EFFECTIVE AND SUSTAINED PROACTIVITY IN THE WORKPLACE: A SELF-DETERMINATION THEORY PERSPECTIVE

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Abstract

Proactivity involves self-starting and future-focused action that aims to bring about change, either in the self or in one's work environment. In this chapter, drawing particularly on self-determination theory, we outline and develop current conceptualizations of how proactivity is motivated, as well as how to promote proactivity that is effective in bringing about change. We propose that autonomous regulation increases the likelihood that proactivity results in positive change for both individuals and organizations and introduce in a dynamic model that represents the positive upward spiral of autonomously regulated proactivity. Autonomously regulated proactivity involves a more complete goal regulation process and a greater sense of ownership and involvement of the self, thus making it more likely for proactive goals to be achieved. Via the satisfaction of psychological needs it enables high levels of individual proactivity that are sustained over time, and stimulates proactivity that is in line with organizational goals. We outline how organizations can encourage autonomously regulated individual proactivity that enhances employees' well-being and personal growth, and contributes to organizational effectiveness.

Keywords: Proactivity, self-determination, psychological need satisfaction

Effective and sustained proactivity in the workplace: A self-determination theory perspective

Introduction

Over the last few decades researchers have increasingly acknowledged that individuals in organizations are not merely "passive, reactive respondents to their context" (Parker, Bindl, & Strauss, 2010, p. 828) but they play an active role in shaping their roles, careers, work environment, social context, and organizations. Individuals "create visualized futures that act on the present; construct, evaluate and modify alternative causes of action to secure valued outcomes; and override environmental influences" (Bandura, 2006, p. 164). The concept of proactivity at work most strongly expresses this view of organizations as environments of and for human agency. Proactivity involves challenging the current situation and working towards what 'could be'. Specifically, being proactive reflects self-starting and future-focused action that aims to bring about change, either in the self or in one's work environment (Parker, et al., 2010). This conceptualization of behavior in organizations emphasizes intentionality and forethought, and acknowledges that individuals are not always merely motivated by tangible reward contingencies. Proactivity makes room for individual goals that are not tied to external rewards but are pursued because they are interesting, highly valued, or reflect authentic and interests. Correspondingly, proactive individuals experience a greater sense of self-determination in their lives (Greguras & Diefendorff, 2010; Seibert, Crant, & Kraimer, 1999).

Research has found that proactivity is associated with a range of positive outcomes (Fuller & Marler, 2009), including job performance (Crant, 1995; Thompson, 2005), career success (Seibert, Kraimer, & Crant, 2001), life satisfaction (Greguras & Diefendorff, 2010), and innovation (Kickul & Gundy, 2002). Proactive individuals are proposed to contribute to organizational effectiveness in dynamic and uncertain environments because in these

contexts, for example, it is not possible to anticipate and pre-specify all that is required of employees; instead, employees need to use their initiative and actively take charge of their environments (Griffin, Neal, & Parker, 2007).

Nevertheless, although there is good reason to expect positive benefits of proactivity, as well as supporting evidence, scholars have increasingly called for an acknowledgement of the potential downsides of proactivity. Not all proactive behavior predicts supervisors' judgments of overall job performance (Chan, 2006; Fuller, Marler, & Hester, in press; Grant, Parker, & Collins, 2009). There can also be costs of proactivity, both to individuals and organizations (Belschak, Den Hartog, & Fay, 2010; Bolino, Valcea, & Harvey, 2010). In considering proactivity we therefore need to consider not only how to motivate this type of behavior in organizations but also how to promote proactivity that is effective for organizations, as well as not so costly for individuals that it cannot be sustained over time.

In this chapter, drawing particularly on self-determination theory, we outline and develop current conceptualizations of how proactivity is motivated, as well as how to promote proactivity that is effective in bringing about change. Self-determination theory provides a particularly fruitful theoretical lens for explaining how proactivity is motivated. In the first part of the chapter, we review how different types of motivation influence the instigation of proactivity. For example, we argue that identifying with important outcomes (identified regulation) is more likely to stimulate proactivity than payment or other external rewards (extrinsic regulation). In the second part of the chapter, we draw on self-determination theory to propose ways to enhance the likelihood that proactivity is effective, both for the individual (e.g., preserving their resources over time) and/or for the organization (e.g., having a positive effect on job performance). In the third part of the chapter, we bring the previous arguments together to propose a virtuous circle by which autonomous motivation promotes effective proactivity which, through a number of mechanisms,

contributes to further proactivity, resulting in a positive upward spiral. Finally, we elaborate how organizations can support and encourage proactivity without undermining its self-determined nature. Prior to our focus on the motivation of effective proactivity, we begin by briefly reviewing the history of the concept of proactivity and the various conceptual approaches that have emerged.

Proactivity in the workplace – Disposition, behavior, or process?

Echoing developments in psychological theorizing about the nature of human behavior (Bandura, 1989, 2001, 2006), research on vocational and organizational behavior has over the last few decades increasingly adopted a more agentic view of individuals. This shift reflects structural changes affecting organizations as well as individual careers. As organizations increasingly need to respond flexibly to rapidly shifting market conditions, managing people in organizations is no longer about ensuring that clearly defined jobs are carried out effectively by enforcing rules and using controls. Instead, it becomes about articulating a vision and empowering an increasingly self-reliant workforce to work towards it (Cascio, 1995; c.f. Griffin, Parker, & Mason, 2010). In uncertain and unpredictable environments work performance is no longer about fulfilling a prescribed job role, but involves taking "self-directed action to anticipate or initiate change in the work system or work roles" (Griffin, et al., 2007, p. 329). At the same time, individual careers become increasingly independent from traditional organizational career arrangements. Concepts such as the protean career (Hall, 1976) or the boundaryless career (M. B. Arthur & Rousseau, 1996) acknowledge the increasing mobility between roles, jobs, organizations, or occupations, and emphasize developmental progression and a holistic perspective (Hall, 1996).

As job roles and career paths have become less predictable, scholars have moved beyond traditional theories of work motivation that primarily focus on assigned goals and have begun to explore "the creative ways in which employees deliberately plan and act to influence, change, and alter their environments" (Grant & Ashford, 2008, p. 6). Several originally isolated streams of research have explored different forms of proactive behavior in organizations: Individuals in organizations voice suggestions (LePine & Van Dyne, 1998), implement ideas (Parker, Williams, & Turner, 2006), and thus contribute to change and innovation (Howell & Higgins, 1990; Scott & Bruce, 1994); they shape (Tims & Bakker, 2010; Wrzesniewski & Dutton, 2001), expand (Nicholson, 1984), and negotiate their tasks and roles (Ashford & Black, 1996); they actively build networks and relationships (Morrison, 2002); they seek out information to improve their job performance (Ashford, Blatt, & VandeWalle, 2003); and they develop their skills and shape their careers (Claes & Ruiz-Quintanilla, 1998; Seibert, et al., 2001; Tharenou & Terry, 1998).

Research on these different forms of proactive behaviors has grown rapidly, but has largely been phenomenon-driven (Grant & Ashford, 2008; Parker, et al., 2010). Since the turn of the century researchers have increasingly called for an integration of these different types of proactive behaviors (Crant, 2000; Parker, 2000). In an effort to empirically integrate different proactive behaviors, Parker and Collins (2010) identified three higher-order categories: Proactive work behavior, proactive strategic behavior, and proactive person-environment fit behavior. Proactive work behavior is aimed at bringing about change within the organization, such as by improving work methods, voicing ideas or concerns, and taking action to prevent problems from reoccurring. Proactive strategic behavior concerns enhancing an organization's effectiveness and fit with the external environment, for example by identifying opportunities or threats or by bringing issues to the attention of top management in an effort to influence strategy. Through proactive person-environment fit behavior individuals improve the compatibility between their needs and abilities on one hand, and the opportunities and demands in the work environment on the other hand (c.f. Edwards, 1996).

It can involve proactively developing skills to meet anticipated demands, seeking feedback, or shaping one's job or role to better fit with one's needs or preferences.

Parallel to this phenomenon-driven focus on distinct proactive behaviors, researchers have investigated broader concepts of proactivity. Bateman and Crant (Bateman & Crant, 1993) identified proactive personality, the dispositional tendency to initiate change in one's environment, as a driver of proactive behavior across different domains. Evidence from a meta-analysis supports the role that proactive personality plays for job performance as well as a range of different proactive behaviors, and shows a positive relationship between proactive personality and career success (Fuller & Marler, 2009). Frese and colleagues (Frese & Fay, 2001; Frese, Fay, Hilburger, Leng, & Tag, 1997; Frese, et al., 2002; Frese, Kring, Soose, & Zempel, 1996) identified the concept of personal initiative, an "active performance concept" (Frese & Fay, 2001, p. 133) that captures a constellation of work behaviors defined as self-starting, proactive and persistent in the face of obstacles. By definition, these behaviors are aligned with organizational goals. In a recent meta-analysis, Thomas, Whitman, and Viswesvaran (2010) showed that personal initiative is positively associated with performance.

More recently, scholars have adapted a process view of proactive behavior. Frese and Fay (2001) drew on action theory (Hacker, 1998) to describe a sequential model of personal initiative. In a personal initiative action sequence, individuals first develop goals, then collect information and make prognoses about the future; they develop plans and execute them before they finally monitor the execution of their plan and gather feedback on whether their actions have been successful or need to be adjusted. Grant and Ashford (2008) distinguished between three phases of the proactive behavior process. In the anticipation phase, individuals envision possible future outcomes. They imagine possible futures (c.f. Strauss, Griffin, & Parker, in press) and the potential costs of pursuing these various possible futures. They then

generate plans of how to implement their ideas. They transform the anticipated future into an implementation guide that specifies how it will be promoted or achieved (Gollwitzer, 1999). This can involve the development of alternative strategies and backup plans. Finally, individuals engage in "action directed toward future impact" (Grant & Ashford, 2008, p. 18). In a combination of the Frese and Fay model and the Grant and Ashford model, Bindl and colleagues (Bindl, Parker, Totterdell, & Hagger-Johnson, 2012) proposed and tested a model of proactive goal regulation. They identified four phases of a proactive goal regulation process. In the envisioning phase, individuals identify opportunities for change and imagine a future that is different from the status quo. In the planning phase they prepare for bringing this future about by mentally simulating different scenarios of how to bring about the envisioned change and by identifying different pathways. The enacting phase involves engaging in proactive behavior. Finally, in the reflecting phase individuals reflect on the consequences of their behavior and gather information that will inform future proactive goal regulation. These authors showed these phases are distinct from each other, and differentially predicted by affect.

Parker and colleagues (Parker, et al., 2010) similarly conceptualize proactivity as goal-driven process. Following more general self-regulation theory(R. Kanfer & Ackerman, 1989), they distinguish between proactive goal generation, which corresponds with the envisioning and planning phases of Bindl et al.'s model and involves the anticipation of desired future states and outcomes, and the development of strategies to bring these states about. Goal striving captures the enacting and reflecting phases of the Bindl et al. model and involves "the behavioral and psychological mechanisms by which individuals purposively seek to accomplish proactive goals" (Parker, et al., 2010, p. 832). According to this conceptualization, for a goal-driven process to reflect proactivity, it needs to involve both processes of proactive goal generation and proactive goal striving. For example, this

definition excludes instances where individuals envision a proactive goal (generation) but then do not follow through with action (striving).

In the present chapter we define proactivity as goal driven process aimed at bringing about a different future that involves goal generation and goal striving elements.

Conceptualizing proactivity as goal-oriented process has important implications for our understanding of how proactive behavior is motivated, as we elaborate next.

What motivates proactivity in the workplace? Insights from self-determination theory

Antecedents of proactivity, including individual differences in the tendency to engage in proactive behavior, have received extensive attention in the literature. Individual differences investigated in previous research include demographics, knowledge and abilities, as well as personality (including proactive personality, as discussed above). Critical situational factors include job design, leadership, and climate (see Bindl & Parker, 2011b, for a detailed review). Scholars have argued that individual differences and contextual variables influence proactivity indirectly via proactive motivational states (Frese & Fay, 2001; Parker, et al., 2010; Parker, et al., 2006). Drawing on existing perspectives on motivation, Parker and colleagues (Parker, et al., 2010) identified three different groups of proximal motivational states through which more distal variables influence proactivity: *reason to* motivation, *can do* motivation, and *energized to* motivation. Individuals will set and pursue proactive goals

- a. if they have a compelling *reason to* engage in proactivity (Vroom, 1964), for example because it relates to their current or future goals (Eccles, et al., 1983),
- b. if they believe they *can*, i.e., that they have an impact on significant outcomes (outcome expectations, Bandura, 1977; Frese & Fay, 2001), and that they can be successful in being proactive and dealing with the consequences of their proactive behavior (efficacy expectations, Bandura, 1997; Parker, 2000), and

c. if they feel *energized* through the experience of high-activation positive affect (Bindl, et al., 2012).

Self-determination theory can contribute to our understanding of each of these states and thus provides insights into how proactivity is motivated, as we outline below. In self-determination theory, a continuum of autonomous to controlled motivation is proposed, with different underlying processes and consequences for the individual of the types of motivation (Deci & Ryan, 2000; Ryan & Deci, 2000). At one end of this continuum is intrinsic motivation, which involves the engagement in a behavior for its own sake, such as for enjoyment or a sense of challenge, independent of its contingencies. At the other end of the continuum lies external motivation, which involves the initiation and maintainance of behavior by consequences external to the person (external contingencies such as payment). In between these extremes are integrated, identified, and introjected motivation, which are experienced as more autonomous than external motivation, even though they not intrinsic. The sense of autonomy derives from a process of internalization, in which people take in attitudes, values, and regulatory structures (Ryan, Connell, & Deci, 1985).

These different forms of motivation can be translated into *reasons to* engage in proactivity (Parker, et al., 2010). The arguments are straightforward in relation to intrinsic motivation, the most autonomously regulated form in which behaviors are engaged in "out of interest without the necessity of separable consequences" (Deci & Ryan, 2000, p. 233). Parker et al., (2010) argued that, because of its emphasis on change-oriented behavior, being proactive increases challenge, thereby fulfilling individuals' basic needs for competence and autonomy. They gave the example of individuals who voluntarily, often in their own time, engage in the development of new open-source software because they find it intellectually stimulating (Lakhani & Wolf, 2003). Likewise, feelings of flow arise from engaging in challenging activities (Massimini & Carli, 1988), so the desire for flow can therefore prompt

proactive efforts. Finally, some types of proactivity (e.g., individual innovation) involve creative processes, which are inherently enjoyable for some individuals.

However, individuals also pursue proactive goals if the tasks involved are not especially enjoyable or intrinsically motivating. In regard to integrated motivation, individual "take in" and internalize values and regulations into their own identity. Thus, as with intrinsic motivation, Parker et al., (2010) argued that integrated motivation is likely to be a strong driving force for proactivity. That is, individuals will set and strive to achieve proactive goals is to fulfill important life goals or express values that are central to the self. For example, individuals engage in proactive behavior to bring about their Future Work Self, a representation of the self in the future that captures their hopes and aspirations in relation to work (Strauss, et al., in press).

Identified regulation occurs when "an individual consciously values the behavioral goal or regulation such that the action is accepted or owned as personally important", similar to the utility judgment in expectancy theory. Identified regulation can also therefore prompt proactivity because individuals "recognize that change toward the envisioned future outcome is important, for themselves and/or for others" (Parker, et al., 2010). For example, if feedback is seen as useful to achieving goals, then an individual is more likely to engage in feedback seeking (Ashford, et al., 2003). Likewise, the concept of flexible role orientation (Parker, Wall, & Jackson, 1997) relates to identified regulation because this refers to the breadth of ownership and responsibility that an individual has internalized into their construction of their role (Parker & Ohly, 2008). Evidence suggests individuals with a flexible role orientation are indeed more likely to engage in proactive work behavior (Parker, et al., 2006). Related concepts, such as felt responsibility for change (Fuller, Marler, & Hester, 2006; Morrison & Phelps, 1999) and perceived job breath (McAllister, Kamdar, Morrison, & Turban, 2007) also

reflect employees' internalization of values and, as such, can predict proactive work behavior (Fuller, et al., 2006).

Regarding which of intrinsic, integrated, and identified forms provide the strongest 'reason to' be proactive, drawing on research showing intrinsic motivation is best for interesting tasks but that identified and integrated were best for important yet uninteresting tasks, Parker et al., (2010, p. 848) suggested that having more than one "reason to", or multiple motivation forms, might provide a flexible motivation base sufficient to stimulate proactive goals and to see them through: "Evidence from education suggests the combination of intrinsic regulation with identified or integrated regulation might be the most powerful: Intrinsic motivation promotes a focus on the task and results in feelings such as excitement, whereas identification facilitates a focus on the long-term significance of the action and promotes persistence (Deci & Ryan, 2000)".

Whether proactivity is regulated by more controlled forms of motivation is less clear. Parker and colleagues (2010) have argued that proactivity by definition involves a sense of volition and is thus is autonomously regulated to at least some degree. Raub and Robert (2010) also argued that proactive behavior is less likely to be regulated by controlled forms of motivation than in-role behaviors and affiliative extra role behaviors such as helping. They propose that in-role behaviors are likely to be motivated mostly by external motivation as not performing them is likely to lead to punishments, while performing them is linked to contractual rewards. According to Raub and Robert, affiliative behaviors are likely to be regulated by introjected regulation, "based on social norms for appropriate interpersonal behavior" (p. 1747). Individuals would engage in affiliative behaviors such as helping because they experience a sense of pride when engaging in these behaviors, or because they would feel guilty otherwise. The authors propose that proactive behavior is however expected to be controversial and may even go against norms (c.f. Morrison, 2006), and argue that

proactivity is thus likely to be perceived as self-expressive and to be motivated by more autonomous forms of regulation.

Other authors have argued that there are increasing external pressures on individuals to display proactive behavior (Bolino, et al., 2010; Erdogan & Bauer, 2005). This would imply that proactive behavior may also be driven by controlled motivation. In regard to introjected regulation of proactive behavior, Campbell (2000) observes that job descriptions increasingly mention proactive behavior. Employees may thus feel guilty when they are not engaging in proactive behavior. This would be an example of introjected regulation where proactive goals have been taken in by the person but have not been accepted as their own. Introjected regulation occurrs when behavior is regulated by internal pressures such as guilt, anxiety, and self-esteem maintenance (Rigby, Deci, Patrick, & Ryan, 1992). As with external regulation, behavior is not self-determined, but is contingent on its consequences. However, in the case of introjected regulation these contingent consequences are administered by individuals themselves.

In regard to introjected motivation, Parker et al., (2010) suggested that achieving positive self-evaluation might prompt proactivity more so than avoiding negative self-evaluations. The desire to feel better about oneself might prompt individuals to gain useful information on their performance and seek feedback (Ashford et al., 2003). Nevertheless, while it is possible for proactive behavior to be motivated by introjected regulation, this form of motivation is unlikely to lead to proactivity that can be sustained over time, as we outline in the next section of the paper. It might also in some cases suppress proactivity. For example, Parker & Collins (2010) showed that a strong performance goal orientation (in which individuals have a strong emphasis on approval) is negatively linked to proactive work behaviors, which they suggested is because these individuals do not want to 'risk' being seen as incompetent when engaging in new or challenging behaviors.

Extrinsic regulation occurs when behavior is maintained by consequences external to the person, such as financial rewards. Marinova and colleagues (Marinova, Moon, & Van Dyne, 2010) found that employees see proactive behavior as instrumental in leading to rewards such as bonuses, promotion, or salary increases. Proactive behavior may also be used as an impression management tactic (Bolino, 1999; Hui, Lam, & Law, 2000). For example, individuals may try to enhance their positive image by seeking favorable feedback, for example by asking for additional feedback after a positive performance review (Morrison & Bies, 1991).

Whether all proactive behavior that leads to external rewards represents extrinsic regulation, however, is unclear, since it could be that individuals see proactivity as leading to important outcomes for themselves yet is still freely chosen, and thus driven by identified regulation. It could also be the case that outcomes that can be seen as external rewards are instrumental to individuals' authentic goals. For example, a person's Future Work Self, i.e., the representation of his or her hopes and aspirations in relation to work (Strauss, et al., in press), may involve working in a job with more responsibility; career progression will then be instrumental to the individual's life goals, and engaging in proactivity to achieve a promotion may thus be driven by integrated regulation. On the other hand it might be that individuals see their salary or job security as entirely contingent on proactivity, giving them little or no choice. In this case, they would feel under pressure to engage in proactive behavior, which would then be driven by extrinsic regulation. Proactive behavior may thus also be regulated by extrinsic contingencies, although we elaborate next why we believe such behavior is likely to be relatively less effective for both individuals and organizations.

Importance of autonomous regulation for effective proactivity

So far, we have argued that all types of regulation can potentially prompt proactive goal generation and striving, but that autonomously motivated forms relative to controlled forms are the most likely 'reasons' to be proactive. However, Parker, Bindl, and Strauss (2010) argued that not all proactive goal setting and striving results in actual change in the self or situation. They suggested that whether actual change occurs depends in part on the quality of the goal processes, and factors that affect these processes (such as goal regulation). Drawing on this perspective, in this section we argue that autonomous forms of motivation are not only more likely to prompt proactive action in the first place, but they are more likely to stimulate proactive behavior that is effective in bringing about change for individuals and organizations. From an individual perspective, effectively bringing about change means doing so in a way that protects or even enhances individual resources and well-being, thereby increasing the likelihood that individuals will continue to engage in proactivity beyond a specific episode. From an organizational perspective, effectively bringing about change means making a positive difference to the individual, team, or organization, such as might be reflected in positive judgments of overall job performance from supervisors.

The idea that autonomously regulated proactivity will be more effective is not new. Grant and colleagues (Grant, Nurmohamed, Ashford, & Dekas, 2011) provided preliminary empirical support for the idea that proactivity is more effective when it is autonomously regulated. In a sample of 106 job seekers they found that personal initiative was only strongly associated with the number of job offers individuals received if their job search was highly autonomously motivated and low in controlled motivation. In a sample of 219 call centre workers the number of calls (used as measure of initiative) was only related to the amount of hourly revenue generated by a call centre worker if their motivation to "invest effort in their job" was high in autonomous and low in controlled motivation. These authors explained their

findings in terms of individuals' energy and willpower. They proposed that proactivity that is intrinsically motivated will be pursued with more energy and passion, in other words, it will be associated with enhanced goal striving.

In addition, proactive behavior often requires self-control. Self-control refers to effort to inhibit impulses, emotions, or behaviors which would interfere with one's goal-directed behavior (e.g., F. H. Kanfer & Karoly, 1972). It is a psychological resource which is limited and once used is temporarily depleted (Muraven, Rosman, & Gagné, 2007). Under conditions of controlled motivation, self-control depletes more strongly. For example, Muraven, Rosman, and Gagné (2007) showed in a series of experiments that individuals in a controlling situation involving performance contingent rewards performed worse on a subsequent test of self-control than individuals in an autonomy supportive condition. The authors found that the differences in self-control depletion did not result from differences in negative mood or motivation; instead, autonomously motivated individuals experienced greater feelings of vitality, i.e., a "positive sense of aliveness and energy" (Ryan & Fredrick, 1997, p. 530). These results were replicated in a series of experiments that used a sense of pressure rather than contingent rewards to elicit the experience of controlled motivation (Muraven, Gagné, & Rosman, 2008). Proactivity that is driven by controlled motivation is thus likely to result in greater resource depletion, and will consequently be less effective and potentially detrimental to individuals' well-being.

Supporting this argument, Bolino and colleagues (2010) argued that proactive behavior will be associated with negative well-being outcomes when individuals who lack resources engage in proactive behavior, for example, because the organization expects them to. This is in line with Chan's (2006) finding that proactive behavior is only associated with positive performance and well-being outcomes when individuals possess resources that enable them to make effective judgments about how and when to be proactive. Hahn and

colleagues (Hahn, Frese, Binnewies, & Schmitt, 2012) also suggested that personal initiative involves a range of effortful behaviors that require psychological resources which are likely to deplete over time. According to Grant et al., proactivity that is driven by controlled regulation is associated with an additional sense of pressure which contributes to the depletion of self-control, thus making it difficult for individuals to focus their energy on their proactive behavior, making it ultimately less effective.

We propose more specifically that, because autonomously regulated individual proactivity consumes less psychological resources, individuals will have more resources to successfully bring about change within a proactive goal episode, and more resources to sustain high levels of proactivity over time. Autonomously regulated proactivity will be more effective by making it more likely that a single proactive goal will be achieved, and that individuals will continuously set and pursue proactive goals, and thus be successful in bringing about a different future for themselves and/or their organization.

We also propose additional processes by which autonomous forms of motivation promote more effective and sustained proactivity. Specifically, we argue the following:

- Autonomously motivated individual proactivity will tend to involve a more complete self-regulatory goal process, including greater likelihood of each of envisioning, planning, and reflecting, as well as more sustained forms of enacting (persistence, recovery from setbacks etc). It will therefore be more effective in bringing about change than individual proactivity regulated by controlled motivation.
- Autonomously motivated individual proactivity engages the 'self' and involves stronger ownership of the intended outcome, thereby enhancing individuals' commitment towards the proactive goal.
- 3. Autonomously motivated individual proactivity enables the satisfaction of psychological needs which in turn:

- a. contributes to the effectiveness of proactivity by facilitating the internalization
 of organizational goals, thus enhancing the benefits of individual proactivity
 for the organization, and
- b. enables sustained proactivity, via its effect on the proactive goal regulation process and its contribution to personal growth.

We elaborate each of these arguments next.

Completeness of the self-regulatory goal process

We suggest that controlled regulation is likely to result in an emphasis on the enactment of proactive behavior, while the phases of envisioning, planning, and reflecting will be neglected. When individuals are concerned with being 'seen' to be proactive or feel guilty if they do not engage in proactive behavior, they will likely emphasize the enactment phase, but spend less time and energy on the phases of the proactivity process that cannot easily be observed. While this has yet to be tested empirically, Bindl and colleagues (2012) argued that proactive goals can only be achieved if individuals successfully engage in each of the phases of proactive goal regulation. Where proactive behavior is regulated by external or internal pressures, the associated envisioning will involve outcome simulations of achieving rewards for proactivity, rather than process simulations of how to successfully achieve a proactive goal. Process simulations are more effective in regulating behavior (Taylor, Pham, Rivkin, & Armor, 1998). They encourage planning and other problem-focused activities, and may prevent the intrusion of irrelevant thoughts (Taylor & Schneider, 1989). Outcome simulations in contrast are concerned with the anticipation of positive emotions and involve the enjoyment of success without providing a basis for achievement (Oettingen, 1999; Oettingen & Mayer, 2002). Without effective envisioning, planning how to achieve the proactive goal and overcome obstacles will be impaired.

Individuals who engage in proactive behavior for the sake of being seen to do so also have little incentive to engage in reflection. Their goal is not about successfully bringing about change, but about the rewards associated with having shown initiative. A lack of reflection will reduce the effectiveness of subsequent proactivity episodes because the individual will fail to extract lessons learnt. Reflection generates information that serves as basis of future envisioning, planning, and enacting. Through reflection, individuals gain and consolidate the strategic, relational, and normative knowledge about how to achieve proactive goals in their organizational context which is critical for the successful implementation of change (Dutton, Ashford, O'Neill, & Lawrence, 2001). Reflection is likely to result in more accurate judgments about how and when to strive for proactive goals, thus making proactivity more effective (Chan, 2006).

In addition, we propose that autonomously regulated proactivity will be associated with sustained enacting. According to self-concordance theory (Sheldon & Elliot, 1999), goals consistent with individuals' core values and interests are associated with enhanced goal striving. Thus, proactivity driven by integrated and identified forms of motivation will be associated with sustained efforts of bringing about the proactive goal. On the other hand, enacting based on controlled motivation is unlikely to be sustained over time because individuals will be less likely to recover from setbacks and to persist in the face of obstacles. Having engaged in less planning, they will have fewer contingency plans for when things go wrong and will give up more readily. They will also be less motivated to achieve their ultimate proactive goal and may be satisfied by having engaged in proactive behavior, regardless of whether they have successfully brought about change. Hui, Lam, and Law (Hui, et al., 2000) provide support for this argument in relation to discretionary work behaviors. In a sample of 293 bank tellers they found that when organizational citizenship behavior is extrinsically motivated, i.e., performed for the instrumental purpose of getting promoted, it is

not sustained once this purpose has been attained. Grant (2008) similarly found that individuals who feel pressured cannot persist at their efforts over time.

To summarize, we propose:

Proposition 1: Autonomously regulated individual proactivity is likely to be more effective in achieving proactive goals than proactivity that is regulated by controlled motivation because it involves more envisioning, planning, and reflecting, as well as more persistent and sustained enacting. A complete self-regulatory goal process will make future proactive goal episodes more effective, resulting in a sustained high level of individual proactivity.

Engagement of the self

Autonomously regulated proactivity – by definition – involves greater engagement of the 'self' because individuals behave in this way for reasons that are core to their identity, values, and interests. As nobody is directing the individual to be proactive, and the impetus for action is coming from within, individuals will have strong feelings of ownership over the proactive goal (Parker et al., 1997). In essence, there is no one else to 'blame' if the proactive efforts are not successful because autonomously regulated proactivity is self-initiated.

Drawing on the self-concordance model (Sheldon & Elliot, 1999), we suggest this greater investment of the self in autonomously regulated proactive action will enhance an individual's determination to see their project through successfully. Proactive goals representing a person's authentic interests and values are integrated with the self, and are perceived as resulting from self-made choices. Because these interests and values are enduring facets of a person's personality, autonomous proactive goals are likely to be pursued with sustained effort over time (Sheldon & Elliot, 1999). Proactive goals driven by controlled motivation are less likely to be linked to enduring interests and values; they thus tend to be abandoned when obstacles are encountered.

It is important to note that we are not suggesting autonomously motivated people's self-esteem will be more dependent on achieving the proactive goal as that would impact a rather unstable sense of self-esteem (Kernis, Cornell, Sun, Berry, & Harlow, 1993). Rather we are suggesting that autonomously motivated individuals will care a lot about achieving their proactive goal because it arises out of their own interests and values, and so will persist accordingly. For example, if an academic decides to implement a new 'ethics' course because s/he believes strongly that students need to be more ethical, this academic is likely to persist more in the face of colleagues' resistance than an individual who set out to introduce the course to boost their next performance appraisal score. In the face of resistance, the latter individual might opt to find an easier way to get a better appraisal.

Our proposition is:

Proposition 2: Autonomously regulated individual proactivity is likely to be more effective in achieving proactive goals than proactivity that is regulated by controlled motivation because it involves greater ownership and engagement of the self, thereby increasing individual's efforts to achieving a successful outcome.

Autonomously motivated proactivity and psychological need satisfaction

Self-determination theory proposes that individuals' well-being depends on the satisfaction of the three psychological needs of competence, autonomy, and relatedness (Tharenou & Terry, 1998). Individuals have the inherent need to feel that they are able to produce desired outcomes (White, 1955), to feel that they are the causal agent of their actions (Crant, 1995), and to feel connected to others (Baumeister & Leary, 1995). Satisfaction of these needs is a requirement for well-being and psychological growth (Deci & Ryan, 2000). We propose that autonomously regulated proactivity is likely to result in higher psychological need satisfaction, which, as we elaborate next, in turn contributes to further episodes of proactivity, resulting in individual proactivity that is sustained over long periods of time.

Autonomous proactivity enables the satisfaction of the three basic psychological needs of competence, autonomy, and relatedness in two different ways. First, it enables satisfaction of psychological needs directly. Proactive goals are often challenging and can create opportunities to experience competence. When individuals feel that they freely choose to engage in proactivity, they are likely to feel agentic and self-directed, satisfying their need for autonomy (deCharms, 1968). Finally, despite its occasional portrayal as self-centered and individualistic (e.g., Hirschfeld, Thomas, & Bernerth, 2011) proactivity often focuses on social processes (Grant & Ashford, 2008). For example, during organizational socialization newcomers seek to build relationships with their new boss and colleagues (Ashford & Black, 1996; Ashforth, Sluss, & Saks, 2007). Prosocial forms of proactive behavior may also allow individuals to feel connected to others at work. Through these forms of socially oriented proactivity individuals are likely to satisfy their desire to be connected with others.

Second, employees engaging in autonomous proactivity are also more likely to find themselves in work environments that are conducive to the satisfaction of their psychological needs. They actively seek out environments that match their values and interests (Parker & Collins, 2010) or shape their environment according to their needs and preferences (Bakker, 2010; Tims & Bakker, 2010; Wrzesniewski & Dutton, 2001). These environments afford individuals with the opportunity to fulfill their needs (W. J. Arthur, Bell, Villado, & Doverspike, 2006). In a study involving 163 full-time employees in Singapore Greguras and Diefendorff (2009) found that fit between the individual's and the organization's values was positively related to psychological need satisfaction assessed 3 weeks later. Individuals proactively shape their job to optimize their job characteristics and maximize their job resources (Tims & Bakker, 2010). They set proactive goals to create conditions which allow the satisfaction of psychological needs, for example by "crafting" their job so that it provides an optimal level of challenge and involves enjoyable activities, or affords the possibility of

flow(Csikszentmihalyi, 1988). In line with this argument, Bakker and colleagues (Bakker, Albrecht, & Leiter, 2011) suggested that engaged employees attempt to sustain their state of engagement through proactive behavior. Manzoni and Barsoux (2009) suggested a more indirect mechanism through which proactivity leads to more favorable work environments. More proactive employees may be seen as stronger performers by their leader and as a consequence receive more developmental and supportive supervision, and greater autonomy.

Our proposition is as follows:

Proposition 3: Autonomously regulated individual proactivity is likely to lead to satisfaction of psychological needs both directly, and by creating contexts in which one can fulfill one's needs.

The satisfaction of psychological needs in turn facilitates effective and sustained proactivity. First, it contributes to beneficial outcomes of proactivity for the organization, through its contribution to higher job performance, and by enabling the internalization of organizational goals which enhances pro-organizational proactivity. Second, it contributes to sustained proactivity and enables individuals to act as agents of continuous positive change by enhancing the proactive goal regulation process, and by contributing to personal growth and progressive expectations which result in the continuous setting of proactive goals.

We elaborate these proposed pathways next.

Psychological need satisfaction enhances the benefits of proactivity for the organization.

Psychological need satisfaction is likely to enhance the positive effects of proactivity for the organization. First, the greater opportunity for psychological needs satisfaction created by autonomously motivated proactivity may be a mechanism for the well-established relationship between proactivity and job performance (Fuller & Marler, 2009). Greguras and Diefendorff (2010) found that employees high in proactive personality were more likely to

pursue and attain autonomous goals which in turn predicted psychological need satisfaction. Baard and colleagues (Baard, Deci, & Ryan, 2004) found that greater need satisfaction on the job was associated with higher supervisor rated performance in a sample 528 employees of an investment banking firm. Taken together, these findings suggest that autonomously regulated proactivity is likely to lead to satisfaction of psychological needs (via the setting and pursuit of proactive goals that self-concordant, i.e., that are in line with individuals' values and interests (Sheldon & Elliot, 1999)), which in turn will lead to higher job performance.

Second, through the process of internalization, psychological need satisfaction also encourages the setting of proactive goals in line with organizational aims, and thus enables proactivity that is likely to have positive outcomes for the organization. Psychological need satisfaction facilitates the internalization of values and regulatory processes (Ryan, 1995). When coupled with a strong commitment to the organization, need satisfaction is likely to lead to individuals' internalizing organizational aims, and setting proactive goals in accordance with them. In other words, when an individuals' needs are fulfilled and they are also care about and want to belong to the organization, employee proactivity is more likely to be "pro-organizational" (Belschak & Den Hartog, 2010, p. 475) and will be aimed at contributing to organizational effectiveness. The pro-organizational focus of autonomously motivated proactivity is further supported by the positive effect of autonomous motivation on affective organizational commitment (Gagné, Chemolli, Forest, & Koestner, 2008). Previous research has linked affective commitment to proactivity (Den Hartog & Belschak, 2007; Griffin, et al., 2007; Rank, Carsten, Unger, & Spector, 2007; Strauss, Griffin, & Rafferty, 2009), and self-determination theory suggests that through internalization processes proactivity associated with high levels of organizational commitment is likely to be more beneficial for the organization. Autonomously regulated proactivity is thus more likely to

have positive outcomes for the organization than controlled proactivity that is driven by, for example, feelings of guilt, obligation, or impression management motives.

To summarize, we propose:

Proposition 4: Psychological need satisfaction enhances the benefits of individual proactivity for the organization by contributing to job performance and, when coupled with organizational commitment, facilitates the internalization of organizational aims and thus the setting of proactive goals in accordance with these aims.

Psychological need satisfaction contributes to sustained proactivity.

This far we have outlined how autonomously regulated proactivity can contribute to the satisfaction of psychological needs which will result in positive outcomes for the organization. Opportunities to satisfy psychological needs are also likely to in turn lead to autonomous motivation of proactivity (Gagné, 2009) and, by contributing to proactive goal regulation and proactive motivational states, facilitate proactivity that is sustained over time as we elaborate next.

Satisfaction of the need for autonomy is not only likely to be a key outcome of proactivity; it will also further contribute to self-starting and self-directed behavior.

Autonomy involves "acting with a sense of volition and having the experience of choice" (Gagné & Deci, 2005, p. 333) which is likely to contribute to the setting of, and striving for proactive goals. In line with this argument, there is empirical support for the positive relationship between the experience of autonomy of work, and proactivity (Hornung, Rousseau, & Glaser, 2008; Parker, et al., 2006).

Satisfaction of the need for competence reflects a sense of self-efficacy, a key component of *can do* motivation which has consistently been linked to proactivity (e.g., Axtell, Holman, Unsworth, Wall, & Waterson, 2000; Frese, Garst, & Fay, 2007; R. Kanfer, Wanberg, & Kantrowitz, 2001; Morrison & Phelps, 1999; Parker, et al., 2006). As proactivity

involves intentionality and forethought, individuals make a conscious decision whether or not to set and pursue a proactive goal (Bindl, et al., 2012; Morrison & Phelps, 1999; Parker, et al., 2006). Proactivity can involve risks for one's ego or image, as its self-started nature implies that it cannot easily be blamed on external circumstances (Grant & Ashford, 2008). It may also be met with resistance by others and create interpersonal problems (Bateman & Crant, 1999; Bolino, et al., 2010). It is therefore important that individuals believe they can be successful in being proactive and dealing with the consequences of their proactive behavior, which is likely to be enabled by their sense of competence.

Satisfaction of the need for relatedness finally provides a sense of security which is likely to make proactivity seem less risky and reduce its perceived interpersonal costs, thus also contributing to *can do* motivation. This is consistent with findings that proactive behavior is more likely to occur in social environments characterized by trust and support (Parker, et al., 2006), and psychological safety (Detert & Burris, 2007).

Deci and Ryan (2000) have argued that satisfaction of the psychological needs for competence, autonomy, and relatedness is essential for personal growth and psychological well-being. There is also empirical support for the relationship between satisfaction of psychological needs at work and well-being (Baard, et al., 2004; Deci, et al., 2001). Through its contribution to personal growth psychological need satisfaction encourages the continuous setting of proactive goals and thus contributes to sustained proactivity. Without personal growth, individuals would have no reason to set and pursue further proactive goals once they have achieved satisfactory fit with their environment (Greguras & Diefendorff, 2009), or have "crafted" their job so that it provides sufficient resources for the satisfaction of psychological needs (Tims & Bakker, 2010). However, individuals often continue to be proactive once they have achieved their goals as evidenced by many longitudinal studies which find positive relationships between past and future proactivity (e.g., Frese, et al., 2007;

Griffin, et al., 2010). Individuals whose psychological needs are satisfied are likely to set increasingly higher standards for themselves and their organizations. Even though they reach their proactive goals, their raising standards give them new reasons to engage in proactive behavior. For example, employees increasing the demands of their job to make it more challenging in order to satisfy their need for competence will subsequently develop their skills and become more confident in their ability. In order to experience optimal levels of demands at work, they will need to seek out additional challenges in their job. Support for the idea that individuals raise their levels of aspiration in response to favorable work environment comes from Bruggeman and colleagues' (Bruggeman, Groskurth, & Ulich, 1975; see Buessing, 2002; Buessing & Bissels, 1998) work on different forms of job satisfaction. The authors propose that different forms of job satisfaction result from a comparison of a person's expectations and the actual work situation, and their level of aspiration. We propose that satisfaction of psychological needs associated with autonomously regulated proactivity will result in progressive job satisfaction. Progressive job satisfaction occurs when a person finds his or her original expectations met by the organizational environment, and consequently raises his or her expectations. Individuals are then likely to continuously set and pursue proactive goals, resulting in high levels of proactivity that are sustained over long periods of time.

Psychological need satisfaction also plays an important role for the *energized to* motivational path of proactivity. To successfully engage in the process of proactive goal regulation, individuals need to harness and maintain their psychological resources as they persist in working towards their proactive goal. Autonomous regulation of proactivity is likely to be associated with higher vitality, a person's "positive sense of aliveness and energy" (Ryan & Fredrick, 1997, p. 530), via the satisfaction of psychological needs (Weinstein & Ryan, 2010). Reis and colleagues (Reis, Sheldon, Gable, Roscoe, & Ryan,

2000) found that day-level satisfaction of psychological needs led to day-level experiences of energy. When people are autonomously regulated they will not experience their efforts as draining and may even feel that they have more energy available to the self (Nix, Ryan, Manly, & Deci, 1999; Sheldon & Kasser, 1995; Weinstein & Ryan, 2010). This is in line with Grant and colleague's (2011) argument that autonomous motivation makes it easier for individuals to focus their attention on their proactive goal and maintain high levels of energy and enthusiasm. Individuals engaging in autonomously regulated proactivity will thus have more energy available to themselves, which enables a more effective and sustained proactive goal regulation process. A high degree of activation leads to increased effort (Brehm, 1999) and will increase striving towards proactive goals, thus enabling persistent proactivity that is more likely to be successful and have positive outcomes. Satisfaction of the psychological needs for competence, autonomy and relatedness will thus result in higher levels of energy available to the individual; this is likely to facilitate a more effective self-regulation and engagement in all four phases of the proactive goal regulation process.

Positive activated states such as vitality or engagement not only make proactivity more effective by reducing its resource requirements and contributing to persistence, they also contribute to the proactive goal regulation process both directly and indirectly (Parker, et al., 2010).

First, as Bindl and Parker (Bindl & Parker, 2011a) argued, experiences of positive activated states such as vitality and engagement influence proactivity directly through three different mechanisms: they facilitate the complex cognitive processes involved in proactivity by encouraging openness and flexibility (Fredrickson, 1998); they promote future-oriented thinking (Foo, Uy, & Baron, 2009); and they promote the setting of more challenging goals (Ilies & Judge, 2005). In line with these arguments Bindl and colleagues (Bindl, et al., 2012) showed that high-activation positive mood encompassing enthusiasm, excitement,

inspiration, and joy was positively associated with all four phases of proactive goal regulation. Support for the positive effect of energy and enthusiasm on proactive behavior also comes from research on work engagement, a "positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002, p. 74). Work engagement has been found to be positively associated with self-reported personal initiative (Salanova & Schaufeli, 2008), and self-reported innovative work behaviors (Strauss, et al., in press), and was positively associated with later personal initiative in a longitudinal study over three years (Hakanen, Perhoniemi, & Toppinen-Tanner, 2008). Hahn and colleagues (Hahn, et al., 2012) similarly found that vigor was related to later personal initiative in a longitudinal study of entrepreneurs.

Second, positive activated states also contribute to sustained proactivity indirectly, by influencing *can do* and *reason to* motivational states (Seo, Barrett, & Bartunek, 2004; Seo, Bartunek, & Barrett, 2010). Individuals experiencing positive affective states more easily recall positive material in memory (Isen, Clark, Shalker, & Karp, 1977). They are thus more likely to focus on successful past episodes of proactivity and experience enhanced *can do* motivation. They generate higher expectancy judgments for the outcomes of proactivity (Wegener & Petty, 1996) and experience higher self-efficacy (Tsai, Chen, & Liu, 2007). They also feel that they have made more progress towards their goals (Johnson & Tversky, 1983) which is likely to have a positive reinforcing effect, further facilitating persistence and goal striving. Positive affective states also influence *reason to* motivation. They facilitate the experience of intrinsic motivation, and make the internalization of regulation more likely (Isen & Reeve, 2005), thus enabling the identified and integrated regulation of proactive behavior.

In summary, we propose:

Proposition 5: Psychological need satisfaction facilitates sustained individual proactivity by contributing to proactive motivational states and proactive goal regulation.

The positive upward spiral of autonomously regulated proactivity

Thus far we have proposed that autonomously regulated proactivity results in stronger 'reasons to' initiate proactivity and increases the likelihood that proactivity results in positive change for both individuals and organizations. In this current section we bring together the arguments discussed above in a dynamic model that outlines what we call the positive upward spiral of autonomously regulated proactivity.

Autonomously regulated proactivity makes it more likely that proactive goals are achieved as it involves a more complete self-regulatory process and thus more effective goal regulation. Effective goal regulation also enhances individuals' resources that enable the achievement of future proactive goals, such as by generating knowledge and facilitating better planning through reflection.

We propose that autonomously regulated proactivity will have positive effects on individuals' well-being and have introduced psychological need satisfaction as a key outcome of autonomously regulated proactivity. Engaging in individual proactivity can directly contribute to the satisfaction of the three psychological needs of autonomy, competence, and relatedness. In addition, it contributes to need satisfaction indirectly. Through proactive behaviors such as job crafting individuals create environments that provide a good fit with their values and needs and afford further opportunities for the satisfaction of psychological needs.

Need satisfaction in turn plays a key role for sustaining high levels of individual proactivity by influencing proactive motivation, and the continuous setting of proactive goals. Individuals who find their psychological needs met experience personal growth and consequently raise their expectations for themselves, and for their jobs. Their expectations

provide a new *reason to* set and pursue proactive goals. As a consequence they continue to work towards positive change.

The concept of need satisfaction also adds to our understanding of the role of psychological resources in the regulation of proactive behavior. Grant and colleagues (Grant, et al., 2011) suggested that autonomously regulated proactivity requires less self-regulatory resources and will thus be more effective. We propose that autonomously regulated proactivity may even be associated with an increase in the psychological resources available to the individual as psychological need satisfaction is likely to be accompanied by feelings of vitality and aliveness (Ryan & Fredrick, 1997).

The satisfaction of psychological resources also plays a key role in explaining the relationship between autonomously regulated proactivity and beneficial outcomes for the organization. Psychological need satisfaction is associated with higher job performance, and facilitates the internalization of organizational norms and goals, enhancing pro-organizational forms of proactivity.

In a positive upwards spiral, the outcomes of autonomously regulated proactivity for the individual and for the organization contribute in turn to the can do, reason to and energized to processes of proactive motivation and stimulate the setting of further proactive goals and thus future episodes of individual proactivity.

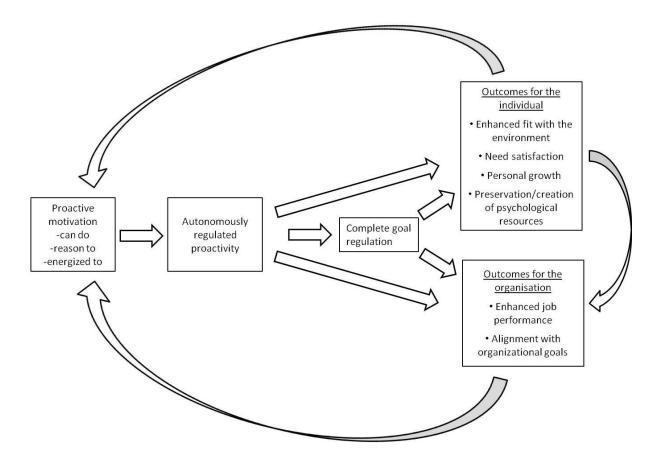


Figure 1. The Upward Spiral of Autonomously Regulated Proactivity

Implications: Encouraging effective and sustained proactivity in organizations

Organizations can encourage proactivity by creating work climates that enable the satisfaction of psychological needs. These work climates will enhance the autonomous regulation of proactivity and, as we have outlined above, facilitate internalization of proactive goals to encourage proactivity in line with organizational goals (Gagné & Deci, 2005).

Designing jobs that facilitate effective and sustained proactivity

A number of studies have investigated the link between job characteristics and proactivity, highlighting the importance of variables such as job autonomy (e.g., Frese, et al., 2007; Parker, et al., 2006), leadership support (e.g., Den Hartog & Belschak, 2012; Morrison & Phelps, 1999; Rank, et al., 2007), and a positive work climate (e.g., Griffin, et al., 2007; LePine & Van Dyne, 1998). This research has been extensively reviewed elsewhere (see e.g., Bindl & Parker, 2011b) and we do not intend to repeat this work here, but rather to identify

date, it has been argued that these work variables can promote the motivational states of can do, reason to, and energized to motivation, which in turn shape proactivity (see Parker et al., 2010). We additionally suggest that job characteristics not only potentially motivate proactivity per se, but are more likely to motivate *autonomously regulated* proactivity, such as via a process of psychological need satisfaction.

Thomas and Velthouse (K. W. Thomas & Velthouse, 1990) provide a theoretical framework for this link and propose that autonomous motivation at work is based on employees' experiencing feelings of impact, competence, meaningfulness, and choice. Impact refers to the assessment that one's behavior is "making a difference" towards accomplishing the intended purpose. Thomas and Velthouse equate this construct with Hackman and Oldham's (1976) "knowledge of results". In Bandura's (1977) terms it captures outcome expectations, rather than efficacy expectations, which are reflected in the assessment of one's competence. Meaningfulness reflects the value of the goal in relation to a person's ideals or standards. Choice finally reflects a person's assessment of his or her autonomy and sense of volition. In a sample of employees of 199 employees of a Canadian telephone company, Gagné, Senécal, and Koestner (1997) showed that autonomy support (a composite score of skill variety, task significance and task identity, feedback on one's performance obtained from supervisors or coworkers, and feedback on one's performance obtained from job activities) was significantly related to employees' assessments of impact, competence, meaningfulness, and choice which in turn explained significant variance in intrinsic motivation.

In a sample of 124 volunteers at a community clinic, Millette and Gagné (2008) found that Hackman and Oldham's (1976) Motivational Potential Score, a multiplication of core job characteristics intended to reflect their impact on critical psychological states, was positively

related to volunteers' autonomous motivation. Specifically, it was significantly related to their intrinsic motivation and, marginally, their identified motivation.

Job-demands resources theory also proposes that job characteristics translate into autonomous motivation by allowing the satisfaction of psychological needs (e.g., Bakker & Demerouti, 2007). For example, feedback is proposed to foster learning and satisfy the need for competence. In line with this argument, Kelloway and Barling (1991) found that skill variety, autonomy support, and feedback from the job significantly predicted employees' perceived competence. Parker (1998) found that increased job autonomy predicted the development of role-breath self-efficacy (which is similar to the experience of competence) over time. Decision latitude or job control are likely to enable the satisfaction of individuals' need for autonomy; and social support is likely to satisfy their need for relatedness (Bakker & Demerouti, 2007).

Van den Broeck and colleagues (Van den Broeck, Vansteenkiste, De Witte, & Lens, 2008) provided empirical support for the link between job demands and resources and psychological need satisfaction. In a sample of 745 employees across 17 Belgian organizations need satisfaction was positively related to the job resources of task autonomy, skill utilization, and positive feedback. A latent job demand factor encompassing workload, emotional and physical demands, and work-home interference showed a small negative relationship with need satisfaction. The zero-order correlation between workload and need satisfaction was however positive. The effect of workload on autonomous motivation is likely to depend on individuals' assessments of autonomy (Marinova, et al., 2010). Under conditions of high autonomy, increasing job demands were accompanied by an increase in intrinsic motivation in a sample of 555 nurses (Van Yperen & Hagedoorn, 2003).

In sum, we extend existing arguments that job characteristics can influence proactivity via their effect on individuals' can do, reason to, and energized to motivational states by also

suggesting that these job characteristics result in psychological need satisfaction, which encourages autonomous motivation of proactivity. As we have argued already, autonomously motivated proactivity is more likely to be successful, for individuals and organizations, than controlled proactivity.

Providing autonomy support

Autonomy has long been identified as crucial for intrinsic motivation at work (e.g., Hackman & Oldham, 1976), and autonomy support is the most important social-contextual variable that predicts autonomous forms of motivation (Deci, Egharri, Patrick, & Leone, 1994; Nicholson, 1984; Williams & Deci, 1996; Williams, Freedman, & Deci, 1998; Williams, Gagné, Ryan, & Deci, 2002). Deci, Connell, and Ryan (1989) argue that autonomy support in organizations is primarily provided by the supervisor. Baard and colleagues even more explicitly state that autonomy support is the "interpersonal climate created by the manager in relating to subordinates" (Baard, et al., 2004, p. 2048). Supervisor behavior can be seen as either informational, i.e., promoting competence and supporting autonomy, or controlling, i.e., pressuring employees to think, feel, or behave in specified ways (Deci & Ryan, 1985). A controlling supervisory style has been found to have a detrimental effect on subordinates' intrinsic motivation (Richer & Vallerand, 1995). Supervisors who try to restrict and control employees' behavior rather than supporting their autonomy are thus likely to undermine autonomous motivation of proactivity. Autonomy supportive supervision on the other hand will encourage autonomous forms of motivation.

Facilitating alignment of proactive goals through internalization

As outlined above, when individuals' proactive goals are based on their internalization of organizational values, they will be in line with organizational aims and contribute to organizational effectiveness. The social-contextual factors outlined so far that enhance and maintain autononomous forms of motivation also enable the internalization of

behavioral standards. Autonomy support contributes to autonomous motivation of proactivity, but it can also promote the alignment of employees' proactive goals with organizational aims through internalization. In a field study, Parker et al., (1997) showed that the internalization of organizational goals (as measured by flexible role orientation) occurred as a result of the introduction of autonomous work groups. In a laboratory experiment, Deci, Egharri, Patrick and Leone (1994) found that internalization was facilitated by acknowledgement of the participants' perspective, by providing a rationale for the respective behavior which highlights its personal utility for the participant, and by providing opportunities for choice. By highlighting the value of proactivity for the organization, by acknowledging the costs and risks, but also the opportunities it may involve for the employee, and by providing autonomy and choice, supervisors can encourage the setting and pursuit of proactive goals that benefit the organization without undermining employees' sense of volition. Autonomy support not only encourages the internalization of proactive goals, it also ensures that this internalization is integrated, i.e., that it becomes an integral part of a person's work-related identity, rather than being introjected, i.e., engaged in out of a sense of obligation, thus contributing to its sustainability.

In addition to these factors, Gagné and Deci (2005) note two factors which uniquely contribute to internalization but are not important for intrinsic motivation. First, internalization depends on the presence of structures and contingencies which can be internalized. Second, internalization is facilitated by the endorsement of the respective behavior by significant others.

In the case of effective proactivity, organizations can facilitate the internalization of proactive goals by creating a clear vision of the future the organization is trying to achieve (Griffin, et al., 2010). A successful vision of the organizational future will also allow employees to imagine themselves as part of this future (Levin, 2000), and to work towards

their Future Work Self, a representation of an individual's hopes and aspirations in relation to work which can serve as a further source of proactive goals (Strauss, et al., in press).

Providing visions of the future thus provides essential guidance for proactivity which can be internalized and stimulate proactive behavior in alignment with organizational goals.

Organizations can further enhance proactivity by encouraging the internalization of a sense of responsibility for bringing this future about (Parker, 2000; Strauss, Griffin, & Parker, 2009). In a sample of 115 employees of a not-for-profit utility company in the US, Fuller, Marler, and Hester (2006) found that access to resources was a critical determinant of employees' felt responsibility for constructive change in the organization (see also Spreitzer, 1996). Autonomy to use resources signals the organization's support for proactivity (Scott & Bruce, 1994) and trust that the resources will be used responsibly. Access to resources to pursue proactive goals also communicates to employees the organization's endorsement of proactivity.

Leaders and managers can also facilitate the internalization of proactive goals in line with organizational aims by signaling their endorsement and approval of employee proactivity. They may communicate their endorsement by demonstrating proactive behavior and acting as role models. They can also contribute to the internalization of proactive goals through autonomy support, as we have outlined above, and by shaping the work environment accordingly. Formal and informal organizational practices and procedures can guide and support proactivity at work. By creating a "climate for initiative", organizations can encourage high levels of proactivity in the workforce (Baer & Frese, 2003, p. 48). This is likely to facilitate the internalization of proactive ways of behaving.

Rewarding proactive behavior

The unpredictable nature of proactivity makes it difficult to introduce clear rewardbehavior contingencies (Parker, et al., 2010). In addition, despite some controversy over the undermining effect of rewards on intrinsic motivation, there is meta-analytical evidence that contingent tangible rewards undermine intrinsic motivation (Deci, Koestner, & Ryan, 1999). Attempts to monitor, assess, and reward proactivity are thus likely to undermine its autonomous motivation (Harackiewicz, Manderlink, & Sansone, 1984; Lepper & Greene, 1975), and encourage a focus on proactive behavior rather than full engagement in the proactive goal regulation process. Making proactivity part of performance appraisal systems and compensation contingent on employees having displayed proactive behavior can thus be problematic. However, rewards may have a positive effect on autonomous proactivity when they function as positive feedback. Meta-analytical evidence of laboratory studies suggests that positive feedback may have a positive effect on the autonomous regulation of proactivity (Deci, et al., 1999). Providing positive feedback for desirable forms of proactivity is likely to contribute to sustaining proactivity, as it may enhance feelings of competence (Gagné & Forest, 2008), which in turn is likely to feed into future can do motivational states. Importantly, this positive feedback has to be informational rather than controlling. Controlling positive feedback that emphasizes the pressure for employees to maintain their high level of proactivity is likely to lead to lower levels of autonomous motivation than informational positive feedback (Pittman, Davey, Alafat, Wetherill, & Kramer, 1980; Ryan, 1982). These ideas have yet to be tested.

Practical recommendations

In summary, these findings highlight the crucial role of supervisors in enabling and maintaining autonomously regulated proactivity and have implications for leaders aiming to enhance proactivity in the workplace. As discussed above, employees are increasingly expected to be proactive (Bolino, et al., 2010; Erdogan & Bauer, 2005). How these expectations are communicated will determine whether employees engage in proactive behavior that is driven by controlled motivation and unlikely to be sustained or effective, or

whether they engage in autonomously regulated, effective proactivity. When expectations about proactive behavior at work are communicated in a controlling or pressuring way this is likely to impair internalization and integration of proactive goals (Deci, et al., 1994). Instead, organizations can encourage the internalization of proactive goals in line with organizational aims and values by providing autonomy support, by increasing job autonomy, by communicating a compelling vision of the future that can guide proactivity, and by instilling a sense of responsibility for bringing this future about, for example, by making relevant resources available. To encourage effective proactivity, organizations need to provide jobs that facilitate the satisfaction of psychological needs and provide positive feedback on desirable forms of proactivity without creating a sense of pressure and undermining employees' sense of volition. Under these circumstances, employees will fully engage in the proactive goal regulation process, making the achievement of their proactive goals more likely. They will experience personal growth and continuous learning, and proactivity will contribute to organizational effectiveness and individual thriving.

Conclusion

Conceptualizing proactivity as a goal-driven process and drawing on self-determination theory, we have investigated the consequences of different motivations for individual proactivity. We propose that proactivity is most effective when it is autonomously motivated. Proactivity that is driven by autonomous motivation is likely to result in a positive upwards spiral. It enables enhanced fit between the individual and their environment, and contributes directly to the satisfaction of psychological needs. By facilitating psychological need satisfaction, enhancing psychological resources, and contributing to personal growth it is likely to be sustained over time, and contribute to individual well-being, as well as positive outcomes for the organization. The proposed differential outcomes of proactive behavior

depending on how it is motivated have important practical implications for organizations aiming to enhance the proactivity of their workforce.

Future directions

While there is preliminary support for the idea that autonomously regulated proactivity is more effective (Grant, et al., 2011), our propositions have yet to be tested empirically. In particular, further research is needed to explore whether effective proactivity does indeed require full engagement in the proactive goal regulation process, and whether this is facilitated by autonomous motivation, and potentially impaired by controlled motivation.

Future research may also explore whether individual proactivity makes a unique contribution to the satisfaction of psychological needs at work, and focus on the well-being outcomes of proactivity. To date, there is surprisingly little empirical research exploring the consequences of proactivity for individuals' work-related well-being. The proposed positive effect of autonomously motivated proactivity on psychological need satisfaction makes positive well-being outcomes likely, for example, because autonomously regulated proactivity may require less self-regulatory resources. These mechanisms have yet to be tested.

Further research is also needed to explore the potential negative consequences of failing to achieve an autonomous proactive goal. Above we argued that autonomously motivated proactivity is likely to be positive for individuals' well-being, such as through a process of need satisfaction. Nevertheless, it is important to recognize that failed proactive efforts might jeopardize employees' well-being more strongly if these are autonomously motivated than if their proactivity is controlled. We argued earlier that the greater engagement of the self means that autonomously motivated proactive is more likely to involve persistence than controlled proactivity. As well as this upside, however, we also

suspect that autonomous proactivity that is ultimately thwarted or goes awry is more threatening to an individual's well-being than thwarted controlled proactivity. Some evidence supports this. Sheldon and Kasser (1998) found that goal attainment is only associated with enhanced well-being for autonomous goals, not for controlled goals, and that not achieving goals is associated with lowered well-being for autonomous but not controlled goals (see also Ryan, et al., 1999). In other words, autonomously motivated proactivity might be positive for well-being when the proactive goal is achieved, but might also be quite damaging to well-being when the goal is not achieved. Although the exact role of affect in relation to thwarted proactivity needs further investigation, one potentially significant implication of this reasoning is that individuals might need additional support from their work environment when their autonomous proactive efforts are not successful. Supervisors and leaders might thus need to particularly strongly attuned to addressing the emotional consequences of unsuccessful autonomous proactivity. Such a possibility needs to be further investigated.

Finally, we have focused our arguments here on proactivity. Whether similar processes apply to related outcomes like creativity needs to be investigated. If innovation includes both creativity (novel idea generation) and proactivity (implementation of these ideas) as others have suggested (e.g., West, 2002), then our discussion also likely has implications for stimulating innovation in organizations.

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