence of retrospect bias of informants. Thus, I choose a longitudinal design with follow-up interviews for a subsample of employees that permitted inquiring about ongoing instances of proactivity as well as following-up on their outcomes at a later stage.

7.3.1 Context

The context of this study was a large energy company based in the United Kingdom. I described the overall procedure of the project in more detail in Chapter 4 (Section 4.4.2). For the present study, thirty-nine employees from three locations served as informants, based on the theoretical sampling premise of achieving maximum variation (Polkinghorne, 2005). Employees were informed about our project and were invited to the interviews by our internal contact person in the organisation, who scheduled the date and time of the interviews. Employees were assured confidentiality by us to the extent that results from the interviews were fed

11 The fact that employees were, within the theoretical sampling procedure of representing different hierarchical levels, chosen by the organisation was potentially problematic to the extent that the selection of employees by the organisation might not have been entirely random. For organisational reasons, we could not fully avoid this as it was not organisationally possible to contact and schedule time for interviews with individual employees. However, in support of a rather randomised sample, the sample of employees was overall representative of the organisation (see demographical information below) and whilst some employees spoke rather highly of the organisation, others were more critical and indeed some of them planned to leave the organisation in the near future. The fact that individuals were invited to partake in the interviews by their organisation also potentially posed a problem with regards to the degree to which employees would participate voluntarily in the interviews. However, we made sure every employee received was informed about the goals of our project in advance and again reiterated at the start of our interviews what these goals were. We also emphasised at the beginning of the interviews that participation was entirely voluntary and that the interview could be stopped at any point in time.
Informants were chosen on the basis of representativeness of the four hierarchical levels that constituted baseline call centre employees (Customer Service Representatives) and three levels of their line managers. Thus, eighteen of the informants were customer service representatives (CSRs) who spent most of their time answering customer calls. These calls ranged from inquiries about billing issues, reporting problems with one’s energy meter or setting up new services. Ten of the informants were team managers, who served as immediate managers to the customer service representatives and were responsible for around 8-15 CSRs. The team managers in the study spent their time overseeing the work of the CSRs by walking around the floor and observing their behaviours, listening in to phone calls and meeting with them to discuss performance. These informants were also responsible for taking escalated calls when their CSRs were unable to resolve issues with customers.

The eight section managers who were interviewed served as direct supervisors to the team managers. These informants were tasked with overseeing the work of a group of 3-5 team managers and managing specific divisions such as customer transfers, credit management or prepayments. Finally, three customer service managers also served as informants. While they were still responsible for ensuring high levels of customer service in their divisions, and served as direct supervisors to the section managers, they were also responsible for strategic planning of their division. Overall, informants ranged in age from 25-56 with mean organisational tenure of 6 years and mean tenure in their current position of 2 years. 29 (74%) of the informants were female.

7.3.2 Data collection

The data used for the present analyses were based on face-to-face interviews with each of the informants. Interviews followed a semi-structured protocol (e.g., Seidman, 1991) in which some questions were pre-determined but the interviewer had scope to ask follow-up questions in order to probe deeper into the experiences of employees. This research approach thus facilitated a flexible approach to aspects of proactivity that were important to informants. For the parts of the interviews focusing...
on proactivity, the three interviewers\textsuperscript{12} began by asking employees if they could think of times in which they had taken action to change something in the organisation (see the final interview guideline in Appendix 1).

If employees could identify a time when this occurred, they were then asked to describe the experience, what they did and how it unfolded and any repercussions and implications, including which emotions they experienced at all stages of the process. All informants were also asked if they had ever anticipated or recognised a problem or opportunity but decided to not do anything about it, including their feelings experienced in relation to these instances. After each day of interviews, the interviewers discussed the interviews and refined the protocol in order to dig deeper into important issues that were arising. The updated protocols were then used in the subsequent set of interviews.

Twenty-one of the 39 employees were interviewed a second time, about 1-2 months after the first set of interviews. We followed this approach in order to maximise rapport with informants, as well as in order to verify our understanding of past proactive accounts reported in the first round of interviews and in order to follow-up accounts of proactivity that were ongoing at Time 1 (Eisenhardt & Graebner, 2007). Following Eisenhardt’s (1989) call for theoretical sampling, we focused on the two lower hierarchical levels of the organisation as proactive efforts appeared more easily identified by informants at these levels\textsuperscript{13}. In these interviews, we followed-up on proactive behaviours mentioned in the first interview by verifying

\textsuperscript{12} These interviews also represented the empirical data collection by Merryn McGregor, as part of her MSc thesis and later as part of her employment at the Institute’s own consultancy Consult IWP. Further, a visiting research fellow from the University of Illinois, Heather Vough, conducted a limited number of interviews and is involved as a collaborator in two publications that are in preparation from this investigation. Of the 60 interviews, 25 were conducted by myself for this thesis (15 at time 1 and 10 at time 2), 28 were conducted by Merryn McGregor (17 at time 1 as single empirical data source for her MSc thesis, and 11 at time 2 in a supporting role as employee of Consult IWP) and 7 interviews at time 1 were conducted by Heather Vough. Data collection and analyses on the role of emotions for proactive goal regulation were designed and analysed under my principal investigation for exclusive use in this thesis.

\textsuperscript{13} It was not the case that proactivity was lacking amongst more senior levels. Rather that, because of the higher expectations for managers to be proactive in their jobs, it was difficult for managers to identify specific proactive incidents to discuss. For the lower level employees, the relative infrequency of proactivity made it more salient and therefore easier to recall and discuss.
our understanding of them; probing with more in-depth, tailored questions for the individual; and asking for updates. The informants were additionally asked to report any new accounts of proactivity at work that had occurred since the first interview. The multi-interview approach provided the opportunity to develop greater rapport with the informants as well as gain deeper insight and follow-up proactive processes under investigation over time (Polkinghorne, 2005; Seidman, 1991). Typically, the interviews in round one lasted between 45-60 minutes and in round two between 30-45 minutes.

Additionally, we conducted overt, non-participant observations (Whyte, 1979) with the customer service representatives and team managers. Specifically, we shadowed overall 15 individual employees for about 2 hours each whilst they carried out their routine work, which helped us familiarise with work procedures in the call centre, technical terms used, and the culture and norms of the organisation. Some of the observations we made were especially helpful for verifying the content of the interviews, e.g., the opportunity to see the 'issue boards' that employees described where they could pin their suggestions for improvements. While notes from observations were not systematically analysed, the observations did serve as an important point of entry into the work lives of the informants.

7.3.3 Coding

An a priori specification of theoretical constructs is beneficial for the preciseness of measurement during data collection (Eisenhardt, 1989). Before beginning the interviews, I thus collated a set of provisional codes based on previous work on goal regulation (Frese & Zapf, 1994; Gollwitzer, 1990; Grant & Ashford, 2008) and on affect (Russell, 1980, 2003). These codes drew directly on the previous literature and included the concepts discussed in the previous chapters of this thesis: positive vs. negative, high vs. low-activated affect, envisioning, planning, enacting and reflecting. After interviews began, each interview was transcribed verbatim. As soon as the first set of transcripts was available, I individually coded them using NVivo, version 8 (QSR, 1999-2008), a software for sorting and classifying qualitative data.

I focused on extracting examples of informants' past, current, or planned proactive efforts across all 60 informant interviews and identified 154 accounts of proactivity overall. I then proceeded coding for the phases of proactivity.
(envisioning, planning, enacting and reflecting) within these accounts. Whilst I did find evidence for all four established phases of proactivity, albeit not always represented in each account of proactivity, I did not find evidence for any additional goal regulation phases in the data. I verified these findings with the second interviewer who simultaneously coded the data with regards to proactive goal regulation.

As I elaborate next, I chose distinct methodological approaches in investigating the two research questions of this study. Firstly, I analysed the data for Research Question 1 on the salience of different emotions in the distinct proactive goal regulation phases by choosing a content analysis approach (Krippendorff, 2004). This analytic approach lends itself to revealing and quantifying patterns in qualitative data (Duriau, Reger, & Pfarrer, 2007). Secondly, I investigated Research Question 2 on the role of emotions for proactive goal regulation by choosing a more grounded qualitative approach (Strauss & Corbin, 1998). This approach has the advantage of allowing for in-depth exploration of informants’ experiences (Miles & Huberman, 1994). In choosing a combined methodological approach in this chapter I followed Langley’s (1999) call for combinations of the use of quantification strategies with more grounded approaches in qualitative research.

7.3.3.1 Content analyses

In order to conduct content analyses, I started by coding for all instances within the accounts of proactivity where emotions were expressed by informants. I drew on the taxonomy of Shaver and colleagues (1987) in guiding my decision of what constituted an emotion. In most cases, this decision was straight-forward as informants reported emotions that were either directly named or very similar to Shaver et al.’s (1987) taxonomy. However, in a few instances informants only indirectly reported their emotions in relation to past proactive efforts. For instance, one informant reported to me that she had ‘cried her eyes out’ (CSR, 25, T 1). I decided to recode this instance as ‘feeling distressed’. Another respondent reported to me: ‘I was praying that it went ahead’ (CSR, 1, T 1). I coded this instance as an example for ‘feeling hopeful’. I discussed these and all other indirect emotional expressions with the two supervisors of this thesis, and arrived at a coding agreement in all cases.
Once all instances of emotions were coded for, I had another run through the emotion codes and coded each instance of emotion expression as belonging to one of the four affective quadrants of the circumplex model of affect. In doing so, I drew on meta-analytic work on the location of emotions in the affective circumplex model by Remington, Fabricar and Visser (2000). I thus coded these emotions into higher-order codes of the affective quadrants from the circumplex model of affect: low-activated positive affect, high-activated positive affect, low-activated negative affect and high-activated negative affect (see Chapter 3, Section 3.2.2.1).

I, however, additionally followed Lombard et al.'s (2002, 2003) recommendations for conducting inter-rated reliability checks in content analysis. Firstly, I familiarised two psychology students (one at undergraduate level and the other at PhD level) with the meta-analytic work by Remington and colleagues (2000) as well as a brief introduction into the concept of the affective circumplex model and gave them five training examples of instances of reported emotional expressions that were not taken from the final sample of proactivity-related emotional expressions. I then met independently with the two coders and discussed questions and issues with the coding guideline. All appeared clear to the coders and each one coded the five training examples in a consistent way. The coders independently rated a random subsample of 30 instances of emotional expression of the actual sample. I calculated Krippendorff’s alpha (Krippendorff, 2004) as a means to determine the level of inter-rater reliability, using an SPSS macro that was provided by Hayes and Krippendorff (2007).

Whilst I used the two students’ responses as a final decision of how to code the quotes, I additionally cross-checked reliability of my own previous coding with each of the students’ coding in order to learn about systematic differences between the two coders. Krippendorff’s alpha is a conservative way of testing for inter-rater reliability because, in contrast to percentage agreement methods to calculate inter-rater reliability, it controls for the effects of chance in coding responses. Thus, a minimum value of .70 has been suggested to be acceptable in order to assume reliability (Krippendorff, 2004). However, the pilot test resulted in a lower than acceptable value for Krippendorff’s Alpha between the two students of $\alpha = .61$ (see Table 7.1).
Table 7.1
Inter-rater Reliability for Classification of a Random Sample (n=30) into Affective Quadrants

<table>
<thead>
<tr>
<th>Coder comparison</th>
<th>Krippendorff's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coder 1 with Coder 2</td>
<td>.61</td>
</tr>
<tr>
<td>Coder 1 with myself</td>
<td>.81</td>
</tr>
<tr>
<td>Coder 2 with myself</td>
<td>.69</td>
</tr>
</tbody>
</table>

I explored the quotes where the two coders disagreed and additionally sought their feedback on difficulties they encountered with the coding. Two main themes emerged: Firstly, whilst it appeared easy to both coders to identify positive versus negative valence of emotions, in some cases they found it difficult to determine whether an emotion was high or rather low-activated. I accounted for this theme by adjusting the coding instructions to advice that for each quote the coders should first determine whether an emotion was positive or negative. In a second step, they should then try and replace the emotion with examples of very highly activated versus very highly low-activated emotions of the same valence (based on the location of emotions in the affective circumplex in the meta-analysis by Remington et al., 2000) to determine whether the emotional expression in the quote was an example of high or rather low activation.

The second theme that emerged as an issue in the coding process was that the two coders found it confusing to distinguish between high and low activation in emotions if the informants experienced very high or very low intensities of an emotion. I adjusted the coding instructions to explain that the level of intensity was not necessarily related to the activation level of an emotion. For instance, if a respondent said ‘I was extremely calm’, this would constitute a low rather than a high-activated emotion, because calmness in itself is a highly inactivated emotion (Remington et al., 2000). In contrast, if a respondent explained ‘I was somewhat upset’, this was a rather high as opposed to low-activated emotion (Remington et al., 2000). The final coding guideline is provided in Appendix 2.

The two coders then independently rated the remaining 238 codes of the full sample. For the full sample, coding agreement between students was $\alpha = .70$, and thus acceptable (see Table 7.2).
In cases of disagreement between coders I chose between the two coding decisions based on my own previous coding as a majority decision. The final list of emotions and their assignment to the quadrants of the circumplex model of affect, is depicted in Table 7.4 in the results section of this chapter.

In an additional coding task, the two coders independently assigned the emotions into emotion families according to the classification scheme by Shaver and colleagues (1987). The coding instructions for this coding task are provided in Appendix 3. Most of the emotional expressions were identically used by Shaver et al. (1987) with only a minority of emotions deviating from the classification scheme. I thus did not expect coding difficulties in this task, and, after verifying with the two coders that the coding instructions were clear, the two coders proceeded to independently assigning the emotions to different emotion families. Inter-rater agreement between the two coders was acceptable, with a value of Krippendorff’s alpha of .78 (see Table 7.3).

### Table 7.2

*Inter-rater Reliability for Classification of the Full Sample (N=238) into Affective Quadrants*

<table>
<thead>
<tr>
<th>Coder comparison</th>
<th>Krippendorff’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coder 1 with Coder 2</td>
<td>.70</td>
</tr>
<tr>
<td>Coder 1 with myself</td>
<td>.73</td>
</tr>
<tr>
<td>Coder 2 with myself</td>
<td>.74</td>
</tr>
</tbody>
</table>

### Table 7.3

*Inter-rater Reliability for Classification of the Full Sample (N=238) into Emotion Families*

<table>
<thead>
<tr>
<th>Coder comparison</th>
<th>Krippendorff’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coder 1 with Coder 2</td>
<td>.78</td>
</tr>
<tr>
<td>Coder 1 with myself</td>
<td>.84</td>
</tr>
<tr>
<td>Coder 2 with myself</td>
<td>.94</td>
</tr>
</tbody>
</table>

Similarly to the coding of affective quadrants, I followed the coding decisions of the two coders where they agreed, and only in cases of disagreement chose either
7.3.3.2 Grounded analyses

In relation to Research Question 2 on the role of emotions for proactivity, I used more grounded analyses of the interview data. Thus, individual experiences of informants shaped the development of theory to the extent that theory was a result of aggregating patterns of individual perceptions (Strauss & Corbin, 1998).

When originally coding for emotions in informants’ accounts of proactivity, I noted that informants frequently attached specific meanings to their affective experiences when being proactive. For instance, informants reported that their emotions at the time caused them to be proactive, or that they adjusted or abandoned their overall proactive goal because of the way they felt about their proactive actions.

In an additional pass through the accounts of proactivity, I thus inductively identified open codes, which are codes that came directly from the words of informants (Miles & Huberman, 1994) and related to the informants’ experience of the role emotions had for their proactive goal regulation efforts. As new codes were identified, they were classified separately in order to reveal new categories as data analysis progressed. The codes that were developed were kept track off by placing them in code lists that included the code and its definition.

After a full run through the data, I went back to the open codes and compared and contrasted them which resulted in higher-order codes, and after comparing and contrasting these higher-order codes, two overarching roles of emotions for proactivity: motivating and evaluating emerged (Miles and Huberman, 1994). The results of these analyses are presented in the below section (Chapter 7.4.2) on the role of emotions for proactive goal regulation. Firstly, I turn to outlining the results for the content analyses that investigated Research Question 1 on which types of emotions were important at different stages of the proactive goal regulation process.

7.4 Results

7.4.1 Types of emotions in proactive goal regulation (research question 1)

I analysed the salience of emotions in proactive goal regulation, using two different foci of classification. Firstly, I drew on the affective circumplex model
Chapter 7

(Russell, 1980, 2003) to investigate the salience of high-activated positive, low-activated positive, high-activated negative and low-activated negative affect for each phase of proactive goal regulation. My objective in doing so was to create a direct way of comparing the thesis findings regarding the role of moods for proactive goal regulation (Chapters 4 and 6) with the role of emotions for proactive goal regulation, using the same framework of reference. Secondly, I analysed the salience of discrete emotions within different emotion families (Shaver et al., 1987) within different phases of proactive goal regulation. Emotions have been traditionally investigated within these emotion families (Ortony & Turner, 1990), thus by accounting for this way of classifying emotions I acknowledged previous emotions research.

For the content analyses, I counted the coded data for mentions of emotions within different phases of proactive goal regulation by number of informants (that is, out of N=39). I used these simple counts as a means to roughly indicate salience of emotions for proactive goal regulation across individuals. If an informant mentioned the same emotion for a phase of proactive goal regulation more than once, I still counted it as a single mention. I used this rather conservative counting rule in order to avoid biases due to individual differences in verbal style that could overweigh the importance of categories for some informants, whilst underrating it for others. Further, I only interpreted counts that represented experiences of at least ten percent of the sample of informants.

7.4.1.1 Salience of affective quadrants in proactive goal regulation

Overall, informants experienced 44 distinct emotions, of which 21 were mainly assigned to high-activated negative affect, 4 to low-activated negative affect, 11 to low-activated positive affect and 8 to high-activated positive affect (see Table 7.4).

The most common emotions for each of these four affective quadrants were, respectively: frustrated (high-activated negative affect), bored (low-activated negative affect), feeling good (low-activated positive affect) and happy (high-activated categories of positive affect). Some of the emotions, such as feeling happy, were represented in more than one category of affective experience. In these cases, the circumstances in which informants had used the words determined whether they were more representative of high or rather low activation. The emotions that were represented in more than one category were typically those that fell on the border
between two adjacent quadrants in the meta-analytic work by Remington and colleagues (2000).

**Table 7.4**

*Overview of Emotions across Affective Quadrants*

<table>
<thead>
<tr>
<th></th>
<th>High-activated negative affect (Out of 34 Informants)</th>
<th>Low-activated negative affect (Out of 20 Informants)</th>
<th>Low-activated positive affect (Out of 20 Informants)</th>
<th>High-activated positive affect (Out of 25 Informants)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frustrated</td>
<td>12 (35%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nervous</td>
<td>7 (20%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distressed</td>
<td>6 (17%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disappointed</td>
<td>4 (11%)</td>
<td>2 (10%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unhappy</td>
<td>4 (11%)</td>
<td>1 (5%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angry</td>
<td>4 (11%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annoyed</td>
<td>4 (11%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apprehensive</td>
<td>3 (8%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horrified</td>
<td>3 (8%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confused</td>
<td>2 (5%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fearful</td>
<td>2 (5%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pressured</td>
<td>2 (5%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scared</td>
<td>2 (5%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worried</td>
<td>2 (5%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxious</td>
<td>1 (2%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concerned</td>
<td>1 (2%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discomforted</td>
<td>1 (2%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Embarrassed</td>
<td>1 (2%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shocked</td>
<td>1 (2%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surprised</td>
<td>1 (2%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bored</td>
<td></td>
<td></td>
<td></td>
<td>9 (45%)</td>
</tr>
<tr>
<td>Discouraged</td>
<td></td>
<td></td>
<td></td>
<td>7 (35%)</td>
</tr>
<tr>
<td>Feeling bad</td>
<td>1 (2%)</td>
<td></td>
<td>3 (15%)</td>
<td></td>
</tr>
<tr>
<td>Disinterested</td>
<td></td>
<td></td>
<td>1 (5%)</td>
<td></td>
</tr>
<tr>
<td>Exhausted</td>
<td></td>
<td></td>
<td></td>
<td>1 (5%)</td>
</tr>
</tbody>
</table>
Table 7.4 - continued

Overview of Emotions across Affective Quadrants

<table>
<thead>
<tr>
<th>Feeling good</th>
<th>Comfortable</th>
<th>Pleased</th>
<th>Satisfied</th>
<th>Relieved</th>
<th>Grateful</th>
<th>Laid back</th>
<th>Confident</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 (35%)</td>
<td>7 (35%)</td>
<td>4 (20%)</td>
<td>4 (20%)</td>
<td>2 (10%)</td>
<td>2 (10%)</td>
<td>1 (5%)</td>
<td>1 (5%)</td>
</tr>
<tr>
<td>6 (24%)</td>
<td>6 (24%)</td>
<td>1 (4%)</td>
<td>1 (4%)</td>
<td>1 (4%)</td>
<td>1 (4%)</td>
<td>1 (4%)</td>
<td>1 (4%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Happy</th>
<th>Excited</th>
<th>Enthusiastic</th>
<th>Proud</th>
<th>Joyful</th>
<th>Hopeful</th>
<th>Interested</th>
<th>Engaged</th>
<th>Optimistic</th>
<th>Passionate</th>
<th>Upbeat</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 (40%)</td>
<td>8 (32%)</td>
<td>6 (24%)</td>
<td>3 (15%)</td>
<td>6 (24%)</td>
<td>3 (12%)</td>
<td>1 (5%)</td>
<td>1 (4%)</td>
<td>1 (4%)</td>
<td>1 (4%)</td>
<td>1 (4%)</td>
</tr>
</tbody>
</table>

| High-activated negative affect (Out of 34 Informants) | Low-activated negative affect (Out of 20 Informants) | Low-activated positive affect (Out of 20 Informants) | High-activated positive affect (Out of 25 Informants) |

Note. Counts of emotions per affective quadrant do not add up to 100% because informants frequently experienced multiple emotions per quadrant.

The results for the counts on emotions as classified within affective quadrants and their perceived salience in proactive goal regulation is presented in Table 7.5. The upper row depicts the different phases of proactive goal regulation, including the number of informants who reported to have engaged in envisioning (38 of 39 informants), planning (29 of 39 informants), enacting (38 of 39 informants) and reflecting (37 of 39 informants). All informants had engaged in at least one of the four phases (N=39).
The left column depicts all four affective quadrants mentioned within the phases of proactive goal regulation, followed by a count of total affect, which indicates the mention of at least one type of affect within each phase of proactive goal regulation. The combination of total affect and overall proactive goal regulation indicated that 92%, that is 36 out of 39 informants, reported some type of affect in connection with their proactivity. Thus, affective experience appeared as overall highly salient in the context of informants' accounts of proactivity. However, within the different phases of proactive goal regulation, affective experience appeared differentially important: Whilst 81% of informants reported to have experienced emotions in relation to envisioning or reflecting, and another 76% reported emotions in relation to enacting on proactivity, only 17% of the informants reported emotions in relation to their efforts to plan for the implementation of proactive goals. Thus, the planning phase of proactive goal regulation appeared as less typically characterised by affective experience, possibly pointing to the dominance of cognitive functioning when planning behaviours (Gollwitzer, 1990) by weighing possibilities and preparing avenues and strategies of how to best engage in proactivity. For instance, a team manager reported how she enquired into organisational budgets and analysed financial data in order to prepare for implementing a change in organisational procedures. She did not report on any emotions during this stage:

Well, I emailed HR to find out the statistics first – how much money we've spent last year, how many days were lost. I tried to get them to break it down as well, you know, into sections like and different things and they eventually after two and a half months came back with the results for me and I said it in my teams so I could give it to all the other managers. [TM, 4, T1]^14

In cases where informants did report emotions in connection with planning proactivity, these emotions were predominantly low-activated positive (across 10% of informants). As I will outline in the next, more grounded analyses part of this chapter, positive emotions possibly served as evaluating mechanisms that indicated a

^14 In the following, informants are identified by the following coding scheme: 1. Position of informant in the organisation (CSR = Customer Service Representative; TM = Team Manager; SM = Section Manager; CSM = Customer Service Manager); 2. Unique number of informant (1-39); 3. Time point of interview (T1 = Time 1; T2 = Time 2).
chosen plan had the potential to progress towards the desired goal (Carver & Scheier, 1990a). When envisioning, the experience of negative emotions, both high and low-activated dominated. Thus, 60% of informants reported high-activated negative emotions and 29% of informants experienced low-activated negative emotions in their reports of envisioning. This finding might be explained by the specific nature of work in a call centre environment. As outlined in Chapter 4 (Section 4.4.1), work in call centre environments tends to be rather prescribed and constrained, so the opportunities that arose for being proactive in this case study were typically a function of problems in the prescriptions and processes. Employees thus chose a proactive approach to problems by preventing them from re-occurring in order to have more effective processes in the future (Parker & Collins, 2010). For instance, a section manager reported:

So last Friday we had a weekly performance meeting around Purchase versus Sales and the stop billing work that's being done so I raised an issue there to see if anyone else had seen it before or what other people thought, everybody else agreed with me and said 'No, it's not right, it needs you to be able to select a normal read so that you only have the final reading as the final read'. So this morning I've raised a ticket for it. [SM, 19, TI]

Informants often reported negative emotions in conjunction with realising the need of process improvement due to processes not working properly, as did the below customer service manager when listening into customer calls from baseline employees:

I quite quickly got a picture of some basic elements of the call that were just horrifying for me and I thought I want them to be put right straight away so I know that with coaching in some aspects it can take a few weeks for people to develop and improve but there are other things, for example, showing empathy – if somebody says they are calling because their partner has just died then it is completely unacceptable for the advisor on the phone to say 'oh right, that's fine' [CSM, 9, TI].

In relation to enacting, informants predominantly reported highly activated types of affect, regardless of valence. Thus, 47% of informants reported high-
activated negative affect, and 39% of informants reported high-activated positive affect in conjunction with enacting in proactivity. This finding corresponds with literature on the concept of vigour (Shraga & Shirom, 2009), which should facilitate the enactment and persistence in following-through the enactment in proactive behaviours (Sonnentag, 2008). As I will outline in Section 7.4.2 when reporting results from the grounded analyses, high-activated negative emotions during enacting also often occurred as a side effect to being proactive.

In relation to reflecting, positive emotions, regardless of activated prevailed. Thus, informants mainly reported high-activated positive affect (54% of informants), and low-activated positive affect (49% of informants). Interestingly, low-activated positive affect overall appeared more salient in the later phases of proactive goal regulation (29% of informants experienced it when enacting, and as reported earlier, 49% of informants experienced it when reflecting). As I will outline in Section 7.4.2, low-activated positive affect arises in connection with evaluating the success from past proactivity rather than prompts the engagement in proactivity.
<table>
<thead>
<tr>
<th></th>
<th>Envisioning (Out of 38 Informants)</th>
<th>Planning (Out of 29 Informants)</th>
<th>Enacting (Out of 38 Informants)</th>
<th>Reflecting (Out of 37 Informants)</th>
<th>Total Proactive Goal Regulation (Out of 39 Informants)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-activated negative emotions</td>
<td>23 (60%)</td>
<td>1 (3%)</td>
<td>18 (47%)</td>
<td>12 (32%)</td>
<td>33 (85%)</td>
</tr>
<tr>
<td>Low-activated negative emotions</td>
<td>11 (29%)</td>
<td>0</td>
<td>2 (5%)</td>
<td>11 (30%)</td>
<td>19 (49%)</td>
</tr>
<tr>
<td>High-activated positive emotions</td>
<td>10 (26%)</td>
<td>2 (7%)</td>
<td>15 (39%)</td>
<td>20 (54%)</td>
<td>25 (64%)</td>
</tr>
<tr>
<td>Low-activated positive emotions</td>
<td>5 (13%)</td>
<td>3 (10%)</td>
<td>11 (29%)</td>
<td>18 (49%)</td>
<td>23 (59%)</td>
</tr>
<tr>
<td><strong>Total affect</strong></td>
<td>31 (81%)</td>
<td>5 (17%)</td>
<td>29 (76%)</td>
<td>31 (84%)</td>
<td>36 (92%)</td>
</tr>
</tbody>
</table>

*Note.* The cells that are subject to discussion in the text are highlighted. Specifically, for the columns of envisioning through reflecting, the respective one or two most dominant affective quadrants per phase are highlighted, provided they were reported by at least 10% of informants.
7.4.1.2 Salience of emotion families in proactive goal regulation

Informants reported to have experienced five out of the six primary emotions from the classification system of emotion families by Shaver and colleagues (1987). The main difference to classifying emotions within emotion families as compared to affective quadrants was that high and low-activated positive affect were now mainly merged into the category of joy, whereas high and low-activated negative affect were now represented in three distinct categories, including anger, fear and sadness. The emotion family of love was not represented in the sample and is thus omitted from the presentation (see Table 7.6).

Table 7.6
Overview of Emotions across Emotion Families

<table>
<thead>
<tr>
<th>Emotion families</th>
<th>Joy (out of 30 Informants)</th>
<th>Fear (out of 23 Informants)</th>
<th>Sadness (out of 24 Informants)</th>
<th>Anger (out of 14 Informants)</th>
<th>Surprise (out of 1 Informant)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happy (21/70%)</td>
<td>Happy</td>
<td>Nervous (7/30%)</td>
<td>Bored (9/37%)</td>
<td>Frustrated (12/85%)</td>
<td>Surprised (1/100%)</td>
</tr>
<tr>
<td>Feeling good (13/43%)</td>
<td>Distressed (6/26%)</td>
<td>Discouraged (7/29%)</td>
<td>Confused (2/14%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proud (9/30%)</td>
<td>Apprehensive (3/13%)</td>
<td>Disappointed (6/25%)</td>
<td>Unhappy (5/20%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excited (8/26%)</td>
<td>Horrified (3/13%)</td>
<td>Unhappy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comfortable (7/23%)</td>
<td>Fearful (2/8%)</td>
<td>Feeling bad (4/16%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enthusiastic (6/20%)</td>
<td>Pressured (2/8%)</td>
<td>Discomforted (1/4%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joyful (5/16%)</td>
<td>Scared (2/8%)</td>
<td>Disinterested (1/4%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pleased (5/16%)</td>
<td>Worried (2/8%)</td>
<td>Embarrassed (1/4%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfied (4/13%)</td>
<td>Anxious (1/4%)</td>
<td>Exhausted (1/4%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hopeful (3/10%)</td>
<td>Concerned (1/4%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interested (3/10%)</td>
<td>Shocked (1/4%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relieved (3/10%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 7.6 - continued

Overview of Emotions across Emotion Families

<table>
<thead>
<tr>
<th>Emotions</th>
<th>Joy (out of 30 Informants)</th>
<th>Fear (out of 23 Informants)</th>
<th>Sadness (out of 24 Informants)</th>
<th>Anger (out of 14 Informants)</th>
<th>Surprise (out of 1 Informant)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Confident (2/8%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grateful (2/6%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Engaged (1/4%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Laid back (1/3%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Optimistic (1/3%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Passionate (1/3%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upbeat (1/3%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I repeated the procedure of simple counts on mentions of emotions within emotion families within the phases of proactive goal regulation (see Table 7.7). Turning to positive feelings, feelings of joy dominated in the phases of planning, enacting and reflecting, thus upon preparing how to have an impact, implementing the impact and thinking back to having an impact on proactive goals. The emotion families of love and surprise, were not, or only to a very limited extent (one person reported feelings of surprise about a situation as initiating proactivity), represented in the data.

Turning to negative emotional experiences, feelings of sadness dominated in the envisioning and reflecting phases. Fear dominated when enacting (31% of informants reported to have had experienced fear in relation to engaging in proactive behaviours). Anger did not dominate in any single phase but was most represented in the envisioning phase of proactivity (28% of informants reported feelings of anger in connection with setting a proactive goal).
Table 7.7
Salience of Emotions within Emotion Families across Elements of Proactive Goal Regulation

<table>
<thead>
<tr>
<th></th>
<th>Envisioning (Out of 38 Informants)</th>
<th>Planning (Out of 29 Informants)</th>
<th>Enacting (Out of 38 Informants)</th>
<th>Reflecting (Out of 37 Informants)</th>
<th>Total proactive goal regulation (Out of 39 Informants)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joy</td>
<td>11 (28%)</td>
<td>3 (10%)</td>
<td>20 (52%)</td>
<td>26 (70%)</td>
<td>30 (76%)</td>
</tr>
<tr>
<td>Surprise</td>
<td>1 (2%)</td>
<td></td>
<td></td>
<td></td>
<td>1 (2%)</td>
</tr>
<tr>
<td>Anger</td>
<td>11 (28%)</td>
<td>3 (7%)</td>
<td>7 (18%)</td>
<td>14 (35%)</td>
<td>14 (35%)</td>
</tr>
<tr>
<td>Sadness</td>
<td>14 (36%)</td>
<td>1 (3%)</td>
<td>7 (18%)</td>
<td>12 (32%)</td>
<td>23 (58%)</td>
</tr>
<tr>
<td>Fear</td>
<td>10 (26%)</td>
<td>12 (31%)</td>
<td>4 (10%)</td>
<td></td>
<td>22 (56%)</td>
</tr>
</tbody>
</table>

Note. The cells that are subject to discussion in the text are highlighted. Specifically, for the columns of envisioning through reflecting, the respective one or two most dominant affective quadrants per phase are highlighted, provided they were reported by at least 10% of informants.

An important limitation in conducting the simple counts in the preceding sections of this chapter is that the functions of the emotions in different phases of proactive goal regulation remained unaccounted for. The next section thus adds with additional analyses that aimed to unravel what types of roles affective experience took on in the different phases of proactive goal regulation.

7.4.2 The role of emotions for proactivity (research question 2)

The purpose of this section is to gain a deeper understanding of the role emotions take on for proactivity. Before presenting these roles, it is useful to understand what informants were ultimately attempting to change with their acts of proactivity. In general, informants reported being proactive about making changes in their “processes”- or scripted ways of responding to emergent issues, a form of task proactivity (Griffin et al., 2007). Further, informants noted that there were often issues that arose that did not have scripts attached to them. In these circumstances

15 Additionally, an integration of findings from simple counts and grounded analyses will be presented in Chapter 8 (Section 8.2.4), where findings on the role of moods and emotions for proactivity will be combined in one integrative model of the role of affect for proactive goal regulation.
they also had to decide how to act. Some changes to process could be done on one’s own, however, in order for the changes to be used more uniformly across the call centre, individuals had to report the issues that they identified to their managers and have their managers take action to ameliorate the issue.

As such, voicing concerns about an issue to managers was the end-move of an episode of proactivity for most informants. These acts are roughly equivalent to acts of issue-selling, often studied at higher organisational levels (Dutton & Ashford, 1993; Dutton et al., 2002; Dutton et al., 1997). Informants also demonstrated other types of proactivity including acting proactively to improve their own career (Tharenou & Terry, 1998) or proactively helping customers (Rank et al., 2007). Common to these instances of proactivity was that informants reported emotions in two main functions: emotions as a motivator and emotions as an evaluator. These functions further differentiated into whether the focus of emotions was own emotions or rather other individuals’ emotions. Further, the roles of emotions differed in their temporal focus: current emotions or anticipated emotions. An overview of the classification system is presented in Table 7.8. Below, I outline each role and category in more detail.
### Table 7.8

**Overview of Roles of Emotions for Proactivity**

<table>
<thead>
<tr>
<th>Own emotions</th>
<th>Emotions as a Motivator</th>
<th>Emotions as an Evaluator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current emotions</td>
<td>Anticipated emotions</td>
</tr>
<tr>
<td>1. Own negative emotions as motivator for proactivity</td>
<td>5. Preventing anticipated own negative affect</td>
<td>9. Own emotions as a signal for whether proactivity is required</td>
</tr>
<tr>
<td>2. Own positive emotions accompanying proactivity</td>
<td>6. Maintaining own positive affect</td>
<td>10. Own negative emotional reaction to outcome of proactivity</td>
</tr>
<tr>
<td>3. Own negative emotions accompanying proactivity</td>
<td></td>
<td>11. Own positive emotions as an outcome of proactivity</td>
</tr>
<tr>
<td>Others’ emotions</td>
<td>4. Others’ negative emotions as motivator for proactivity</td>
<td>7. Avoiding others’ anticipated negative affect</td>
</tr>
<tr>
<td></td>
<td>8. Promoting others’ anticipated positive affect</td>
<td>12. Positive emotional responses from others</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13. Negative emotional responses from others</td>
</tr>
</tbody>
</table>
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7.4.2.1 Emotions as a motivator of proactivity

The motivating role represents a fuelling, stimulating element of emotions that promoted and/or sustained proactive efforts. The emotions taking on a motivating role for proactive goal regulation were either current, in which case the informant engaged or sustained in proactivity out of currently feeling in a certain way, or they were anticipated, with the informant engaging in proactivity in anticipation of specific emotional outcomes. Further, the emotional experiences were either experienced within the informant him or herself (own emotions) or they were perceived by the informant as experienced by others (for instance, colleagues, customers or supervisors). Below, I outline the categories that emerged within the notion of emotions as a motivator of proactivity.

Category 1 concerned current emotions as a motivator of proactivity. Specifically, informants repeatedly reported about instances in which they decided to set a proactive goal out of experiencing negative emotions. Thus, emotions prompted the setting of a proactive goal. For instance, a section manager reported about her efforts to engage in career-related proactivity:

_I am not afraid to say when I’m getting bored which is how this came about as well: I got to a point where I thought I’m not being challenged anymore, I can do this in my sleep, I understand the processes inside and out, I have to move on, it doesn’t have to be up, it can always be to the side and I think as well if you are working with different people that also gives you that stretch as well because we are not all the same – different styles, you can learn different things from different people. [SM, 28, T1]_

Similarly, a team manager described how she decided to improve a process at work:

_We have tried a different way because I was getting really fed up of doing them because they are quite difficult to do and another way was going into the system and put it through the system and it should pop up on the particular Manager’s list but those Managers weren’t checking and they haven’t got time to check them whereas I have so it has got to a point now where I have changed the way I’m doing it. [TM, 14, T2]_
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Common to these examples was that individuals envisioned a proactive goal upon encountering negative feelings. These examples correspond with the conceptual work on problem-focused coping, whereby individuals, upon faced with a stressful situation, appraise the situation to find behavioural options to bring about a change to the situation (Folkman et al., 1986) or to repair their moods (Forgas, 1995). This pathway to proactivity is referred to in the following as a prompting mechanism of emotions for envisioning.

Further, when enacting the proactive behaviours, these actions were often accompanied by emotions (Categories 2 and 3). Thus, informants often reported positive emotions that emerged during their proactivity and appeared to sustain their engagement in proactivity (Category 2). For instance, a section manager described how she prepared her voicing behaviour (LePine & Van Dyne, 1998) by looking for additional evidence of the issue, and how she encountered positive emotions upon doing so:

> When Valentine, the guy beside me, was checking it and he said to me yes, they have un-billed and I said ok, I will have that. I was quite excited – it’s a bit sad really, isn’t it? Some people might think I am a psycho. I was actually really excited that we had found an example where somebody had de-billed that actually that’s not what we should be doing and I could do something about it so I had the ability to then raise that to then a Team Manager. [SM, 28, Account 122, T2]

Similarly, a customer service representative described an instance where she had engaged in proactive customer service (Rank et al., 2007) by self-initiating additional service for a customer, and had experienced positive emotions in the process:

> I was on the account for about five hours ringing everybody up and trying to get it sorted and when I did that I felt good and I felt that was beyond my means to do that for the customer rather than just saying it is going to be alright, call back tomorrow or we will get you a normal appointment. [CSR, 21, TI]
On a conceptual level, these examples speak to the literature that suggests positive affect should instil intrinsic values of goals in individuals (Isen & Reeve, 2005), promote self-regulatory advantage (Martin, Ward, Achee, & Wyer, 1993) and foster persistence in a set course of action (Erez & Isen, 2002; Seo et al., 2004). This pathway to proactivity is referred to as the sustaining role of emotions.

Informants not only experienced positive, but also negative emotions whilst enacting in proactivity (Category 3). Negative emotions appeared to facilitate for employees to focus their attention on the proactive issue (Easterbrook, 1959; Gable & Harmon-Jones, 2010). In this vein, the following two quotes represent examples where customer service representatives, whose core job it was to sit on the phone and to answer customer queries, described instances of taking charge of issues at work (Morrison & Phelps, 1999) and voicing these issues to their supervisors (LePine & Van Dyne, 2001):

*I was a bit nervous to start off with. It was a bit daunting to be in front of the managers and put my point across but generally there was a consensus and they were agreeing with what I was saying and they were discussing something similar anyway which is why it led to being changed in the end.* [CSR, 29, T1]

*I had to present what I've been doing for the past four weeks in front of all Section heads and Managers and I was proper nervous.* [CSR, 10, T1]

Further, in motivating their proactivity, employees appear to not only focus on own emotions, but also on emotions of others. Thus, informants also reported to have set proactive goals as a function of perceiving negative emotions by other individuals about a particular issue (Category 4). For instance, a customer service representative reported an instance where she enjoyed proactively helping (Grant et al., 2009) a customer who experienced negative emotions:

*She [the customer] came on quite stressed and she had had people look in to [a problem with her customer account] and then not dealt with it so it was quite nice obviously to show her that I was trustworthy and I would do it sort of thing.* [CSR, 32, T1]
Another customer service representative reported how she prosocially changed the procedure (Morrison, 2006) in dealing with customers who experienced highly activated negative emotions:

*The energy watch are empowerment calls so this is your last chance for the company to get it sorted before it comes to an official complaint ... although some of the businesses can get reduced to tears when it's a small business and they're loaded with debt and the rest of it, so I've agreed payment arrangements longer than what I should have done. [CSR, 12, T1]*

The next set of categories subsumed the role of anticipated emotions, either of oneself (Categories 5 and 6), or by others (Categories 7 and 8), in motivating proactivity. For instance, informants sought to prevent anticipated negative affective experiences for themselves (Category 5). Thus, in the two following examples, two informants reported how they sought to craft their jobs (Wrzesniewski & Dutton, 2001) in order to avoid future negative emotional experiences:

*I've reached Mark in Credit Ops [who] is one of my colleagues, and I've said what can he give me because I need some more work because I will get bored. [CSM, 35, T1]*

*I think if we just sat and worked through the task list for what we need to do and our little bubble that we're in I think it would get quite tedious for the work that we do so you do have to open your eyes a little bit and open your mind and say well if I do this I'm going to get experience in what I'm doing anyway, I know how to do it so I might as well do the whole thing rather than possibly passing it to somebody who isn't as confident in what they do and with the possibility of it going wrong again. [CSR, 26, T1]*

Common to these examples is the notion of proactive coping (Aspinwall, Sechrist, & Jones, 2005) whereby individuals engage in self-initiated actions in order to prevent future negative emotions. It also relates to Baumeister and colleagues' (2007) theme of individuals striving to achieve positive emotional outcomes in their actions.

Informants also set proactive goals in order to maintain positive affective states in the future (Category 6). For instance, a customer service representative
reported that she had engaged in proactive behaviours in the past in order to feel comfortable at work:

*I'm a person that demands action because at the end of the day I'm here to long in the hours ... and I need to be comfortable whether it's my seat, whether it's my desk or whether it is my Manager.* [CSR10, Account 38]

This category maps onto the literature of mood maintenance, whereby individuals seek to maintain their positive emotional experiences by engaging in behaviours that allow them to do so (e.g., Carlson et al., 1988).

In line with the anticipatory focus of proactivity, informants also reported that they had set proactive goals in anticipation of own or others' future emotions. In this vein, informants chose to be proactive in order to avoid the arousal of negative emotions in important stakeholders, such as customers, or subordinates (Category 7). For instance, a section manager reported how she decided to improve the layout of a meter reading for customers, in order to avoid negative emotional reactions from customers about these readings:

*From a point of view looking at it on the system it's just that the read type is a different read type ... the reading is still the same, the charges are still the same, it is just that it says final read when it's not. It's not that big a deal but from a customer point of view I think it would be confusing and that's what I want to change so that customers don't find that confusing and because it could have an impact on our failure calls.* [SM, 19, T1]

Similarly, informants sometimes sought to be proactive in order to promote other individuals' anticipated positive affect (Category 8). For instance, a team manager described how she decided to reduce monitoring of her subordinates in order to improve the way her subordinates feel at work:

*When you say to people you need to do this, this and this on top of this, this and this - and as I say the work is monotonous, we do the same thing every day - people will make mistakes. So that is why I ... said 'I don't agree with checking everything'. This ... eventually, in the long run, will lead to a happier team, people are going to know what's expected of them and then*
within that if they are not doing it consistently then I can deal with it from there. [TM, 13, T1]

These efforts in influencing others’ anticipated emotions could be referred to as *anticipatory emotion regulation* as they reflect attempts to influence others’ moods before they fully occurred.

The above section outlined how emotions can influence proactive goal regulation, mainly the envisioning phase, by motivating employees to set self-initiated goals. Overall, however, emotions not only took on a motivating role for proactivity, but also an evaluating role, as I will describe next.

### 7.4.2.2 Emotions as an evaluator of proactivity

Apart from motivating proactivity, emotions had an *evaluating role* for proactive goal regulation. They signalled or fed back the perceived progress or failure towards the proactive goal, or the perceived feasibility to engage and persist in the implementation of the proactive goal and they shaped consecutive processing with the proactive goal. The evaluating role thus corresponded closely to perspective of feelings as information for cognitions (e.g., Schwarz, 1990). Either own emotions, experienced by the informant him or herself, or others’ emotions towards the proactive efforts, as perceived by the informant, were applied by the informants to gauge the relevance, progress and final success or failure of proactive goal regulation, as I will elaborate next.

Firstly, upon envisioning and planning, informants evaluated the appropriateness to engage in actual proactive behaviour dependent on how they anticipated to feel about the anticipated situation (Category 9). For instance, a team manager described to me how he gauged whether it was appropriate for him prior to engaging in career path planning (Grant & Parker, 2009), depending on how he felt about opportunities that present themselves:

*I have been here about two and a half years, maybe a little bit longer and you can develop at a pace that feels comfortable to yourself and then when roles come up if you are ready to go for them then chat with your Manager and if you feel happy go for it and then you do that.* [TM, 6, T2]
In this regard, feeling satisfied at the career level one currently is at, may derail employees from setting a career-related proactive goal, as described by a customer service manager:

*I don't currently have a huge desire to go any higher than the level I am so I'm quite happy at the level I am and I feel confident at the level I am and I am quite comfortable at that level.* [CSM, 16, T1]

These examples correspond with control theory (Carver & Scheier, 1982) which suggests that individuals strive to attain a goal only if a discrepancy between a current and a desired situation is perceived. Similarly, they correspond with the literature on person-job fit that suggests that individuals will aim to attain the best possible fit between an external situation and internal qualities (Erdogan & Bauer, 2005). It also relates with Baumeister et al.’s (2007) notion of the role of emotions in guiding behaviours towards desired emotional outcomes.

Turning to the next two categories, informants frequently reported emotions that were related to their reflecting and giving sense to the outcomes of their past proactive efforts (e.g., Bless, 2002; Fredrickson, 2000). Dependent on the perceived success of failure of the outcome, these emotional reactions were either negative (Category 10) or positive (Category 11). These reflection processes occurred at any stage of the proactive goal regulation process. For instance, a team manager reported how he envisioned the proactive goal to improve work processes, however due to external demands did not proceed engaging in this goal. Reflecting on this instance, he reported feelings of frustration over not having implemented the change:

*I see a lot of little things a lot of the time and it is almost an acceptance that that's an issue and because there is work around it you tend to use the work around and not look at the root cause ... I think a lot of that is dependent on what type of work you are doing like in the Call Centre you have fifty calls waiting, where does your priorities lie because with queries when you can really get the result that you need but it is not the result that will be the quickest way and I think that happens quite a lot generally within call centres. [...] It's frustrating because you don't have time to do it – well you probably have got the time but you never seem to find the time to do it, there's always another priority.* [TM, 27, T1]
Likewise, this reflection process could occur at the very end of the proactive goal regulation process, after evaluating the outcomes of the proactive action. For instance, a section manager reported how she had engaged in networking (Thomas et al., 2010), however upon evaluating the negative outcomes she experienced feelings of unhappiness:

*I was trying to get a relationship going with third parties which is quite difficult and because I was quite enthusiastic I sort of went diving into the ‘can we come and visit you, can we do this’, and I didn’t really understand the protocol, I was supposed to go through the Contract Manager and it all sort of blew up in my face for a bit that ‘you shouldn’t be coming talking straight to me’. So now I wouldn’t ever do that again, I would go through the Contract Manager – I’m not convinced that that is the right thing to do but it is certainly what they want. [It makes you feel] stupid, I guess, but also that I hadn’t thought it through so I felt unhappy with my thought processes.* [SM, 8, T1]

Repeated negative emotional outcomes from proactivity led to employees’ disengagement from this way of behaving, as a team manager described:

*I feel like if I express anything to my Section Manager it’s just gone in one ear and out the other and I just get deflated. I get de-motivated and think why bother, I will just come in, do my job and get paid and go home.* [TM, 4, T2]

In contrast, perceived successful outcomes of proactivity (Category 11) were often associated with internalised attributions of success, such as feeling proud and perceiving increased levels of self-worth (Lazarus, 1991b). Such feelings have been linked with the setting of challenging goals in the future (Lewis, 1993). Although it was not systematically tested in the present case study, experiencing feelings of pride could thus facilitate employees’ setting of proactive goals in the future. In this vein, proactive behaviours in general were thus often means for call centre employees to craft their jobs in order to find more meaning in their work (Wrzesniewski & Dutton, 2001). For instance, a customer service representative described how engaging in customer service proactivity improved her feelings at work:

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A lot of the times in here you can get quite down because people shout at you a lot and taking their problems out on you and they might have called somebody else beforehand and you get the brunt of it or they could have woken up like a bear with a sore head and it's your fault. But when you do something and you are rewarded for it in the way of the customer thanking you and she [a specific customer] was really, really grateful that I had gone out of my way and it makes you want to do the same for everybody. When you are in here, you are in a call centre, most of the blinds are closed, I am here ten hours of the day, it is a long day to be here just on the phone but when you get ones like that it is a challenge to yourself to complete it and when you have it makes you feel really good. [CSR, 21, T1]

Finally, informants not only evaluated their own emotional reactions to their proactive efforts. They also monitored the emotional reactions of important stakeholders, such as colleagues, customers or supervisors towards their proactivity and took these reactions as a means to attribute meaning to their proactive efforts (Wrzesniewski, Dutton, & Debebe, 2003). Positive emotional responses of others (Category 12) encouraged informants to maintain a set course of proactive action. For instance, a customer service manager recalled how she implemented a practice of personal coaching for her subordinates and perceived her subordinates to take on this change with positive feelings:

*I've certainly performed in a way that is different to the way they are used to on this Department because I'm bringing in my experience from elsewhere so, for example, with my coaching style I would, the Section Managers [subordinates] have never been coached before so it seems to be that you get to a certain level and it stops so they didn't know if what they were doing was right so it's been a refreshing change for them and they've told me that they do enjoy it like they are getting a lot out of it ... in their eyes it's something that is radically different and it is more than they've had before. [CSM, 9, T1]*

Negative emotional responses of others (Category 13) signalled to informants that a correction to their course of action was needed in order to successfully implement their proactive goal, a theme discussed more in detail in control theory
literature (e.g., Carver & Scheier, 1990b). For instance, a customer service manager reported how she perceived a negative emotional response from her supervisor to a process change she implemented. She thus invested additional effort in convincing her supervisor of the value of her proactive action:

I ... implemented a whole new process – got everybody re-trained. I got them all trained in Payment Advocacy and Payments, switched all the UDS letters off, so the cash continued to come in so by the time he [supervisor] came back [from his vacations] it was a done deal. ...He [supervisor] was absolutely horrified and I explained my reasons and my suspicions and I had evidence [...] so now we are just starting that – they are all doing everything, the cash has gone through the roof. [CSM, 35, T1]

To summarise, emotions served as a motivator or as an evaluator to proactive goal regulation. In addition to the previous chapters of this thesis, findings on the roles of emotions for proactivity included an interpersonal perspective where informants were inspired in their proactive goal by emotions from others (Categories 4, 7, and 8) and were influenced by the emotional responses of stakeholders in their proactive goal pursuit (Categories 12 and 13). Novel to the present findings is also the role of temporal focus in emotions. Not only did current emotions prompt proactivity (Categories 1-4), but also own or others’ anticipated emotions had a motivating function for proactivity (Categories 5-8). Consistent with the notion of proactivity as action that requires resistance against challenges (Frese & Fay, 2001), informants, apart from enjoying the challenge of being proactive (Category 2), were often confronted with negative emotions within themselves (Category 3) as well as from stakeholders (Category 13). Own emotional responses (Category 10 and 11) served as a feedback or learning mechanism that served to adjust the course of action in current and future proactivity.

The different roles of emotions further occurred at different phases of proactive goal regulation (see Figure 7.2). The motivating role of emotions occurred at the envisioning stage via a prompting mechanism (Categories 1, 4, 5-8) and at the enacting stage via a sustaining mechanism (Categories 2 and 3). Further, emotions appeared to have an evaluating role at each of the four phases of proactive goal regulation: envisioning, planning, enacting and reflecting (Categories 9-13). Whilst
the motivating role of emotion comprised an influencing path from emotion to envisioning and to enacting (depicted with a one-headed arrow), the evaluating role of emotion appeared rather bidirectional (depicted with two-headed arrows) in the form of proactive goal regulation stimulating certain emotions, as well as emotion stimulating changes in proactive goal regulation.

**Figure 7.2**
*Roles of Emotions for Proactive Goal Regulation*

![Diagram of Roles of Emotions for Proactive Goal Regulation](image)

Thus, the role of affective experience for proactivity appeared to be more nuanced than previously assumed, covering intra-and interpersonal emotions as well as current and anticipated feelings from others and the self, and occurring at different stages throughout the process of proactive goal regulation.

**7.5 Discussion**

In this chapter I have presented an empirical investigation into the role of emotions for proactive goal regulation. Firstly, I content-analysed the salience of
different affective quadrants for proactive goal regulation. This procedure provided empirical evidence of the overall high amount of salience of emotions for informants’ recalled accounts of proactivity. Simple counts of the coded data showed patterns of relationships between different affective quadrants in the phases of proactive goal regulation in a way that negative feelings (both high and low-activated) dominated when envisioning proactivity, low-activated positive feelings were most salient in the planning phase (however, this phase was overall characterised by a lack of salience in emotional experience), high-activated feelings (both positive and negative) prevailed in the enacting phase and positive feelings (both high and low-activated) were the two most salient quadrants of affective experience in the reflecting phase.

This pattern of relationships between emotions and proactive goal regulation was replicated when reanalysing emotions as classified within distinct emotion families. The one notable additional finding was that different qualities of negative emotions appeared to occur predominantly at different stages. Thus, whilst anger was most represented in the envisioning phase of proactivity, fear was the most dominant emotion family when enacting and sadness prevailed in the envisioning and reflecting phases.

As part of the second research question of this chapter, I analysed the roles of emotions for proactive goal regulation. Two main roles of emotions for proactive goal regulation emerged in the data: Firstly, emotions appeared to take on a motivating role, particularly in prompting envisioning and in sustaining enacting in proactivity. Emotions also took on an evaluating role in a way that affective experience was associated with engaging in any of the four phases of proactive goal regulation. These evaluations resulted from prior engagement and informed future engagement in a corresponding account of proactive goal regulation. The role of emotions also differed with regards to their locus of emotional experience (within oneself or within other individuals) as well as temporal focus (current emotions or anticipated emotions). I will turn to discussing implications of my findings next.

7.5.1 Implications

Employees’ affective experience shapes their behaviours within organisations (see e.g., Beal et al., 2005; Seo et al., 2009). Due to the complexity of affective experience, research on proactivity has had a tendency to narrow conceptualisations
of this phenomenon to the investigation of high-activated positive and negative moods (e.g., Fritz & Sonnentag, 2009), as well as positive affectivity (Den Hartog & Belschak, 2007). This focus makes sense considering how many variables one must take into consideration when trying to understand a phenomenon in full. However, through using a qualitative design that allowed rich insights into multiple aspects of affective experience, I aimed to contribute with this chapter in highlighting the complexity behind the role of affective experience for proactivity at work.

Specifically, whilst previous empirical research on the one hand has focused on explaining the direct relationship between affect and proactivity (see Chapter 3, Section 3.4) and conceptual research on the other has emphasised the importance of understanding proactivity as a goal regulation process (Frese & Fay, 2001; Grant & Ashford, 2008; Parker et al., 2010), the research presented in this chapter is one of the first to integrate these two elements in order to demonstrate that there are various impacts of affective experience at work in each of the stages of proactivity.

To investigate the role of emotions for proactive goal regulation carries several implications for theory development. Thus, the relationship between emotions and proactive goal regulation appears to be direct in some parts, and indirect in others, rather than resembling a straight-forward affect to proactivity causal pathway that has been hypothesised in past proactivity research. For instance, whilst emotions appeared to influence envisioning and enacting, emotions took on an additional, more indirect evaluating role for each phase of progression towards the proactive goal. Envisioning, planning, enacting and reflecting all prompted certain feelings about the proactive account and these feelings then determined whether the planned for action was to be sustained, adjusted according to the emotional feedback or abandoned all together. Importantly, the role of affect emerged as not constrained to individuals’ own emotions at the time of engaging in proactivity.

Instead, individuals additionally considered emotions of important stakeholders in the proactive goal process and even anticipated own and others’ emotions in pursuing proactive goals at work. These findings highlight the active role individuals take in trying to understand emotions of other individuals in a social context (e.g., Parkinson, 1996; Parkinson, Fischer, & Manstead, 2005). Thus, proactive employees appeared to sustain in proactive behaviours in spite of incurring negative emotions, such as negative responses from others or own adverse feelings.
towards the proactivity-related situation. This finding stands in a contrast to previous research suggests that individuals likely abandon goals when negative emotions are experienced (Carver & Scheier, 1990a).

The tactics of mechanisms that employees use in order to sustain in proactivity in spite of experiencing negative emotions thus deserve more attention in proactivity research. For instance, related research on emotion regulation suggests that employees, who sustain in proactivity over time, might use strategies that are related to reappraising, rather than suppressing their emotions (e.g., Gross & John, 2003). Thus, an agentic view of individuals changing their own emotions, as well as those of others, although neglected in proactivity research thus far, could add important insights into the processes that underlie employee proactivity. I will return to discussing this potential area of future research in more detail in Chapter 8 (Section 8.4.3).

Practically, findings from this chapter indicate that affective experience overall are highly salient in informants' accounts of proactive goal regulation. When promoting proactivity in employees, organisations thus need to be aware that this type of employee behaviour is associated with their feelings at work. For instance, the act of engaging in proactive behaviours, due to the rather exposed character of self-initiated action (de Stobbeleir et al., 2010), was frequently associated with highly activated negative feelings, such as anxiety or nervousness. Further, attributions of successful proactivity were associated with feelings such as pride, whereas repeated negative attributions of proactivity outcomes led to feelings of disengagement.

To the extent that organisations provide coaching to supervisors that helps them comprehend and manage the feelings of their subordinates in relation to their proactive efforts, organisations can aim to ameliorate negative affective experience in relation to proactive efforts, and foster positive ones. Thus, related research on innovative behaviours in organisations suggests that a climate of psychological safety enables employees' willingness to voice out ideas for improvement (Baer & Frese, 2003). Similarly, to the extent that management openly provides feedback on successful instances of proactivity, positive affective experience of employees towards their past proactivity can be facilitated (Belschak & Den Hartog, 2009), likely promoting higher levels of future proactive efforts from employees.
7.5.2 Limitations and future research

There are several limitations to the empirical investigation presented in this chapter. Particularly, as an author I inevitably made selections that shaped the qualitative research. Thus, in this study I provided a construction, rather than a transmission, of reality (e.g., Golden-Biddle & Locke, 2007). However, as I elaborate below, I followed several strategies that were recommended by Miles and Huberman (1994) as means for establishing quality in qualitative research. Thus, in order to reach dependability in the present research, I discussed the content of the interview guideline with other researchers at onset of study, as well as with the other two interviewers after each day of interviews. Additionally, at all stages of data collection and analyses, I repeatedly discussed my findings on themes and emerging patterns in the data with other interviewers in the project. I also conducted inter-rater reliability checks on the classification of emotional expressions into affective quadrants and into emotion families.

In order to maintain credibility in the present research, I triangulated data from our initial job analyses and site visits in the organisation with employees’ reports in the interviews, spanning different sites of the organisation as well as different job hierarchies. In doing so, I did not find significant contradictions to the reported findings from this study. I further conducted follow-up interviews in order to establish trust and in order to verify past understandings of accounts of proactivity. I additionally verified themes that emerged in my research with experts in the organisation when presenting the project findings to the organisation. Finally, in support of the transferability of my research findings, I was able to relate the themes of my results to previous findings in affect research. Thus, different roles of emotions corresponded with well-established concepts, such as ‘mood maintenance’ (Carlson et al., 1988) or ‘emotions as a learning mechanism’ (Baumeister et al., 2007).

However, it is worth contemplating how the results from this case study may have been different in other contexts. The present context of a call centre environment is distinctive in a number of ways. In this vein, particularly the frontline customer service representatives in my case study were working under rather controlled conditions in which there were ‘process maps’ for nearly every circumstance they might face in a customer interaction. The highly monitored nature of work might have emphasised accounts of proactivity that are highly problem-
driven. Thus, most accounts of proactivity related to employees' setting a proactive goal related to improving faulty processes. Accordingly, employees predominantly reported negative emotions in relation to their envisioning of proactive goals. In work environments with higher levels of discretion, employees might report more positive emotions in regard to envisioning a specific proactive goal.

However, the finding that negative emotions dominated in prompting envisioning proactivity could also be indicative of a common finding in emotions research that negative emotions likely spur more specific action tendencies than do positive emotions (e.g., Fredrickson & Branigan, 2005). Although the present case study explored all types of proactivity informants reported, it will be important for future research to gain confidence in the results from this case study across work contexts and forms of proactivity.

There are also methodological limitations to the present investigation. Firstly, I used simple counts in the content analysis part of the chapter, and thus could not establish statistical significance of results, but rather rough indications of patterns in responses. However, I additionally conducted in-depth analyses on the roles these emotions took on in the proactive goal regulation process. I thus did not aim to provide generalisable results, but rather to provide rich insights into the research questions that underlied this case study (McGrath, 1982).

Secondly, I drew on past and current accounts of proactivity reported by informants. Thus, my results are prone to recall biases (Eisenhardt & Graebner, 2007) in informants' reports of past emotions and proactive goal regulation. Specifically, the emotions reported might have been the most intense emotions experienced in connection with the account of proactivity (Fredrickson, 2000). Others emotions which informants might not have been able to recall as clearly, may have played a role as well. However, I aimed to minimise such possible recall biases by asking informants to additionally report on current accounts of proactivity and by conducting follow-up interviews with a subsample of employees where I verified my understanding of past proactive accounts and probed for further details of ongoing accounts of proactivity.

Future research could quantify the relationship between emotions and proactivity, based on the set of emotions found in this investigation, by following specific accounts of proactive goal regulation in real time (Bolger, Davis, & Rafaeli,
2003). It would also be worthwhile to investigate temporal dynamics of the roles of emotions in more conscious versus automated forms of proactivity (see Grant & Ashford, 2008). For instance, if an employee regularly engages in proactive behaviours, the occurrence of feelings of anxiety upon speaking up and presenting ideas to colleagues and supervisors should become less prevalent.

Additionally, future research could consider the social context in which proactivity occurs. For instance, the present case study was set in a call centre environment in which employees were required to display positive emotions towards their customers, corresponding to the concept of 'emotional labour' (Hochschild, 1983). Future research could investigate how the display of emotions within a certain work context relates to proactivity at work. For instance, previous research suggests that individuals are likely to internalise displayed emotions (e.g., Kiesler, 1971). The internalisation of emotions, such as enthusiasm and optimism, that service employees are required to display towards their customers, could thus, ultimately, prompt higher levels of proactivity in these employees.

As employees go about their everyday work there are occasional opportunities to make change that have the potential to influence their work or the work of others. The likelihood of employees recognising these opportunities, preparing responses to the opportunities and implementing action depend on the affective experience towards these opportunities. By highlighting the role of these emotions, I have demonstrated that understanding proactivity involves going beyond focusing on overt proactive behaviours. Rather, it involves understanding how individuals set proactive goals, plan for and implement these goals, and seek to understand the implications of actions for others as well as for themselves.
Chapter 8: General Discussion and Conclusion

8.1 Overview

In this thesis, I set out to investigate the role of affective experience for proactive behaviours at work. Proactivity at work can show itself in a wide range of behaviours such as actively seeking feedback (Ashford et al., 2003), expressing voice (Van Dyne & LePine, 1998), selling issues (Dutton & Ashford, 1993) and taking charge of work-related matters (Morrison & Phelps, 1999). Common to these behaviours is employees' setting and pursuing goals independently of external requirements (Parker et al., 2010). In contrast, work psychology traditionally has focused on more passive conceptualisations of work and employees such as work characteristics to which employees adjust in order to perform their job (Hackman & Oldham, 1976), on employees' commitment to goals that are provided by the organisation (Locke, Shaw, Saari, & Latham, 1981) and on social structures and cultures at work to which new employees need to adapt (Van Maanen, 1976).

Theories on work motivation correspondingly focused on specific, organisation-set goals that were achieved by clearly defined, proficient work behaviours (Steel & König, 2006). These theories, however, offer less explanation for employees' behaviours in work situations in which goals are not clearly defined and direct links between rewards and performance are missing (Shamir, 1991).

Past research on proactivity emphasised the role of antecedents that are of particular relevance for motivating self-initiated action at work. The focus has been mainly on distal contextual antecedents of employee proactivity such as leadership (Den Hartog & Belschak, 2007; Griffin, Parker, & Mason, 2010; Rank et al., 2007; Rank et al., 2009; Strauss, Griffin, & Rafferty, 2009) and job design (Fay & Sonnentag, 2002; Frese et al., 2007; Frese et al., 1996; Hornung & Rousseau, 2007; Morrison, 2006; Ohly & Fritz, 2010; Ohly et al., 2006; Parker et al., 2006) as well as trait individual differences, such as proactive personality (Bateman & Crant, 1993; Kammeyer-Mueller & Wanberg, 2003; Lambert et al., 2006; Seibert et al., 2001; Thompson, 2005) or conscientiousness (Carless & Bernath, 2007; Kanfer et al., 2001; Parker & Collins, 2010; Tidwell & Sias, 2005) and their interactions with organisational context (Grant & Sumanth, 2009; Kim & Wang, 2008; McAllister, Kamdar, Morrison, & Turban, 2007; Parker & Sprigg, 1999; Speier & Frese, 1997).
In my thesis, I drew on self-regulation literature to argue that proactivity can be more comprehensively conceived as a goal-regulation process (Frese & Fay, 2001; Grant & Ashford, 2008), whereby employees set a proactive goal (envisioning), prepare to implement this goal (planning), act towards achieving this goal (enacting) and seek to learn about the consequences of their efforts towards goal achievement (reflecting). I further argued that a comprehensive investigation of proactivity as a goal regulation process, in extension of the investigation of enacted behaviour, should be particularly relevant when studying the role of affective experience for proactivity. In this vein, a large body of affect research indicated that the influence of affect on human behaviour is mainly indirect (Barsade et al., 2003; Brief & Weiss, 2002) via influencing cognitive processes (Isen, 1984, 1990, 1999, 2000a) and learning mechanisms (Baumeister et al., 2007; Fredrickson, 2000).

Drawing on a large body of research on affect, I theoretically argued that affective experience should influence proactive goal regulation, over and above cognitive-motivational factors. Specifically, I argued that unique combinations of activation and valence in affect relate to proactivity at work differentially. Thus, drawing on prior theoretical perspectives, I distinguished between the four quadrants of the affective circumplex (Russell, 1980, 2003) that represented the end poles of activation and valence combinations: High-activated positive affect, low-activated positive affect, low-activated negative affect and high-activated negative affect.

I also distinguished between mood and emotions, consistent with existing conceptualisations. Whilst work-related mood represents object-free ways of feeling at work, emotions are related towards a particular object or event. I theoretically argued for an energising pathway of moods to proactivity (Parker et al., 2010), emphasising the role of high-activated positive moods for employees' proactivity. I also focused on exploring the role of different types of proactivity-related emotions at different stages of the proactive goal regulation and found empirical evidence of emotions taking on a motivating as well as evaluating role for proactive goal regulation.

In this final chapter, I will begin by summarising and integrating the empirical findings of this thesis (Section 8.2). I will then outline the practical implications of the findings, and will point out limitations of my thesis as well as to future avenues of research (Section 8.3). I will finish this thesis with concluding
Remarks about the contribution of this thesis to the extant literature on proactivity (Section 8.4).

8.2 Summary and Integrated Discussion of Findings

8.2.1 Overview of the empirical chapters

This thesis was designed around five main research questions (depicted in Figure 8.1).

Figure 8.1
Overview of Research Questions

Research Question 1 investigated the relevance of work-related moods for proactive as compared to proficient work behaviour. In a sample of baseline call centre employees, a comparison of structural equation models indicated that high-activated positive affect was significantly more strongly related to proactive work behaviour than to proficient work behaviour. This initial study highlighted the importance of including affect when considering proactive work behaviour.

Research Question 2 concerned the relevance of affective experience as a predictor of proactive behaviours, over and above well-established cognitive-motivational antecedents. Findings indicated that high-activated positive moods were associated with proactive behaviours over and above main effects of affective organisational commitment (reason to pathway) and role breadth self-efficacy (can do pathway). This study therefore suggests that affect plays a unique role in its
influence on proactive work behaviour, and that the *energised to* pathway is worthy of further consideration.

Research Question 3 investigated proactivity as a goal regulation process, comprising the self-regulatory elements of envisioning, planning, enacting and reflecting. A measure of proactive goal regulation was developed and validated, drawing on call centre employees' self-reports, as well as on supervisor ratings of proactive performance. Thus, evidence suggested that a four-factor model of proactive goal regulation can be empirically meaningfully distinguished and that all four elements add to supervisors' perceptions of proactive performance. The implication of this study is that the role of affect should be considered not only for proactive action, but also for envisioning, planning and reflecting.

Research Question 4 investigated the role of moods for proactive goal regulation. In two independent samples of call centre employees and medical students, I found evidence of the positive influence of high-activated positive affect for all elements of proactive goal regulation. Further, low-activated negative moods were positively associated with the non-enacting elements of proactive goal regulation.

Research Question 5 explored the role of emotions in the proactive goal regulation process. Drawing on a sample of informants across four levels of a role hierarchy in a call centre environment, I found evidence of high salience of emotional experience in proactive goal regulation (92% of informants reported to have had experienced emotions in relation to their proactive efforts). Different types of emotions (within affective quadrants and within emotion families) were associated with different phases of the proactive goal regulation process. Overall, emotions assumed two main roles for proactive goal regulation: *motivating* proactivity, by prompting and sustaining proactive efforts and *evaluating* the progress and desirability of proactive efforts.

Methodologically, the three studies in this thesis, that served for the investigation of the five research questions, complemented one another in important ways (see Table 8.1).
Thus, Chapters 4 and 5 represented cross-sectional study designs with baseline call centre employees. Chapter 5 included, however, additional supervisor ratings of proactive performance, in order to reduce possible influences of common method variance. These cross-sectional designs did not allow for any causal inferences. This methodological drawback was accounted for in Chapter 6. Chapter 6 used the same cross-sectional design of the previous two chapters, however replicated and extended findings in a four-time point longitudinal study amongst undergraduate medical students. Chapter 6 thus represented a longitudinal quantitative investigation, which encouraged generalisability of findings, to the detriment of detail in respondents' experiences. Chapter 7 accounted for this limitation by adopting a qualitative longitudinal study design, which facilitated the analyses of in-depth experiences by informants, whilst also permitting a quantification of results.

The empirical chapters also complimented each other in their conceptual foci. Whilst Chapter 4 focused on the role of different types of moods as an antecedent of proactive behaviour, Chapter 5 emphasised the concept of proactive goal regulation. Merging these two foci, Chapter 6 simultaneously investigated the role of moods for proactive goal regulation, whilst Chapter 7 additionally explored the role of a second type of state affective experience, emotions, for proactive goal regulation.

Whilst each of the four empirical chapters of this thesis represented investigations in their own right, they did complement one another in insights on the

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role of affect for proactivity. Three main areas of integration emerged, as I will outline next.

8.2.2 Affect as an influencing factor of proactive behaviour

I initiated my empirical work in Chapter 4 by investigating the importance of affect particularly for enacted proactive behaviour as compared to enacted proficient behaviour at work (Griffin et al., 2007). Thus, I argued that high-activated positive moods were more strongly associated with proactive behaviour than with proficient behaviour. Proactive behaviours represent the pursuit of self-set goals (Parker et al., 2010) rather than mainly organisation-set goals (Griffin et al., 2007) and thus likely represent more highly internalised types of self-regulation (De Charms, 1968; Ryan & Deci, 2000). High-activated positive mood, in turn, should facilitate intrinsic value of actions (Isen & Reeve, 2005) and activate energies to engage in discretionary ways of behaving (Carver, 2006). This hypothesis was supported in a sample of 227 call centre employees where high-activated positive affect was positively associated with proactive behaviour ($\beta = .52, p<.05$) however not with proficient behaviour ($\beta = .05, ns$). A comparison of competing structural equation models further indicated that high-activated positive affect had a significantly larger role for proactivity than for proficiency ($\Delta \chi^2, \Delta df: 4.89, 1^*$).

Secondly, I expected high-activated positive affect to be associated with higher levels of proactive behaviour over and above well-established can do and reason to cognitive-motivational factors via an energised to pathway (Parker et al., 2010). Specifically, I theoretically argued that high-activated positive affect would be relevant for proactivity over and above individuals’ perceived capability to engage in roles outside of their prescribed role (role breadth self-efficacy, Parker, 1998), and their affective commitment towards the organisation (Meyer et al., 2004; Meyer et al., 2002) which should provide a reason for individuals to engage in work-related proactivity. I particularly expected a positive main effect of high-activated positive affect because it should influence individuals’ tendency to choose generative vs. defensive behaviours (Seo et al., 2004), promote individuals’ setting of higher and more challenging goals (Ilies & Judge, 2005), foster approach behaviours (Cacioppo et al., 1999; Watson et al., 1999) and enhance confidence to achieve positive outcomes (Baron, 1990; Kramer et al., 1993).
My expectations were mainly supported, although I did not find a dominant role of high-activated positive affect in direct comparison to the indicators of can do and reason to motivation. Thus, findings indicated that the association of role breadth self-efficacy (can do pathway) with proactivity was largest ($\beta = .40, p<.001$). Notably, high-activated positive affect (energised to pathway) was more strongly positively associated with proactive behaviour ($\beta = .23, p<.01$) than affective organisational commitment (reason to pathway; $\beta = .16, p<.05$). Further, my analyses were rather conservative as I controlled for trait affectivity, thus ruling out trait influences of the energised to pathway, whilst I did not control for trait influences of the can do and reason to pathways. Additionally, affective organisational commitment (Meyer & Allen, 1991) conveys an affective note, and in the analyses probably took up parts of the variance explained by high-activated positive affect. Importantly, high-activated positive moods were significantly positively associated with proactive behaviour, thus supporting the importance of the role of high-activated positive mood for proactive behaviours at work.

In the empirical studies of this thesis, I also set out to add insight into previous research on the role of affect for proactivity. This research had emphasised the positive roles of high-activated positive moods (e.g., Fritz & Sonnentag, 2009) and positive affectivity (e.g., Den Hartog & Belschak, 2007; Parker et al., 2008) for proactivity and showed contradictory findings with regards to the relationship of high-activated negative affect for proactivity (Den Hartog & Belschak, 2007; Fritz & Sonnentag, 2009). In extension to this previous work, I additionally focused in my analyses on a differentiation between high and low-activated positive and negative moods.

Specifically, across two independent samples and both in relation to career-related proactive behaviours (feedback seeking and career initiative; Ashford, 1986; Tharenou & Terry, 1998) and work-related proactive behaviour (task proactivity; Griffin et al., 2007), I found coherent results: Only high-activated positive mood was positively related to enacting ($\beta = .23, p<.01$ for career-related proactive behaviour, and $\beta = .26, p<.01$ for work-related proactive behaviour). The other three affective quadrants of low-activated positive, high-activated negative and low-activated negative moods were, as theoretically expected, not related to proactive behaviour. I further extended the focus of investigation to exploring the role of emotions for
proactive behaviour. Whilst some of the results above replicated in the context of emotions, others contradicted the above findings and additional explanatory mechanisms emerged in a grounded qualitative analysis.

Thus, in agreement with my findings on the overall prevalent role of mood for proactivity, emotions appeared as highly salient for proactivity. For instance, in Chapter 7 I found that 92% informants of an overall sample of 39 informants recalled the salient experience of emotions with regards to their past proactive efforts. These findings additionally indicate that both moods and emotions are relevant for individuals’ experience of proactivity. Finding that affect was important for proactivity using two very different methods additionally contributes to confidence in the individual results.

Additionally, high-activated positive emotions were associated with the stage of enacted proactive behaviour. Thus, informants reported salient feelings of joy when engaging in proactive behaviour. This finding further strengthens the finding of the role of high-activated positive mood for proactive behaviour found earlier. In contrast to my initial expectations, content analyses on the relationship between emotions and proactive behaviour also revealed that high-activated negative feelings, particularly of fear, were associated with the engagement of proactive behaviours. Thus, highly activated negative emotions appeared to facilitate for employees to focus their attention on the proactive issue (Easterbrook, 1959; Gable & Harmon-Jones, 2010).

To summarise, the empirical findings from my thesis contributed with insights over and above previous proactivity research by adding a systematic investigation of the low-activated quadrants of affect as well as extending the focus of investigation onto the role of emotions that are directly related to individuals’ proactive efforts. In Section 8.2.4, I will additionally discuss below an integration of the findings of mood and emotion for proactive goal regulation.

8.2.3 The concept of proactive goal regulation

In this thesis, I argued that understanding proactivity as a goal-regulatory process, rather than exclusively the enactment of behaviour, would contribute to a more comprehensive understanding of the relationship between affective experience and employee proactivity. I drew on self-regulation literature theory (Frese & Zapf,
1994; Gollwitzer, 1990) to propose a model of proactive goal regulation that comprised four elements (envisioning, planning, enacting and reflecting).

When *envisioning*, individuals set and decide on proactivity-related goals (Hacker, 1986a; as cited in Frese & Zapf, 1994; Locke & Latham, 1990). Proactive goals have been defined as self-initiated, anticipatory and change-oriented (Parker et al., 2010; Grant & Ashford, 2008). When *planning*, individuals prepare to engage in behaviour that is related to their proactive goal (Gollwitzer, 1996; Gollwitzer & Brandstätter, 1997). *Enacting* comprises overt proactive behaviour, as previously empirically studied in proactivity research (for a conceptual overview of the main concepts in proactivity research, see Bindl & Parker, 2010c; for an empirical integration of concepts, see Parker & Collins, 2010). Finally, *reflecting* consists of individuals' efforts to understand the success, failure, consequences or implications of their proactive behaviour. These efforts ultimately serve as information that can lead an individual to sustain or modify the elements of envisioning, planning and enacting.

In contrast to the more simplified quantitative model of proactive goal regulation in which I conceptualised *reflecting* to occur exclusively as a function of actual engagement in proactive behaviours, informants in the qualitative study reported to have reflected on their proactive goals even without progressing further to planning or enacting stages. In this vein, one role of emotions was to help individuals *evaluate* the outcomes at each of the phases of proactive goal regulation. These evaluations were however rather instant, *formative* mechanisms that shaped further progression with the course of action in the corresponding proactive goal. The reflecting phase, as I conceptualised it in my model of proactive goal regulation, refers to overall learning outcomes from past proactivity, and thus represents a more *summative*, overall form of feedback to proactivity.

In the qualitative interviews of Chapter 7, the four phases of proactive goal regulation were reported from most of the 39 informants. Thus, 38 informants reported salient memories of having envisioned a proactive goal, 29 of the informants reported efforts of preparing to implement a proactive goal, 38 informants provided examples of enacting in proactive behaviours and 37 informants included in their reports accounts of reflecting on the outcomes of the proactive goal. In contrast to what is a more simplified, conceptual model of the envisioning leading to planning
leading to enacting and ultimately to reflecting, informants reported progressing and regressing between the phases, for instance after having reflected on outcomes of their proactive action they went back to choosing different strategies (planning) to go about their proactive goal in a different way (enacting).

As such, quantitative investigations of proactive goal regulation models (for instance, as in Chapter 5) will be simplifying existing complexities of self-regulation if they do not allow for non-sequential engagement in the different phases. However, in the qualitative interviews from Chapter 7, no further phases of proactive goal regulation emerged, and evidence was found for the proposed four phases model, although not in all cases in its completeness. These findings were complimented in Chapter 5 with a quantitative investigation of the factorial structure of the work-related proactive goal regulation. Upon comparing competing models, the proposed four-factor structure, comprising the elements of envisioning, planning, enacting and reflecting resulted as the best-fitting model and additionally had an overall excellent fit to the data ($\chi^2/df = 1.59$, $CFI = .99$, RMSEA = .05 and SRMR = .03).

Further evidence of the factorial structure of proactive goal regulation resulted in Chapter 6, where I replicated the above described confirmatory factor analyses in the domain of career-related proactive goal regulation. Fit was overall not as good as in the work-related proactive goal regulation model (average values across the four time points were $\chi^2/df = 2.26$, $CFI = .90$, RMSEA = .10 and SRMR = .07), which could be due to a combination of two factors. Fit indices are highly susceptible to sample size (Bentler, 1990; Hu & Bentler, 1999), and sample size in the students sample for career proactivity was rather low (N=132, as opposed to N=227 for the call centre employee sample) and simultaneously included a larger number of items. Importantly, however, at each of the four time points the hypothesised four-factor solution had a significantly better fit to the data than any of the competing models.

I further theoretically argued for the importance of each one of the four elements of proactive goal regulation in yielding what Chen and Gogus (2008) referred to as a complete roadmap of action. I tested the assumption of relevance of all four elements in investigating how they related to supervisor-rated proactive performance. My assumptions were overall supported, in so far that all four elements explained variance in supervisors' perceptions of proactive performance. However,
they were important to very different extents, thus indicating a differential importance of the phases, at least with respect to supervisor perceptions of proactive performance: the actual engagement in proactive behaviours was the most important contributor to supervisors' perceptions of proactivity (40.7% of variance explained in proactive performance ratings, followed by planning with 31.2% and reflecting with 17.6%). Envisioning was least important (10.6%) and was the only element to not significantly relate to supervisor-rated proactive performance. This finding indicated that envisioning per se might not yield benefits apart from setting the basis for planning, enacting and reflecting.

The pertinence of the planning phase for effective action has been emphasised in previous research (e.g., Dörner & Schaub, 1994). Anecdotal evidence from the interview study in Chapter 7 also speaks to the relatively high importance of planning, in addition to enacting. Thus, a section manager reported how her networking efforts (Thomas et al., 2010) resulted in mediocre outcomes due to a lack of planning the proactive action:

I was trying to get a relationship going with third parties which is quite difficult and because I was quite enthusiastic I sort of went diving into the ‘can we come and visit you, can we do this’, and I didn’t really understand the protocol, I was supposed to go through the Contract Manager and it all sort of blew up in my face for a bit that you shouldn’t be coming talking straight to me. So now I wouldn’t ever do that again, I would go through the Contract Manager – I’m not convinced that that is the right thing to do but it is certainly what they want. [SM, 8, TI]

The conceptualisation of proactivity in a proactive goal regulation model appeared to matter also because different moods (Chapter 6) and emotions (Chapter 7) related to different phases of proactive goal regulation in different ways, as I will discuss below in detail. Thus, high-activated positive mood was positively associated with all elements of proactive goal regulation, whereas low-activated negative mood was only related to envisioning, planning and reflecting for career-related proactive goal regulation and was only related to envisioning for work-related proactive goal regulation. In the context of work-related proactive goal regulation, because envisioning of all elements of proactive goal regulation was the one least associated
with supervisors’ perceptions of proactive performance (see relative importance analyses in Chapter 5), feelings of low-activated negative affect should thus not be very helpful in facilitating overall proactive performance.

Neither low-activated positive mood nor high-activated negative mood was associated with proactive goal regulation. Findings also indicated a differentiated view when investigating the role of emotions for proactive goal regulation. Thus, emotions had an evaluating role for all phases of proactive goal regulation and an additional motivating role for envisioning via a prompting mechanism and for enacting via a sustaining mechanism. I will turn to discussing the roles of moods and emotions for proactive goal regulation next.

To summarise, findings in my thesis suggested that four elements of proactive goal regulation could be meaningfully distinguished: Envisioning, planning, enacting and reflecting. A methodological drawback inherent to both the quantitative and qualitative studies is that I investigated mainly retrospect accounts of proactivity and informants might not have recalled all details from the proactive account. However, as recommended by Eisenhardt and Graebner (2007), I conducted longitudinal follow-up interviews in order to verify past accounts and follow-up on current accounts that were reported in the initial set of interviews. Future research could aim to track informants’ experiences of proactive goal regulation in real time (Bolger et al., 2003), thus minimising the influence of recall biases whilst allowing for a less simplified conceptualisation of employees’ engagement in proactive goal regulation.

8.2.4 The roles of moods and emotions for proactive goal regulation

In this thesis, I conceptualised mood and emotions as part of the affective circumplex, resulting in four unique combinations of valence and activation combinations: High-activated positive affect, low-activated positive affect, low-activated negative affect and high-activated negative affect. Emotions, although sometimes conceptualised within this affective circumplex (e.g., Shaver et al., 1987), have been predominantly classified within distinct emotion families (e.g., Ekman, 1992; Izard, 1977; Plutchik, 1994; Shaver et al., 1987). In my qualitative analyses in Chapter 7, I chose to classify emotions both in terms of the affective circumplex in order to be able to directly compare the role of mood and emotions. I additionally classified emotions in different emotion families, which particularly added more
fine-grained information to the different qualities of emotions within affective quadrants.

**High-activated positive affect.** I theoretically argued that high-activated positive affect should be positively associated with proactivity at work. Firstly, through facilitating the setting of proactive goals (Ilies & Judge, 2005; Martin, Ward, Achee, & Wyer, 1993), secondly through facilitating proactive decision processes (George & Brief, 1996; Weiss et al., 2004), thirdly through facilitating persistence in the engagement in proactive behaviours (Tsai et al., 2007), and fourthly through motivating reflection and learning processes on past proactive action (Isen & Reeve, 2005).

In support of these arguments, a highly consistent finding in my thesis across Chapters 4, 6 and 7 is that high-activated positive affect (moods and emotions) was positively associated with proactivity at work. Thus, in Chapter 4 high-activated positive affect predicted proactive behaviour ($\beta = .23$, $p < .01$) when controlling for affective organisational commitment (reason to pathway) and role breadth self-efficacy (can do pathway). High-activated positive affect also predicted proactive behaviour ($\beta = .52$, $p < .05$) when controlling for the other three affective quadrants and for proficient work behaviour as an additional outcome.

These findings extended to high-activated positive affect predicting all four elements of proactive goal regulation (envisioning, planning, enacting and reflecting) in Chapter 6. High-activated positive affect predicted all elements of work-related proactive goal regulation in Study 1 (envisioning: $\beta = .24$, $p < .001$; planning: $\beta = .25$, $p < .01$; enacting: $\beta = .26$, $p < .01$; reflecting: $\beta = .29$, $p < .001$) and all elements of career-related proactive goal regulation in Study 2 (envisioning: $\beta = .25$, $p < .05$; planning: $\beta = .22$, $p < .05$; enacting: $\beta = .23$, $p < .01$; reflecting: $\beta = .29$, $p < .01$).

Additional cross-lagged analyses in Study 2 indicated that the relationship between high-activated positive affect and proactive goal regulation was rather synchronous as compared to lagged (Model 2, Figure 6.4). Weak indications of lagged effects pointed out a causal influence of high-activated positive affect on proactive goal regulation as compared to the reversed causal pathway from proactivity to increased levels of high-activated positive affect (Models 3 and 4, Figure 6.4). One important limitation to this study design was the summative retrospect measurement of affect and proactive goal regulation over the course of one
month. This design, while facilitating first insights into overall relationships of constructs by drawing on the same point of reference in time, inhibited conclusions about how high-activated affect is associated with one particular course of proactive action.

The qualitative case study reported in Chapter 7 countered this limitation to some extent. Whilst case studies do not allow for a great extent of generalisability of results (Langley, 1999), they facilitate rich insights into informants’ experiences (Yin, 1994). The case study served as a more in-depth investigation into call centre employees’ proactivity than was investigated in the previous chapters, using the qualitative study design as a complimentary method to the previous quantitative ones. Content analyses of the data indicated that high-activated positive emotions were highly salient, particularly in association with enacting and reflecting on proactivity. However, in the studies on mood and proactive goal regulation in Chapter 6, high-activated positive moods were positively associated also with envisioning and planning (see beta sizes reported earlier). This could speak to a more indirect affect-infusion (Forgas, 1995) where general mood broadens cognitive flexibility (Fredrickson 1998, 2001) that is likely needed when preparing avenues for engaging in specific proactive action.

In addition to the content analyses, more grounded analyses of the qualitative data (Strauss & Corbin, 1998) indicated that emotions had an evaluating role for all phases of proactive goal regulation, and, particularly, a motivating role for envisioning and enacting. High-activated positive emotions (the emotion family of joy) thus took on an evaluating/motivating role for enacting and an evaluating role for reflecting. The positive associations of high-activated positive moods and emotions (feelings of joy), particularly for enacting and reflecting, are depicted in the summative model of the role of affect for proactive goal regulation (Figure 8.2).

**Low-activated positive affect.** Turning to the role of low-activated positive affect, I theoretically argued that feelings of low-activated positive affect should signal that a present situation was already desirable and thus did not need changing (Izard, 1977) and would ultimately lead to inactivity (Frijda, 1986). Empirical findings in relation to low-activated positive moods, such as feeling overall calm and relaxed at work, supported these arguments. Low-activated positive mood was neither associated with proactive behaviour (Chapter 4) or any element of proactive
goal regulation, work or career-related (Chapter 6). In the interviews in Chapter 7, informants also indicated that feelings of low-activated positive moods at the onset of proactive goal regulation sometimes derailed, rather than encouraged, the pursuit of proactivity. For instance, feeling satisfied at the career level one is at, may derail employees from setting and implementing a career-related proactive goal, as described by a customer service manager:

*I don't currently have a huge desire to go any higher than the level I am so I'm quite happy at the level I am and I feel confident at the level I am and I am quite comfortable at that level.* [CSM, 16, TI]

However, qualitative findings from Chapter 7 indicated that low-activated positive emotions did have an important role for proactive goal regulation: Low-activated positive affect emerged as highly salient in informants' accounts of reflecting on past proactive efforts (49% of informants reported to have experienced feelings such as comfort, pleasantness or satisfaction when thinking about the outcomes of proactivity). Low-activated positive affect thus took on an evaluating role for proactivity in signalling that an outcome was successfully achieved (see Figure 8.2 for a depiction of the role of low-activated positive affect for proactive goal regulation). Although I did not systematically test for the dynamics of past emotional experiences for future proactivity, informants who reported positive feelings upon reflecting their proactive efforts often indicated they would engage in this type of behaviour again in the future. This also supports the argument made by Baumeister and colleagues (2007) who suggested that past emotional experiences serve as a learning mechanism in shaping future behaviour in similar situations. Thus, individuals evaluate how a certain behaviour makes them feel and use this feeling as an indicator for similar situations in the future in guiding their behaviours.

*High-activated negative affect.* Turning to the role of negative affect for proactive goal regulation, I argued that the role of high-activated negative mood for proactive goal regulation should be rather ambivalent. Thus, negative affect can signal to an individual that the present situation needs changing (Carver & Scheier, 1990a) and can act as a stimulus for initiating proactive behaviours. However, feelings such as anxiety at work could also deplete self-regulatory resources needed for self-regulation in discretionary, self-initiated behaviours (Muraven & Baumeister, 2000; Schmeichel & Baumeister, 2004), lead to goal blockage (Berkowitz, 1989) and
prompt avoidant rather than proactive approach behaviours (Carver, 2006; Higgins, 1997; Rodell & Judge, 2009). As expected, quantitative analyses in Chapters 4 and 6 indicated overall non-significant associations of high-activated negative moods and proactivity.

Findings from Chapter 7 further suggested that the role of high-activated negative emotions for proactivity was rather complex. For instance, unrelated high-activated negative feelings sometimes signalled to an individual that the focus of attention needed to be directed towards more urgent tasks. For instance, a section manager reported that she started to engage in job crafting (Wrzesniewski & Dutton, 2001) only after she felt less pressured in her new job:

I think the first six months I found the job very hard for various reasons. Even though I was an experienced Team Manager the step up to Section Manager I did find harder than I thought I would so I think the first six months were just very difficult anyway. I think it was more difficult as well because I had a bigger Section in the first six months. ... it was just too much to cope with... [Recently] I have been more proactive in doing things differently because I feel stronger as a Section Manager and things are more routine and more habit now than they were six months ago ... so I think I am in a position now where I am more proactive and I do think about things differently and how I can make the job more interesting and what more I can achieve with my teams than I did the first six months. [SM, 19, T2]

Further, even directly related negative emotions potentially derailed proactive efforts if they were appraised by the individual as too strong (Folkman et al., 1986). Thus, intense feelings of fear in relation to a proactive issue could derail a set proactive goal from being implemented. For instance, a section manager described how she decided not to enact in her goal to change the strategic setup of her work, out of fear of negative consequences:

I've thought about changing it but not actually implemented it because it's been a bit of a drastic change so I have been a bit fearful of it and worried about the reaction that it might get - that's probably the biggest thing that I haven't done. [SM, 34, T1]
However, I also found evidence of different qualities of rather high-activated negative affect to have motivating functions for proactivity. Thus, feelings of anger were positively associated with envisioning proactivity. Fear (which comes closest to the conceptualisation of high-activated negative affect in Chapters 4 and 6) was experienced mainly in connection with enacting in proactivity and appeared to help sustain attentional focus on the proactive issue. In the quantitative Chapters 4 and 6, I had limited the choice of items for the quantitative measure to feelings that reflected more generalised feelings at work (based on Warr, 1990) that included feelings similar to fear, however not highly directional feelings such as anger which rather resemble emotions than mood. As such, I could not directly compare the roles of anger as a mood with anger as an emotion for proactive goal regulation. Future research could investigate the role of moods related to anger for proactive behaviours.

Based on my reading of self-regulation research I would however not expect a positive relationship between overall work-related feeling anger and proactivity. Highly potent negative feelings, such as anger, (see Shaver et al., 1987, for an investigation of the potency of emotions) should distract self-regulatory focus from a given task (Beal et al., 2005) and deplete individuals' resources in dealing with the negative feeling (Hobfoll, 1989; Muraven & Baumeister, 2000). The empirical findings on the association of emotions of anger and fear with the envisioning and enacting phases of proactivity, respectively, are depicted in the integrative model in Figure 8.2.

Low-activated negative affect. I theoretically argued for feelings of low-activated negative affect to broaden individuals' cognitions (Gable & Harmon-Jones, 2010; Verhaeghen et al., 2005) which should facilitate the setting of proactive goals. Low-activated negative affect should also lead to contemplation and rumination (see Martin & Tesser, 1996). It should also signal that a current situation is not pleasant, thus prompting thoughts of how to improve the current situation (Carver & Scheier, 1990a). However, similar to high-activated negative affect, I argued that low-activated negative affect would however result in avoidance rather than approach behaviours (Carver, 2006; Higgins, 1997; Rodell & Judge, 2009) and deplete individuals' self-regulatory resources (Hobfoll, 1989), thus resulting in a zero relationship with the actual implementation of proactive behaviours (enacting). I thus
argued that low-activated negative affect would be positively associated with all phases except enacting.

Empirical findings in Chapter 6 supported my arguments in some parts and contradicted them in others. In support of my arguments, low-activated negative moods were not associated with enacting in work or career-related proactivity, in either sample of call centre employees and medical students, respectively. However, contrary to my expectations, low-activated negative affect was only positively associated with envisioning work-related proactivity ($\beta=.28$, $p<.001$) in the sample of call centre employees. It was, in support of my hypotheses, related to envisioning, planning and reflecting career-related proactivity ($\beta=.30$, $p<.05$; $\beta=.36$, $p<.01$; $\beta=.27$, $p<.05$; respectively for envisioning, planning, and reflecting) in the sample of medical students. These differential findings could be due to differences in the meaning of work- and career-related proactivity for depressed individuals: Changing the self to achieve a better fit with the environment (career-related proactivity) could be more highly relevant to the self (Markus & Nurius, 1986), prompting individuals who experience low-activated negative feelings to not only set proactive goals but also to plan and to ruminate about these goals more extensively than they would do when thinking about improving the organisation (work-related proactivity).

Future research should investigate the role of low-activated negative affect for different types of proactivity more in detail. Particularly, future research could investigate the longer term outcomes of low-activated negative affect: extensive engagement in rumination or contemplation of proactive change without the implementation of action towards a change could ultimately be disruptive, from both an organisational perspective (e.g., ‘wasted’ time) and an individual perspective (e.g., discontent as a result of unfulfilled aspirations; see Seligman’s (1975) model on ‘helplessness’).

The one consistent result across samples for low-activated negative affect (which is as such depicted in the role of low-activated negative affect for proactive goal regulation in Figure 8.2) was that low-activated negative appeared positively associated with envisioning proactivity ($\beta=.28$, $p<.001$ for work-related proactivity; $\beta=.30$, $p<.05$ for career-related proactivity). This finding was further supported in Chapter 7, where I investigated the role of low-activated negative emotions for
proactive goal regulation. Low-activated negative emotions dominated in the envisioning phase. Thus, 29% of informants experienced low-activated negative affect in at least one account of proactivity. Low-activated negative affect, mostly represented in feelings of sadness, thus took on a motivating, prompting role of envisioning (see Tables 7.5 and 7.6). Low-activated negative emotions were, however additionally salient in the reflecting phase, where they fed back to individuals the perceived failure of past proactive efforts.

Anecdotal evidence from the interviews suggests that feelings of sadness as an outcome of proactivity likely led to disengagement from this type of behaviour in the future, possibly because these feelings represented a learning process that subsequently influenced future decision making (Baumeister et al., 2007). Future research in terms of negative emotions in general could investigate the situational and individual contingencies that determine when negative affect derails, rather than prompts, employee proactivity. In this vein, the can do motivational pathway (Parker et al., 2010) could be particularly important by shaping whether individuals have sufficiently high perceptions of their own capability to implement proactive goals to change a situation (Bandura, 1997; Parker, 1998).

To summarise, low-activated negative moods appeared to facilitate envisioning of proactivity and high-activated positive moods were positively associated with all four elements of proactive goal regulation (see Figure 8.2, the distal influence of these affects is depicted in one-headed arrows pointing towards the elements of proactive goal regulation). Further, emotions took on a proximal motivating and evaluating role for proactivity (depicted in reciprocal arrows leading to and from the elements of proactive goal regulation). Notably, different qualities of negative feelings prevailed in different phases of proactivity. Thus, feelings of anger or sadness were predominant in prompting envisioning of proactivity. Fear was associated with enacting in proactive behaviours and sadness was linked with informants' perceptions of failed proactive efforts. Positive feelings of joy were most dominant in the planning, enacting and reflecting phases. Next, in further integrating

16 Notably, this investigation was based in the same work environment as was Study 1 in Chapter 6 that had investigated the role of low-activated negative mood for work-related proactivity. Thus, further support is needed by future research that extends to work environments beyond those of call centers.
the empirical results of my thesis I turn to discussing expected interactions between different types of affective experience.

**Figure 8.2**

*Integrated Model of the Role of Affect for Proactive Goal Regulation*

*Note.* The distal roles of moods for motivating proactive goal regulation are indicated by one-headed arrows. The proximal roles of emotions in motivating and evaluating proactive goal regulation are indicated by arrows that incorporate reciprocal influences. Indications of the role of emotions for the different elements of proactive goal regulation are based on simple counts and are meant to be rough indications of overall patterns that emerged, not statistically significant results.

*Interaction of different types of affect.* Although I did not test the interaction of different types of affect directly, my empirical findings on the roles of different qualities of mood and emotions indicate such interactions might be relevant. Thus, whilst empirical findings from Chapters 4 and 6 indicated that high-activated positive moods were positively associated with the envisioning and enactment of proactivity, findings from Chapter 7 indicate that high-activated negative emotions were highly
dominant in the envisioning and enacting phases. Thus, call centre employees reported to have experienced feelings of anger and sadness in the envisioning phase, and feelings of fear when enacting in proactivity. It could be that overall positive moods help alleviate the tendencies to abandon goals when encountering negative affect (Carver & Scheier, 1990a). 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; George & Zhou, 2007; Martin, Kuiper, Olinger, & Dance, 1993), which might facilitate sustaining and completing 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, could have particularly powerful effects on prompting and sustaining proactivity because individuals are proactive in order to maintain their positive moods (Carlson et al., 1988; Wegener & Petty, 1994). In the limitations and future research part of this chapter (Section 8.4.2), I will outline this idea further in acknowledging the potentially active role individuals take in changing their own affective experiences (e.g., Gross, 1998).

8.3 Practical Implications

In my thesis, I conceived proactivity as a way of behaving (e.g., Grant & Ashford, 2008; Parker et al., 2010) as opposed to a stable disposition (Bateman & Crant, 1993). Empirical findings supported this perspective. Thus, the degree to which respondents in my studies indicated they had been proactive was a function of proximal motivational factors (can do, reason to, and energised to; see Chapter 4). Further, in the quantitative analyses of my thesis that investigated the role of moods for proactivity at work (Chapters 4 and 6), moods were associated with proactivity whilst controlling for systematic influences of trait affectivity. All together, these findings coincide with previous proactivity research that has shown that more malleable motivational factors are associated with employees’ proactivity over and above disposition (e.g., Dorenbosch et al., 2005; Parker et al., 2006). It also further strengthens Frese and colleagues’ (1996) call for the use of developing proactivity amongst employees rather than selecting dispositionally proactive individuals into the organisation.
Organisations can thus develop interventions that are targeted at facilitating proactivity amongst their employees. The conception of proactivity as a goal regulation process in this thesis provides a useful basis for such organisational interventions and development programs. Thus, organisations can now measure to what extent employees engage in each of the proactive goal regulation elements. Dependent on the context of the work and the organisation, organisations may favour that employees plan very carefully before they engage in proactivity, for instance in safety-relevant work environments. Instead, service companies might wish for their employees to very quickly enact on benefitting a customer in a service interaction. By investigating employees’ engagement in all elements of proactive goal regulation, organisations may determine which organisational and individual factors contribute to the engagement of each and design corresponding intervention and development programs.

Findings of this thesis also relate to how affective experience at work influences proactive goal regulation. One important finding from Chapter 7 was that employees set proactive goals that were prompted by negative emotions such as being annoyed or frustrated about a faulty work procedure. Similarly, employees’ perception of not having been able to achieve an improvement to the situation resulted in negative feelings. Research indicates that emotions may fade into more general work-related moods (Frijda, 1993). Thus, it is relevant for organisations to investigate whether employees successfully enact on proactive issues that are caused by negative emotions. Employees’ engagement in envisioning proactive goals without (successfully) enacting on them (because of work systems or leadership in the organisation, or individual perceptions of a lack of capability, and so forth) might ultimately lead to overall disengagement and detachment from the organisation. Anecdotal evidence from the case study with call centre employees suggested that not all proactive efforts needed to be successfully implemented – in some cases, it was important that supervisors acknowledged a suboptimal situation and explained to employees the reasons why an improvement was not possible. I will return to discussing the role of leadership for facilitating proactive goal regulation below.

Empirical findings from Chapter 7 also indicated that employees tended to experience feelings of anxiety and nervousness when enacting proactive behaviours. These feelings were associated with employees’ perceptions of vulnerability when
presenting ideas in front of colleagues and supervisors, or with perceptions of lacking the personal or job-related skills to enact the required behaviour appropriately. Practically, these findings suggest that organisations could facilitate proactivity by increasing employees' perceived capability to enact in proactive behaviours adequately, for instance by means of presentation skills training that enhance employees' perceived capability to present their ideas to supervisors and colleagues. It could also indicate a need to install organisational structures and routines that facilitate and encourage transparency and communication across teams and hierarchies, such as providing 'issue boards' where employees were encouraged to communicate ideas for process improvements, as the organisation in my case study did.

Further, interpersonal processes likely play a role in facilitating proactivity at work. Thus, elements such as perceived trust in supervisors (McAllister, 1995) and psychological safety (Baer, & Frese, 2003) appear crucial for facilitating employees' decision to enact on their proactive goals. In particular, perceptions of support by supervisors might be relevant in generating constructive outcomes from negative affect (George & Zhou, 2007) and thus facilitate the implementation of proactive goals that are based on negative issues in the organisation. Organisations could develop supervisors' capabilities of coaching and supporting employees in their proactivity. Additionally, as previous research suggests, top managements' explicit communication that proactive behaviours are welcome in the organisation might additionally help to mitigate perceived risk to engage in proactive behaviours (Dutton et al., 1997; Morrison & Phelps, 1999) and thus help translate employees' envisioning and planning proactivity into overt action towards a proactive impact.

One of the core empirical findings of my thesis (across Chapters 4, 6 and 7) was that it was high-activated positive affective experience at work such as feeling energetic and enthused, as compared to low-activated positive feelings such as comforted and relaxed, that was positively associated with all elements of proactive goal regulation, both across call centre employees as well as across medical students.

As such, organisations as well as higher education should aim to provide inspirations for employees/students that maintain high levels of activated positive affect. Past research has identified influential facilitators of positive affect at work. For instance, positive affect appears readily influenced by various features of work
such as the quality of work design, teams, or leaders (Brief & Weiss, 2002; George & Brief, 1992). With a particular focus on high-activated levels of affective experience, research on the related concept of employee engagement (for a comparison of the two concepts, see e.g., Bindl & Parker, 2010a; Macey & Schneider, 2008) has indicated several avenues for promoting high-activated positive feelings at work. Thus, in a study with service employees, positive daily team climate predicted higher levels of individual employee engagement on the same day (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009).

Organisations should therefore aim to pay attention to the moods of work groups. Interventions that improve teams' overall level of engagement will likely produce more sustained effects than targeting individuals only. Additionally, physical features of the job, such as pleasant office designs and good technological equipment can promote engagement amongst employees (Salanova, Agut, & Peiró, 2005).

Likewise, being responsible for different tasks has been shown to prevent feelings of monotony and to enable employees to feel stimulated in their job (Salanova & Schaufeli, 2008). Similarly, research indicates that the broadening effect of positive mood on cognitive processes only occurs if the task is judged to be important (Isen, 1999). One particular strategy in the context of promoting particularly high-activated types of positive affect could be to engage employees/students with the outcomes of their potential proactive goals in order to increase perceived task significance. For instance, in a study of professional fundraisers, Grant and colleagues (2007) found that employees worked substantially more productively if they personally met the end beneficiaries of their fundraising activities. Thus, to confront call centre employees with the end product of their raison d'être in the organisation would be likely to facilitate perceptions of task significance. Similarly, in order to promote career-related proactivity in medical students, the course syllabus could comprise work placements early on, where students see the effect of the things they learn at University on actual patients.

Overall, a discussion of practical implications from the empirical findings of this thesis indicate that organisations can choose from a wide range of options, the feasibility and usefulness of which will to a certain extend depend on the specific
circumstances and needs of an organisation, in order to facilitate employees’ engagement in proactivity.

8.4 Limitations and Future Research

This thesis focused on investigating the roles of moods and emotions for employees’ proactive goal regulation. There are several limitations and avenues for future research that arise from this thesis. Whilst I have pointed out the major limitations of the four empirical studies in the respective chapters, here I will point out and elaborate study-spanning, more general themes of limitations and potentials for future research. I outline three overarching themes below:

8.4.1 Complexity of the proactive goal regulation process

In my thesis, I investigated proactive goal regulation as the extent to which employees engaged in different elements of the process: envisioning, planning, enacting and reflecting (Chapter 5). I developed and validated this measure in the context of task proactivity (Griffin et al., 2007), and replicated it for the context of career proactivity. I thus aimed to measure two different types of proactivity, one that was mainly related to changing the work environment (task proactivity), and one mainly related to changing oneself (career proactivity), thus reflecting the two main ends of proactive impact (Parker et al., 2010). In Chapter 7, I chose a methodologically different approach in freely exploring employees’ retrospective accounts of proactive goal regulation with regards to any type of proactivity, although the context of a call centre environment meant that proactive behaviours such as problem prevention (Parker & Collins, 2010), taking charge (Morrison & Phelps, 1999) and customer service proactivity (Rank et al., 2007) dominated.

Although I showed that different elements of proactive behaviour at work can be empirically meaningfully distinguished, future research is needed to add more fine-grained insights into how the process of employees engaging in these different phases of proactive behaviour unfolds, including how the process varies for different forms of proactive behaviour (see e.g., Belschak & Den Hartog, 2010; Parker & Collins, 2010). For instance, proactively helping a customer might be a short-lived, spontaneous act for which affect infusion (Forgas, 1995) might be highly relevant. More long-lived, planning-intense types of proactivity such as strategic planning (Parker & Collins, 2010), in contrast, could be less associated with affective
experience. In this vein, preliminary evidence from a sample of nurses suggests that affective experience was a more important influencing factor for patient care-related proactivity than were cognitive-motivational factors, whereas the act of voicing issues to supervisors was more highly associated with cognitive factors than with affective experience (Bindl, Parker, Johnson, Groth, & Collins, 2009).

These differences in proactivity also raise the question as to the role of affect for proactivity across different occupations and work environments. In this thesis high-activated positive mood, for instance, was consistently positively associated with proactivity across samples of call centre employees and medical students. However, low-activated negative affect was more important for planning and reflecting on proactivity in the context of career-related proactivity than for work-related proactivity. Future research could extend the work of this thesis to systematically compare and contrast the role of affect for proactive goal regulation across different types of occupations and across ways of behaving proactively in organisations.

Diary studies (see e.g., Bolder et al., 2003) could build on the here presented framework of proactive goal regulation to track one specific proactive goal and related planning, enacting and reflecting processes, as well as related feelings, over time. For instance, such diary design could focus on investigating whether the nature of the process changes over time, dependent on the level of experience of the individual with proactive goal regulation. For instance, Grant and Ashford (2008) proposed that the repeated display of proactive behaviour results in more automated processes, with employees then displaying proactive behaviour regardless of expected feedback or consequences.

Additionally, future research could focus on investigating more complex parameters within the different elements of proactivity. Frese and Zapf (1994) suggested, for instance, a differentiation of goals along their difficulty and connectedness with sub-goals. In a similar vein, Grant and Ashford (2008) argued that proactivity at work can be distinguished along the criteria of their form, their intended target of impact, their frequency, timing and tactics. Incorporating these aspects into the measurement of proactive goal regulation would yield further insights into potential differences alongside different qualities of proactive work.
behaviours and possible differential emphases of affective experience for these qualities.

8.4.2 Embeddedness of affective experience and proactive goal regulation in the social context

In this thesis, I focused on individuals' experience of affect and proactive goal regulation. This focus could now be extended to investigate the relationship of affective experience and proactive goal regulation in the broader context of the organisation. For instance, in cases where proactivity is about changing the context of the work, proactive goal regulation likely includes cooperation with others in the organisation. Different areas of proactivity research have acknowledged the role of social processes for proactivity by investigating the role of influencing tactics of employees in raising issues to top management (Ashford et al., 1998; Dutton & Ashford, 1993; Dutton et al., 2002; Dutton et al., 2001).

Similarly, in my empirical work with Heather Vough and Sharon Parker (2010), we found evidence of the role of interpersonal influences in the course of the proactive goal regulation process. For instance, when planning proactivity, call centre employees often informed colleagues about their plans, sought additional information from experts in the organisation and verified with colleagues that a problem was of mutual relevance. Moreover, since proactive behaviours are both rather interpersonal as well as risky in character, issues such as trust in the supervisor and/or colleagues (e.g., McAllister, 1995), organisational climate (e.g., Baer & Frese, 2003) as well as leader-membership exchange (e.g., Graen & Uhl-Bien, 1995) are likely more important determinants of proactive behaviour than hitherto considered.

Some research to date has focused on team-level proactivity (Druskat & Kayes, 2000; Hyatt & Ruddy, 1997; Kirkman & Rosen, 1999; Tesluk & Mathieu, 1999). These studies suggest that proactivity is a relevant team-level concept. Future research could now investigate how proactivity at the individual level relates to team-level proactivity. For instance, in order for a team to act proactively, does it require all team members to be individually proactive or only a certain number of team members? And can colleagues share different steps of the proactive goal regulation process, for instance by one team member establishing the proactive goal and others planning and enacting on it? Such processes have not yet been examined.
The notion of group influence also relates to the conception of affective tone within a group (George, 1996). Thus, previous research indicates that moods converge within work teams, owing to mood contagion and social influence (Totterdell, Kellett, Teuchmann, & Briner, 1998). Within groups, a more positive group affective tone has been linked with superior performance at work (Totterdell, 2000). In contrast, negative affect expressed by others, particularly anger, has been linked with fear and exhaustion in the target of the anger as well as in uninvolved bystanders (Rupp & Spencer, 2006), thereby potentially stifling the proactivity of the target and bystanders. These thoughts lead to the notion of employees’ regulation of affective experience in others and in themselves which I will discuss in the following section of this thesis.

8.4.3 An agentic view on individuals’ regulation of affective experience

An agentic view of the regulation of affective experience appears relevant in the context of the relationship between affect and proactive goal regulation in a twofold way:

Firstly, individuals’ regulation of own emotions might be relevant for superior proactivity outcomes. As shown in Chapter 7, proactivity is often initiated by negative feelings such as frustration or annoyance. Further, in informants’ accounts of past proactivity in the call centre environment I found that proactivity was often met by negative emotions from others, showing their resistance to accept a change to a present situation. The enacting phase of proactivity also often required employees to engage in behaviours that would expose them to others such as presenting and voicing ideas to superiors — these behaviours were often accompanied by feelings of nervousness or anxiety. Proactive employees appeared to be able to cope with these negative feelings successfully in persisting with their proactivity. These findings indicated the potential role of individuals’ skills in regulating their own affective experience (e.g., Koole, 2009) for proactive behaviours at work. Successful emotion regulation to the extent that the employee quickly recovers overall positive affective experience in the face of negative emotions (Gross, 1998) should have several benefits for the employee.

For instance, it could act as a coping mechanism in preventing the employee from detrimental effects related to the experience of fully aroused negative emotions such as depletion of self-regulatory resources (Muraven & Baumeister, 2000;
Richards & Gross, 1999) and impairment in well-being and interpersonal functioning (Gross & John, 2003). Being aware of one’s own emotions (Swinkels & Giuliano, 1995) should also help. Thus, in a study of designers George and Zhou (2002) found that negative emotions promoted creativity, however only when employees possessed clarity of their feelings.

Similarly, employees who reinstall their positive affective experience more quickly than others might be more successful in their proactivity because their positive moods signal to others their benevolent intentions. In this vein, research has indicated that supervisors are likely to give more credit to proactive behaviours if the employee simultaneously expressed high levels of activated positive affect. Thus, Grant and colleagues (2009) argued that supervisors would react to employees’ expression of positive affect by attributing favourable motives to their engagement in proactive behaviours. However, display of highly-activated positive emotions may have beneficial effects only to a certain extent. Thus, it has been argued that organisations have implicit expectations as to the types of emotions that should be expressed by employees (e.g., Rafaeli & Sutton, 1989). For instance, in an organisation that values low extents of expression of affective experience, the display of high-activated positive affect in connection with voicing proactive ideas might be perceived by supervisors as ‘too emotional’. To be able to experience highly-activated positive affect, whilst displaying it in a way that is perceived by others as appropriate for the corresponding context, thus appears rather relevant for the context of proactivity at work. As Frese and Fay (2001) suggested, proactive employees might be the better emotion regulators.

Secondly, employees, in order to be proactive might engage in monitoring, or even regulating others emotions, in order to achieve their proactive goals. This also relates to the role of emotional intelligence for work performance (Ashkanasy, Ashton-James, & Jordan, 2003; Côté & Miners, 2006). In this vein, Ang, Cummings, Straub and Earley (1993), in a series of laboratory studies, showed that individuals were more likely to engage in feedback seeking when they perceived that the person they were to seek feedback from was in a good mood. Similarly, Morrison and Bies (1991) in their literature review argued that employees are more likely to engage in feedback seeking if the person to seek feedback from is in a positive mood, because they feel their act of feedback seeking will be seen more favourably. In order to
counter resistance of supervisors or colleagues in accepting proactive changes to the workplace, employees might thus seek to engage in active tactics to favourably influence others' emotions towards the proactive issue. In deliberately influencing others' emotions (for a classification of strategies, see Niven, Totterdell, & Holman, 2009), employees could thus lower resistance from the environment towards their proactive stances and solicit other's engagement in the proactive issue. Future research could investigate the role of emotion regulation of oneself and of other individuals in engaging and persisting in proactive goal regulation.

8.5 Conclusion

In this thesis, I set out to contribute to the extant research on affect at work and on proactivity with insights on the role of affective experience for sustained employee proactivity. I introduced the concept of proactive goal regulation and investigated the roles of work-related moods and emotions for different phases of the goal regulation process. My empirical findings provided initial support that different elements of proactive goal regulation can be empirically meaningfully distinguished. This differentiation adds to the literature on proactivity by providing an empirical framework from which to investigate self-regulatory processes that unfold when employees are proactive.

My thesis findings further indicate that being proactive is an affect-infused process. More specifically, findings from my thesis suggest that individuals' experience of affect both initiates and sustains proactive goal regulation. Particularly high-activated positive moods facilitated engagement in all phases of proactive goal regulation. Emotional experiences in relation to a proactive goal functioned as a motivator in prompting or sustaining proactive efforts or as an evaluator in learning from proactive efforts. My thesis thus suggests the importance of comprehensively investigating parameters such as activation and valence in affect, as well as different roles of moods and emotions when studying the relationship between affect and behaviours. Proactive behaviour at work is a timely and relevant topic for today's work places. Thus, with greater levels of decentralisation and fast-paced change, it is increasingly important that employees take charge of their careers and their work environments. Most importantly, the findings of this thesis suggest that the way employees feel when at work matters in their pursuit of making things happen.
References


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References


References


References


References


References


Appendices

Appendix 1: Structured Protocol for Informant Interviews

Exhibit 1: Structured Protocol for Initial Informant Interviews

<table>
<thead>
<tr>
<th>Warm up</th>
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<tbody>
<tr>
<td>1. What is your current position with [NAME OF ORGANISATION]?</td>
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<tr>
<td>2. How long have you worked in this position?</td>
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<td>3. How long have you worked with [NAME OF ORGANISATION] in total?</td>
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<td>4. What is a typical day at work like for you?</td>
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<th>Past Proactivity</th>
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<tr>
<td>5. Have you ever used your initiative to try to change or improve a situation at work?</td>
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<td>6. What was the situation?</td>
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<td>7. What was your motivation to do so?</td>
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<td>8. Could you describe the process from when you had the idea to when you actually engaged in the action?</td>
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<tr>
<td>9. How did you feel before you did it? During? After?</td>
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<td>10. Was anyone else affected by your action? If so, who, and how did they respond?</td>
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<tr>
<td>11. How did your leader respond to your action?</td>
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<td>12. Would you say that your action was successful? On reflection, how do you think back on it?</td>
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<tr>
<td>13. Would you engage in this action again? Would you do anything differently now?</td>
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<tr>
<th>Examples for Non-Proactivity</th>
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<tr>
<td>14. Can you think of a time when you had an idea or thought something needed to change but you didn’t do anything about it?</td>
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<td>15. Why did you decide not to act?</td>
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<td>16. Were there any consequences of not acting?</td>
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<td>17. How do you feel about this now?</td>
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<td>18. How would you respond if you were faced with the same situation again?</td>
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<th>Examples for failed Proactivity</th>
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<tbody>
<tr>
<td>19. Have you ever used your initiative and things didn’t turn out as you expected?</td>
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<td>20. How did that make you feel?</td>
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<tr>
<th>Emotions at Work</th>
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<tbody>
<tr>
<td>21. Have you ever experienced strong emotions at work?</td>
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<tr>
<td>22. What was the situation?</td>
</tr>
<tr>
<td>23. If negative emotions, what did you do about it/ the situation?</td>
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<tr>
<th>Current and Future Proactivity</th>
</tr>
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<tbody>
<tr>
<td>24. Are you currently thinking about or actively taking charge or showing initiative on any issues?</td>
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</tbody>
</table>
Appendices

Proactivity of Others
25. Can you think of someone in your team who shows the type of behaviours we just talked about?
   a. Could you name a typical example of the behaviour?
   b. How did you/other colleagues/your leader find this behaviour?
   c. Was it more a one-off, or does this person usually behave like that?
   d. Was that type of behaviour successful, or could your colleague have done it better?

26. Does your leader show these type of behaviours? How does his/her team find these behaviours of the leader?

General Performance
27. Can you think of a specific situation when you were very satisfied with your performance? What made you be satisfied with it?

Future at [NAME OF ORGANISATION]
28. Where do you see yourself job-wise in a couple of years from now?
29. How are you going to get there?
30. What could stop you from getting there, what could help you?

Exhibit 2: Structured Protocol for Follow-up Informant Interviews

Warm up
1. Is your current position with [NAME OF ORGANISATION] still the same?
2. Has anything changed in your work between the first interview and now?
3. Has any of your job tasks changed? If so, how did this come about? Are you currently thinking of changing your tasks, like taking on a new task or so?

Past, Current, and Future Proactivity
4. I remember that we talked about this situation in the first interview where.....(referring to past examples mentioned at time 1)
5. Again thinking about your job during the past month: can you think of a situation where you used your initiative to try to change or improve a situation at work? Or where you took charge of something without having been told to do so?
   a. What was the situation?
   b. What was your motivation to do so?
   c. Could you describe the process from when you had the idea to when you actually engaged in the action?
   d. How much time and effort would you say did you invest in this action?
   e. How did you feel during this whole process? [probe: I would like to give you four descriptions of emotions, could you please tell me what best reflects your feelings when thinking about engaging in the acting, during the whole process, and as a consequence? (engaged/enthusiastic, comfortable/relaxed, miserable/depressed, distressed/anxious)]
   f. Was anyone else affected by your action? If so, how did they respond?
   g. Would you say that your action was successful?
Appendices

6. Are you thinking of using your initiative in a work situation right now?

Dimensions of Proactivity

7. I'd now like to ask you about your work more in general:
   a. How often do you actively seek feedback from your supervisor? (feedback seeking)
      i. Why/why not do you do it? Do you have a strategy for seeking feedback? (like, choosing the right time, words...)
      ii. How do you feel when at each stage?
   b. How often do you engage in career planning, e.g. trying to get into certain training courses, discussing your career with your supervisor, etc. (career Initiative)
   c. How often do you negotiate with your supervisor about your job role? (job change negotiation)
   d. How often do you change bits of your job in order to make it more suitable for you? Prompt – do other people in your role do their job in the same way as you do? (job crafting)
   e. How often do you communicate your views about work issues to others in the workplace, even if your views differ and others disagree? (voice)
   f. How often do you search out new processes at work? (individual innovation)
   g. How often do you try to find the root cause of things that go wrong at work? (problem prevention)
   h. How often do you initiate changes in the way you deal with customers (customer service proactivity)?
   i. How often do you think while at work how this work might affect [NAME OF ORGANISATION] in the future? (strategic scanning)

Emotions at Work

8. Thinking about your job during the last past month: can you think of a situation where you were really de-motivated or really energised? What was the situation? If de-motivated, what did you do about it?

Non-Proactivity

9. Can you think of a time when you had an idea or thought something needed to change but you didn’t do anything about it?
10. Why did you decide not to act? Were there any consequences of not acting?
11. How do you feel about this now? How would you respond if you were faced with the same situation again?

Proactivity of Others

12. Can you think of someone in your team who shows the type of behaviours we just talked about?
   a. Could you name a typical example of the behaviour?
   b. How did you find this behaviour, and how did other colleagues/leader find it?
   c. Do you have any guess why your colleague engaged in this
behaviour?

d. Was it more a one-off, or does this person usually behave like that?
e. Was that type of behaviour successful you think, or could your
colleague have done it better and if so, how?

13. What in your experience encourages or discourages employees from putting
forward ideas etc.? What can [NAME OF ORGANISATION] as an employer
do in order to encourage this?

14. What in your experience divides somebody who successfully implements new
ides/changes procedures etc. from somebody who doesn’t?

Proactivity in other Life Domains or Past Work

15. What about your life outside work? Are you that kind of person who goes out
there and organises meetings with friends, and plans activities in your free
time? How does this relate to your behaviour at work?

16. Think of your last job. Would you say you were more or less active in putting
forward ideas, and doing things beyond the ones you were expected to do?
And why do you think is this so?
Appendix 2: Inter-rater Coding Guideline for Affective Quadrants

CODING INSTRUCTIONS

INTRO / THEORY BACKGROUND
Thank you very much for helping with my thesis research as an independent coder. In my thesis, I explore the role of affective experiences at work for proactive behaviours. Being proactive is about making things happen, anticipating and preventing problems, and seizing opportunities. It involves self-initiated efforts to bring about change in the work environment and/or oneself to achieve a different future. For instance, employees can decide on their own to improve a process at work (changing the work environment). They can also seek out opportunities to learn new skills to enhance their career progression (changing oneself). In the recent study, I asked call centre employees to report to me past, current, or future plans for engaging in proactive behaviours at work. I also asked these employees to recall how they felt when being proactive.

Affective experiences can be represented in the circumplex model of affect (shown in Figure 1). Within the circumplex model of affect, emotions are distinguished along two dimensions: 1. according to whether they are positive or negative (horizontal axis of the affective circumplex), and 2. according to whether they are either high or low aroused/activated (vertical axis of the affective circumplex). The combination of both dimensions determines to which of the four affective quadrants the quote should be allocated to: High-activated positive affect, low-activated positive affect, low-activated negative affect, or high-activated negative affect.

Figure 1: Circumplex Model of Affect
CODING INSTRUCTIONS

The quotes I ask you to code here are exerts from these interviews. Each of the quotes will contain an expression of feelings. Please read the entire quote carefully to get an overall impression of the context in which the feelings are expressed. Please then allocate the expression of feelings to one of the four quadrants of affect.

For every emotional expression, you need to identify whether it is a pleasant or an unpleasant emotion (horizontal axis of the affective circumplex), and whether it is highly or low aroused/activated (vertical axis of the affective circumplex). The combination of both determines to which of the four affective quadrants the quote should be allocated to.

The overview from a current meta-analysis will give you a good indication of where each feeling fits in (see Figure 2). However, you will find that irrespective of this overview, reading the overall quote in context will give you an additional hint as to where the affective expression might be best allocated to. This is especially relevant where an emotion is not represented in the study by the overview in Figure 2, or where the emotion does not per se clearly fall into one of the four affective quadrants in the meta-analysis (this is the case for all emotions listed as 0, 90, 180, or 270 degrees, or those labelled as ambiguous). Please aim to get an overall impression of the emotional expression in the quote, and then decide based on your understanding of the situation where the emotion is best allocated to.

Before you start, here are some important organisational information:

- In some of the quotes you will find multiple emotional expressions. The one that you are asked to rate will be marked in bold and italics. While other emotions named in the quote might give you an additional hint concerning the context of the situation, you should only rate the single emotional expression highlighted as indicated above.

- Please try to allocate each instance to one (only one!) of the four affective quadrants, if at all possible. Only in cases where you feel you cannot make a decision at all, please leave it blank and write a short note in a separate document instead explaining why it was not possible for you to allocate this emotion to a quadrant, this will help me improve the coding guideline in the future.

- The context in which an emotional expression is experienced in can shape your decision to allocate even the same emotion to different quadrants in different circumstances/quotes. That’s ok, above all try to understand the quote and allocate the emotional expression to the best of your understanding in the context of the specific quote to an affective quadrant.

And, at last, here are some general coding tips:

1) Suggestions for an Overall Coding strategy: First, decide on whether an emotional expression is positive or negative — once you’ve done that, try to gauge:
   - A) If it’s a negative emotion: does the sentence make more sense if you replace it with words such as anxious, frustrated, or nervous (= high-
activated negative affect) or, alternatively, with *depressed* or *inactive* (= low-activated negative affect)?

- B) If it's a positive emotion: does the sentence make more sense if you replace the underlined emotion with words like *enthusiastic* or *energetic* (= high-activated positive affect), or rather with *relaxed* or *inactive* (= low-activated positive)?

2) Please note, sometimes respondents report on very intense levels of one emotion, e.g. they say "I was really extremely depressed", or "I was absolutely comfortable", however this might still mean the reported emotion is low-aroused, that it is merely a case of very high levels of experiencing a low-aroused emotion. Similarly, if they would say "I felt somewhat frustrated" that would be low-levels but of a high-aroused emotion (= to be coded as high-activated negative affect).
**Figure 2: Alphabetic overview of emotions in the affective circumplex model**

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<th>Affective Experience</th>
<th>Commonly predicted location in affective circumplex (in degrees)</th>
<th>Affective Experience</th>
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*Note. For allocation to the different affective quadrants, please compare column ‘commonly predicted location’ (in degrees) with indications of degrees in Figure 1 above.*
Appendices

Appendix 3: Inter-rater Coding Guideline for Emotion Families

ASSIGNING OVERALL EMOTIONS FROM INTERVIEWS TO EMOTION FAMILIES

Dear both,

as a final coding task, I would like you to assign the emotions that were mentioned in the interviews (listed on page 3) to so-called emotion families, that is categories of emotions that they belong to. This scheme (an overview of these emotion families is provided on page 2) is independent of the affective circumplex model you have looked at so far. The scheme stems from a 1976 social psychology paper that aimed at summarising all possible human emotions – thus, you will find that many of the emotions listed there will not be relevant to our context here, and that some of the emotions sound somewhat old-fashioned.

However, the coding should be very straightforward to do – most of the below listed emotions are also listed exactly as such in the emotion families overview. Only a few of the here listed emotions won’t exactly appear in the overview. For these, it is particularly important that you 1) decide to which emotion family they belong most, and 2) name the emotion listed below the emotion categories, that best represents the emotion you are coding (for completion, these two steps need to be done also in case that the emotion is listed exactly in the schematic overview).

On Page 2 you will find the overview of emotion families framework (it would be helpful if you printed this page and had a look at while you code the emotions listed on Page 3).

Please assign each emotion to an emotion family and to the emotion that you think corresponds most closely to it within the emotion family. In case you think that several emotions resemble the emotion you are supposed to code for, please try and decide on only one emotion that best resembles your coded-for emotion best.
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Appendices
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