Moving beyond job search quantity: Towards a conceptualization and self-regulatory framework of job search quality

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Abstract
Job seeking is an important aspect throughout people's careers. Extant theory and research has focused on one particular dimension of job search, that is, intensity/effort (i.e., job search quantity), posing that intensity/effort importantly affects employment success. The present conceptual paper extends job search theory by arguing for the importance of job search quality in explaining job search and employment success. We conceptualize job search quality as consisting of *process quality* and *product/behavior quality*, and propose that high-quality job search products/behaviors are more likely with a high-quality job search process. A four-phased cyclical self-regulatory model is presented, specifying the components of job search process quality. We build theory regarding the interrelations between quality components, the antecedents and outcomes of job search quality, and the moderators of these relations. This theory offers new and more detailed explanations for previous findings, directions for future research, and practical guidelines regarding (re)employment success and services.

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At any point, many individuals engage in job seeking, including unemployed people searching for reemployment, employed people looking for a new job, school-leavers or graduating students seeking their first job, and nonworking people (re)entering the labor force (Boswell, Zimmerman, & Swider, 2012; Kanfer, Wanberg, & Kantrowitz, 2001). In their influential review, Schwab, Rynes, and Aldag (1987) stated that finding (re)employment and the quality of employment depend on the sources that job seekers use to acquire information about job vacancies and the intensity of their job search. Based on this notion, most of the empirical research on job seeking has focused on the *quantity* of people's job search behavior, operationalized as the number of job search activities that people engaged in (i.e., job search intensity; e.g., Barber, Daly, Giannantonio, & Phillips, 1994; Kopelman, Rovenpor, & Millsap, 1992), or the general amount of time and effort that people spent on looking for employment (i.e., job search effort; e.g., Barber et al., 1994; Blau, 1993), or a combination of both (e.g., Blau, 1994; Kinicki & Latack, 1990). Using these types of measures, meta-analytic support (Griffeth, Hom, & Gaertner, 2000; Kanfer et al., 2001) has been found for the importance of job search quantity in predicting the finding of a (new) job.

Although the finding that intensity and effort pay off is encouraging, the effect sizes of the meta-analytical correlations are modest (r_cs range from .21 to .28). Measures of job search quantity such as intensity and effort typically explain less than 10% of the variance in employment outcomes. This may be due to the fact that apart from job search quantity many other nonsearch factors determine employment success, such as labor market demand, employer discrimination, and job seeker human and social capital (Wanberg, Hough, & Song, 2002). Furthermore, several methodological reasons may explain the relatively low level of explained variance of job search quantity measures in employment success outcomes

(e.g., the use of self-reports at only one time point, the timing between the measurement of job search intensity and employment success outcomes; Steel, 2002; Wanberg, Glomb, Song, & Sorenson, 2005).

In addition to these explanations, one may question whether effort/intensity and number of job search sources/activities are the only important components of people's job search behavior. Kanfer et al. (2001) noted that job search behavior can be evaluated regarding intensity-effort (i.e., frequency and effort of job search activity), but also regarding content-direction, referring to the type of activities engaged in and the quality of these activities. Thus, in addition to the quantity of people's job search behavior, also the type and quality of the performed job search activities is an important dimension of job search. For example, spending a lot of time on searching for vacancies is less effective when one looks at the wrong places. Or when sending out a large number of application letters, one less likely gets positive responses if the letters are poorly written.

Although various scholars have coined the notion of job search quality (i.e., Saks, 2005; van Hooft & Noordzij, 2009; van Hoye, van Hooft, & Lievens, 2009; Vinokur & Schul, 2002; Vuori & Vinokur, 2005; Wanberg et al., 2002; Wanberg, Kanfer, & Banas, 2000), and it may be common sense that quality is important, research and theory on job search, unemployment, career transitions, and turnover focused almost exclusively on job search quantity, ignoring the idea of job search quality. It remains unclear what job search quality refers to exactly as no substantive definition, conceptualization, or theory on job search quality is available. In addition, although concepts related to quality-aspects of job seeking have been examined, such research is scarce, mostly indirect, and scattered across different literatures. Absent from the literature is a cohesive discussion of what is meant by job search quality in an integrated sense, as well as theory on the antecedents and outcomes of job search

quality and the conditions that impact those relations.

The purpose of this conceptual paper is threefold. First, it aims to identify and delineate the components of job search quality, as well as conceptualize the relations among those components. In doing so, we synthesize relevant research into a conceptual framework of job search quality. Second, we build theory regarding the antecedents and outcomes of job search quality, and the moderators of these relations. Third, this paper aims to push job seeking research into new directions, by challenging the field to develop, study, and incorporate assessments of job search quality in addition to just job search quantity. We argue that a better understanding of job search quality is essential to advance both research and practice regarding reemployment success and services.

We begin with a brief overview of extant job search theory, portraying that previous research has defined job search as a multistage process, albeit without specific attention to quality. We then draw upon the marketing and total quality management literature to argue for a distinction between job search product quality and job search process quality, and for conceptualizing job search process quality as a highly self-regulated job search. Extending previous job search theory and models, we use extant self-regulatory theory and recent advancements in the self-regulation literature to develop the components of our multistage job search quality process framework (see Figure 1), and as such refine, expand, and specify what a high-quality job search process entails. Finally, we develop theory on the antecedents and outcomes of job search quality, its interplay with job search quantity, and boundary conditions that impact those relations.

Extant job search theory

Previous research describes job search as involving specific behaviors to identify labor market alternatives, acquire information about these alternatives, and actively pursue job opportunities (Barber et al., 1994; Bretz, Boudreau, & Judge, 1994). Job search includes activities such as reading personnel advertisements, preparing a résumé, making inquiries to prospective employers, and going to job interviews (Blau, 1994). Extant theory and conceptual models have defined job search as an important factor in the process of coping with job loss (Latack, Kinicki, & Prussia, 1995; Leana & Feldman, 1988), in career decision-making during school-to-work transitions (Mihal, Sorce, & Comte, 1984; Soelberg, 1967), and in the employee turnover process (Mobley, 1977; Steers & Mowday, 1981), increasing the chances to obtain a (new) job.

Job search is often conceptualized as a *multiphased process*, consisting of several sequential stages. In his job search model, Soelberg (1967) described a deliberation phase of evaluation and occupational choice, followed by an implementation phase during which people allocate time, money, and effort to the job search. Building on this idea, Blau (1994) identified a preparatory and an active job search phase. Also broader theories on human behavior and decision-making have been used to suggest different stages in the job search process. For example, Stevens and Beach (1996) used image theory to discern a phase of goal formulation and a phase of planning the job search. Applying the theory of planned behavior and Gollwitzer's (1990) action phases to job search, scholars have distinguished between a deliberation phase of forming job search intentions, an implemental phase of planning one's job search intentions, and a behavioral phase of performing the planned job search activities (e.g., van Hooft, Born, Taris, van der Flier, & Blonk, 2004, 2005; van Hooft & Noordzij, 2009; Wanberg et al., 2005).

In addition to the conceptualization of job search as a multiphased process, recent theorizing has emphasized the *self-regulatory*
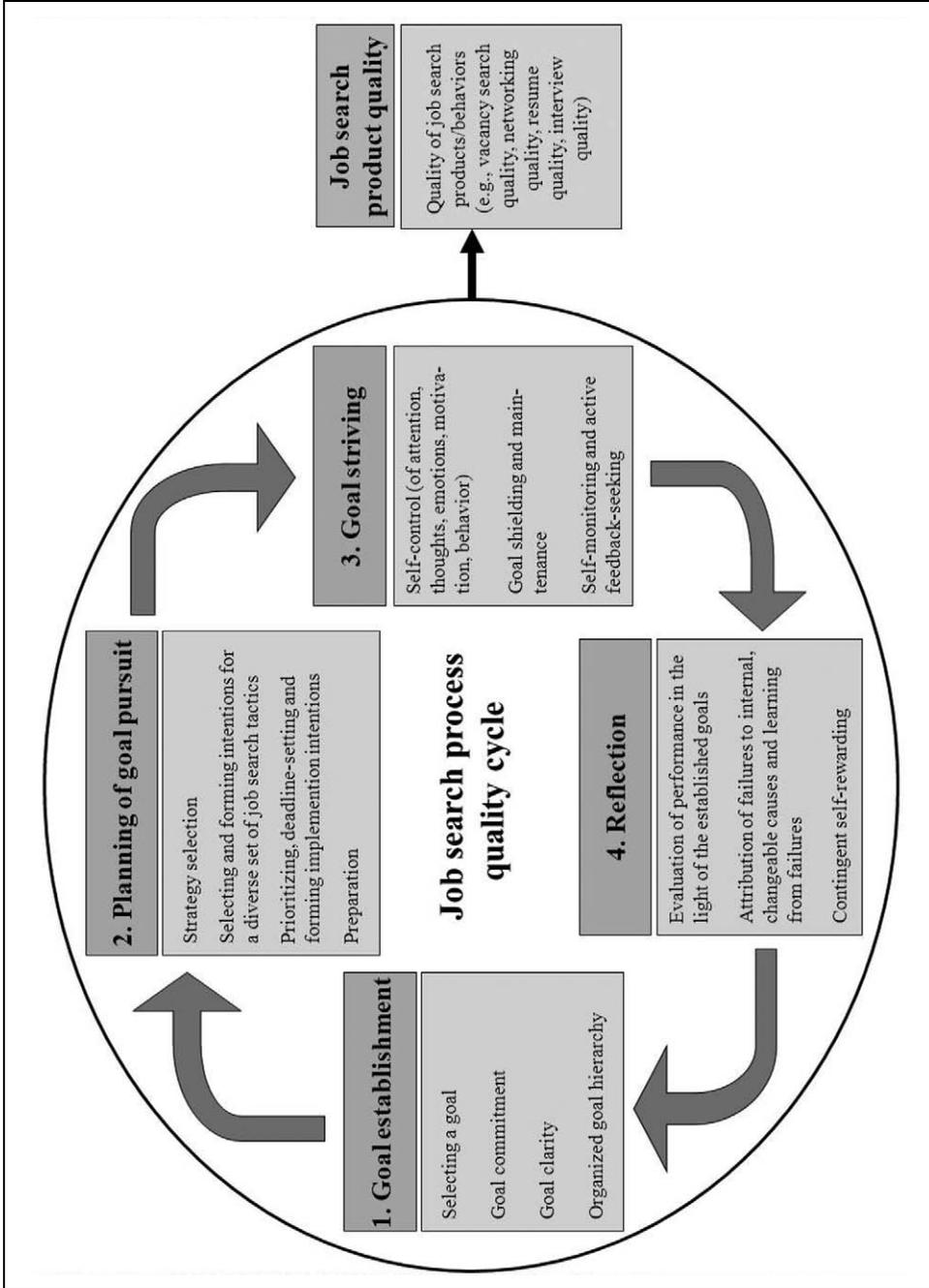
Figure 1. Cyclical self-regulatory model of job search process quality.

nature of the job search process, noting that job seeking is a largely self-organized and self-managed process involving goal setting, planning, monitoring, and evaluating progress towards the goal. For example, Kanfer et al. (2001) defined job search as a dynamic, recursive self-regulatory process, predicted by personality, self-evaluations, and motives. Saks (2005) presented an integrative self-regulatory model of the job search process, distinguishing between individual and situational predictors, job search and employment goals, job search behaviors, and job search and employment outcomes. Turban, Stevens, and Lee (2009) demonstrated the importance of metacognitive activities in predicting job search outcomes, thus illustrating the viability of a self-regulatory approach towards job seeking.

Although some of these theories and models (implicitly) recognize the importance of job search quality (i.e., Kanfer et al., 2001), none define the construct and delineate its components, and none offer theory on how job search quality comes about, on the outcomes of a quality search, and on the conditions that make quality more (or less) important. An expansion of extant theory and models to incorporate job search quality is critical to advance job search theory, to enhance prediction of reemployment outcomes, and to provide guidance to job seekers and job search professionals.

Conceptualizing job search quality

The underpinnings of our multicomponent model of job search quality originate from previous work on product/service quality in the marketing literature. Below we describe this research as related to the conceptualization of quality, and argue for distinguishing between job search product quality and job search process quality.

Quality as a product versus process

The concept of quality in general has multiple and often very broad or muddled definitions.

Reeves and Bednar (1994) identified several types of definitions of product/ service quality, and reviewed each definition's strengths and weaknesses. Based on this review, job search quality can be conceptualized as *performing one's job search activities in such a way that those meet/exceed the expectations of the demanding parties of the labor market* (e.g., selecting organizations, recruiters, assessors, hiring managers, counselors). A strength of this conceptualization is its external, organization-oriented focus, since what is high quality ultimately depends on the evaluations of the demanding parties of the labor market. However, although the demanding parties' expectations include some universals, these are to a large extent idiosyncratic (e.g., in each industry different ideas prevail about what constitutes a high-quality résumé or interview). A remaining question thus is how job seekers should perform their job search activities in order to increase the chances to meet those (idiosyncratic) expectations. Therefore, this external perspective to quality should be complemented by an internal or job seeker perspective, which holds that a high-quality job search refers to *a job search that conforms to certain set and established standards and specifications*. This definition implies a focus on the job search process. That is, in order to develop the specific quality standards and specifications, the job search should be disaggregated in its composing elements, and quality standards should be developed for each element. These quality standards can then offer prescriptive guidelines for job seekers and their counselors as to how to conduct a high-quality job search, which should ultimately lead to job search products that likely meet/exceed the demanding parties' expectations.

Thus, we argue for a distinction between an external, organization-oriented perspective towards quality, and an internal, job seeker perspective towards quality. The external perspective refers to job search quality as *job search behaviors or products* (i.e., networking

behavior, résumés, application letters, interview behavior) that meet/exceed the expectations of the demanding parties at the labor market. Operationalization and measurement of job search quality according to this perspective by definition involves (to some extent subjective) ratings of for example recruiters, hiring managers, or employment counselors on the extent to which the job seeker's products (e.g., résumé, application letter) or behaviors (e.g., networking, interview behavior) meet/exceed their expectations. The internal perspective, in contrast, focuses on job search quality as a *job search process* that conforms to certain standards and specifications.

The conceptualization of quality as composed of process quality and product quality can be further substantiated using the total quality management (TQM) literature. The core idea of TQM is hat high-quality products are impossible without implementing high-quality processes (Hackman & Wageman, 1995). In other words, the only way to producing high-quality products or services, is to implement high-quality processes. TQM states that such high-quality processes are typified by cycles of performance enhancement, based on feedback. Specifically, TQM focuses on a cyclical process of planning, performance, process analysis, and adjustment to the environment, leading to continuous improvement (Dean & Bowen, 1994).

Similarly to TQM, we argue that high-quality job search products and behaviors are more likely when the job search process is of high quality, and that a high-quality job search process is characterized by cycles of planning and analysis of the performed activities, enabling continuous improvement and learning. That is, job search is a difficult and complex process, involving a wide array of available methods and channels to use, and multiple behaviors that job seekers are often relatively unfamiliar with. Oftentimes, it is unclear exactly which methods and behaviors are effective and which are not. With conscious

and careful attention to planning, analysis of performed job search activities, and adjustment and improvement of one's job search behavior based on such analysis and feedback from the environment, it is more likely that job seekers can learn and enhance their performance in order to improve fit with the labor market demands and meet the recruiting organizations' expectations. Therefore, it is important to further explicate what a high-quality process exactly entails. Given the multiphased nature of the job search process, we pose that job search process quality cannot be conceptualized as a single one-dimensional construct, but is multidimensional in nature, encapsulating all phases of the job search process. The next sections focus on elaborating job search process quality, using self-regulation theory.

Job search quality as a self-regulated process

Self-regulation refers to "those processes, internal and/or transactional, that enable an individual to guide his/her goal-directed activities over time and across changing circumstances (contexts)" (Karoly, 1993, p. 25). Similarly, Zimmerman (2000, p. 14) defines self-regulation as processes of "self-generated thoughts, feelings, and actions that are planned and cyclically adapted to the attainment of personal goals." Self-regulation involves self-control of attention, thoughts, affect, and behavior deliberately or automatically (Karoly, 1993). Thus, self-regulation not only includes regulation of behavior (e.g., effort, intensity), but also regulation of cognitions and emotions before, during, and after performing the behavior.

Self-regulation is especially needed in the attainment of distal goals that involve lengthy processes, composed of tasks low on intrinsic (activity-related) motivation and high on extrinsic (outcome-related) motivation (Sansone & Thoman, 2006). That is, for tasks that are intrinsically motivating, self-regulation is not

needed as those tasks are inherently pleasurable, interesting, and fun. However, for tasks that are difficult, boring, unpleasant, or otherwise aversive (i.e., low intrinsic motivation), but important to attain some valued goal (i.e., high extrinsic motivation), people need self-regulation (e.g., regulation of effort, reminding oneself of the valued outcome, maintenance actions directed at increasing interest) to ensure task persistence and performance. For most individuals, job search is characterized by this combination of low intrinsic and relatively high extrinsic motivation. That is, job search activities are rarely considered to be fun, enjoyable, and entertaining. Rather, the job search process is mostly experienced as difficult and full of negative emotions (Borgen & Amundson, 1987; Wanberg, Zhu, & van Hooft, 2010). Thus, people usually engage in job-seeking activities not because such activities are inherently pleasurable (i.e., low intrinsic motivation), but because these activities are needed to obtain the valued goal of finding (new) employment (i.e., high extrinsic motivation). Although the ultimate goal of having a job may provide intrinsic motivation, it is a distal goal and the path towards it involves persistence over a considerable period of time to attain it. Combining this rationale with the TQM assumptions, we therefore pose that a high-quality job search process can be conceptualized as a highly self-regulated job search process.

In the self-regulation literature (e.g., Austin & Vancouver, 1996; Gollwitzer, 1990; Kanfer, 1990; Karoly, 1993; Lord, Diefendorff, Schmidt, & Hall, 2010; Vancouver & Day, 2005; Zimmerman, 2000), a distinction is made between phases of self-regulation activities, ordered in a cyclical fashion. Integrating these self-regulation phase models with TQM and extant job search theory, we propose that a high-quality (i.e., highly self-regulated) job search process starts with cognitive forethought, consisting of *goal establishment* followed by the *planning of the goal pursuit*. Because job search is a difficult task that most

job seekers have relatively little skilled experience with, a high-quality job search cannot occur without conscious thought, deliberation, planning, and preparation. While many self-regulation processes occur automatically or nonconsciously (Fitzsimons & Bargh, 2004), this is mostly true for lower level self-regulation, and for tasks that are guided by scripts or habits (Lord et al., 2010). Because job search typically is a nonroutine and complex task, for which little automatic script structures are available, it requires continuous conscious processing and self-regulation. Relying on automatic self-regulation may in fact harm quality as counterintuitive actions and non-habitual behaviors are often needed in a high-quality job search. For example, for a high-quality search one should engage in networking with people who one is only vaguely acquainted with (i.e., weak ties), which may feel awkward at times. Overcoming such initial reluctance needs conscious self-regulation (e.g., planning and preparing the network efforts and acting accordingly).

The cognitive forethought phases are succeeded by a behavioral phase of *goal striving, directional maintenance, and volitional control* during which self-regulation is needed to initiate and maintain the planned activities. Lastly, we propose that a high-quality job search process requires *reflection and revision*. That is, without thorough analysis and evaluation of one's job search behavior in the context of the established goals and based on the feedback from the environment, an upward cycle of learning and performance enhancement (which is an essential part of quality; cf. TQM, Dean & Bowen, 1994) cannot be achieved. For a high-quality job search process, such reflection should result in optimizing one's goals, planning, and behavior, and improving the adjustment to the demands and expectations of the labor market. Figure 1 depicts these four cyclical phases that describe a high-quality job search process. Our model furthers previous theorizing on job search as

a process (Blau, 1994; Soelberg, 1967; Stevens & Beach, 1996; van Hooft, Born, Taris, van der Flier, & Blonk, 2004, 2005; Wanberg et al., 2005), and previous self-regulatory models on job search (Kanfer et al., 2001; Saks, 2005) by providing a detailed phase model of a high-quality job search process grounded in self-regulation theory, introducing the phase of reflection to the job search literature, and explicitly emphasizing the cyclical nature of the job search process.

Summary and formal definitions of job search quality

In summary, we argued that in conceptualizing job search quality one must distinguish between the quality of job search behaviors/products and the quality of the job search process. We further argued that higher quality behaviors/products are more likely the higher the process quality. Based on an organization-oriented, external perspective towards quality, we defined job search product quality as the extent to which a job seeker's job search behaviors/products meet/exceed the expectations of the demanding parties at the labor market. Furthermore, using a job seeker-oriented, internal perspective towards quality, job search process quality was conceptualized as the extent to which the process conforms to certain standards and specifications. Based on TQM, which focuses on quality cycles, we theorized that those process quality standards and specifications refer to conforming to the ordered sequence of four self-regulatory job search phases. Thus, synthesizing the job seeker-oriented, internal perspective on quality, the TQM principles, and self-regulation theory, we define job search process quality as *the extent to which a job search is self-regulated, that is, the extent to which a job search is conducted by cycling through the four sequential self-regulatory phases of goal establishment, planning of the goal pursuit, goal striving, and reflection*.

In addition to this overall quality standard (i.e., conforming to the ordered sequence of job search phases), within each of the four phases specific quality standards need to be developed that job seekers should conform to for a high-quality job search process. Such development requires a more detailed look into each of these phases. In the next section, we therefore provide a description of each of the four phases grounded in self-regulation theory, and discuss relevant research on job seeking, job loss, and career decision-making, that informs what quality entails in each phase. Furthermore, based on recent theorizing and research in the self-regulation literature, we introduce new self-regulatory concepts to the job search literature that further add to the specification of quality in each phase. This synthesis resulted in the specification of quality standards for each phase of the quality cycle as displayed in Figure 1. As such the quality cycle in Figure 1 aims to provide a *prescriptive* model of what a high-quality job search process entails.[1] This prescriptive model may serve as an important guide for job seekers and their counselors, as well as for developing a measure of job search process quality.

In summary, the product and process definitions of job search quality, and the theoretical arguments outlined before result in the following definitional propositions:

> Proposition 1: Job search behavior/product quality is positively affected by job search process quality.
> Proposition 2: A high-quality job search process involves (a) cycling (one or multiple times) through an ordered sequence of the four self-regulation phases of goal establishment, planning, goal striving, and reflection, and (b) conforming to certain standards and specifications in each phase.

In the following section, we will elaborate what these standards and specifications in each phase refer to.

Specification of process quality in the self-regulation phases

Phase 1: Goal establishment

Self-regulation theory states that any self-regulated process starts with a goal. Goals are internal representations of desired states (Austin & Vancouver, 1996), which are organized in hierarchies and function as referent values to which one's actual state is compared (Carver & Scheier, 1982; Lord & Hanges, 1987). Although goals do not guarantee achievement of desired outcomes, selection of a goal from among diverse and possibly conflicting alternatives is a necessary step in the achievement process (Karoly, 1993). In fact conscious self-regulation can only occur once a goal is set, and therefore setting goals is a key mechanism and a first step in the self-regulation cycle. Although both conscious and nonconscious goals can initiate self-regulatory processes (Fitzsimons & Bargh, 2004; Lord et al., 2010), conscious goals are necessary for self-regulation of behaviors that are not well learned or that are performed in difficult and changing circumstances (Ouellette & Wood, 1998), such as job seeking. Thus, a self-regulated or high-quality job search process starts with goal establishment.

Self-regulation theorists (e.g., Austin & Vancouver, 1996; Zimmerman, 2000) further argue that for proper self-regulation people should not only *select the goal content* but also develop its dimensions, such as importance (or *commitment*), specificity (or *clarity*), and proximity (i.e., the extent to which a goal is embedded in a *hierarchically organized system of goals*). Conscious self-regulation cannot occur when there is no conscious and clear goal (i.e., a standard or objective is needed to regulate one's behavior to), and self-regulation more likely fails when the goal is perceived as less important and when the goal is not embedded in a hierarchical goal system, with more proximal process goals operating as regulators towards more distal outcome goals. Similarly, without a conscious and clear goal that one is committed to, and that is integrated in a hierarchical goal system, the job search process more likely proceeds in a nonsystematic haphazard fashion, implying low job search process quality.

Selecting a goal. The importance of goal selection in the job search process has been acknowledged in extant job search theory (Kanfer et al., 2001; Saks, 2005; Stevens & Beach, 1996; Wanberg & Kammeyer-Mueller, 2008). However, empirical research on goals in job search is scarce. The most obvious goal that may initiate a job search is the goal of attaining a new job (e.g., because of job loss, graduation, or dissatisfaction with one's current job). Individuals may also set more specific goals, such as finding a less stressful job, one that requires less commuting, pays more, or is more challenging. Not only finding a job, but also goals like obtaining leverage against one's employer (Boswell, Boudreau, & Dunford, 2004), staying aware of opportunities, and developing a professional network (van Hoye & Saks, 2008) may initiate a job search. In any case, a conscious goal is needed to start and guide a self-regulated (i.e., high-quality) job search.

Goal commitment. The job search literature has also paid some attention to the development of the goal's dimensions. Kanfer et al. (2001, p. 838), for example, noted that the job search process "begins with the identification *and commitment* [emphasis added] to pursuing an employment goal." Goal commitment or importance, defined as "the degree to which the individual is attached to the goal, considers it significant or important, is determined to reach it, and keeps it in the face of setbacks and obstacles" (Latham & Locke, 1991, p. 217), in the context of job search mostly can be interpreted as one's determination to find employment. The related concept of employment

commitment, or the importance placed on employed work, is an often studied variable in unemployment research, and is related to job search intensity and reemployment (Kanfer et al., 2001).

Goal clarity. Austin and Vancouver's (1996) goal dimension of specificity (i.e., the specificity or clarity with which the goal is represented) received some attention in the job search literature, mostly described as purposefulness, goal-directedness, or job search clarity (Stevens & Beach, 1996; Stumpf, Colarelli, & Hartman, 1983; Wanberg et al., 2002). Wanberg et al. (2002) defined job search clarity as the extent to which job seekers have clear job-search objectives, for example regarding the type of job they want. They proposed that a lack of job search clarity undermines job search effectiveness, as people low on clarity likely contemplate more and may not target their applications effectively to potential employers. Empirical findings have shown that job search clarity positively relates to number of interviews, employment status, and reemployment quality (Côté, Saks, & Zikic, 2006; Wanberg et al., 2002; Zikic & Saks, 2009).

A related concept is career planning, defined as the setting of career goals or as having goals, plans, strategies, and objectives for one's career (Saks & Ashforth, 2002; Zikic & Klehe, 2006). Career planning was found to relate positively to reemployment quality (Zikic & Klehe, 2006), even after controlling for job search intensity (Saks & Ashforth, 2002). Although career planning contains elements of not only job search goals (i.e., Phase 1 in our model) but also job search planning (i.e., Phase 2), these findings nevertheless suggest that, regardless of people's job search intensity, the purposefulness with which people engage in job seeking is important in a high-quality job search.

Organized goal hierarchy. Austin and Vancouver's (1996) goal dimension of temporal range or goal proximity has received no explicit research attention in the job search literature. It nevertheless is an important goal dimension from a self-regulatory perspective. Several self-regulation theories distinguish between super-ordinate or distal goals and subordinate or proximal goals, forming a goal hierarchy (e.g., Bandura, 1991; Carver & Scheier, 1982). Proximal goals are important in the self-motivation process, because attaining these goals leads to self-satisfaction and progressive mastery of an activity (Bandura, 1991). Therefore, progress toward distal goals is best achieved when these distal goals are combined with proximal self-guidance. Empirical research has supported these contentions, showing that proximal goals enhance self-efficacy for the distal goal (Bandura & Schunk, 1981; Stock & Cervone, 1990), increase satisfaction with the progress towards the distal goal (Stock & Cervone, 1990), and lead to greater persistence and better performance (Bandura & Simon, 1977; Donovan & Williams, 2003; Stock & Cervone, 1990). As Zimmerman (2000) concluded, high-quality self-regulation is therefore characterized by a hierarchically organized system of goals, with more proximal process goals operating as regulators towards more distal outcome goals.

Extending previous job search research, we propose that an important dimension of a high-quality job search process involves the specification of the employment/job search goal in a hierarchically organized system of both higher level and lower level goals. For example, the distal outcome goal of finding a (specific type of) job should be subdivided into more proximal process goals referring to specific suboutcomes (e.g., "I want to get a job interview at organization X") in order to achieve the distal outcome goal. Developing a goal hierarchy with proximal process goals helps in making the cognitive transition from goal establishment into planning the goal pursuit.

In summary, based on the synthesis of job search and self-regulation research and theory, we propose that a highly self-regulated job search starts with selecting a goal and

developing its dimensions in terms of purposefulness or goal clarity and goal importance or commitment. Extending previous job search theory, we argued that temporal proximity or position in a structured goal hierarchy is a crucial dimension in a self-regulated job search. Regarding job search process quality, this leads to the following proposition:

> Proposition 3: A high-quality job search in the goal establishment phase refers to (a) selecting a conscious goal, developing (b) strong goal commitment and (c) high goal clarity, and (d) embedding the (distal) goal in a hierarchically organized system of proximal (sub)goals.

Phase 2: Planning of the goal pursuit

In achievement situations people should not only pay attention to the goal to be attained, but also to the steps required to reach that goal (Austin & Vancouver, 1996; Frese, Stewart, & Hannover, 1987; Gollwitzer, 1990). Therefore, the second self-regulation phase in our quality cycle is the planning phase. This phase involves processes referring to the preparation of the goal pursuit, and the development of specific behavioral paths or strategies, that is, determining when, where, how, and how long to act (Austin & Vancouver, 1996; Diefendorff & Lord, 2008; Vancouver & Day, 2005). Planning links goals to behavioral tactics, and implies prioritizing among various goals. As such, it builds on the goal establishment phase, and facilitates the transition from cognition to action. Austin and Vancouver (1996) noted that planning serves two functions. First, it provides a means of testing alternative actions without using actual physical resources. Second, to achieve multiple goals (or a nested hierarchy of goals), it is necessary to plan a sequence of activities (i.e., prioritize). Importantly, planning and strategy selection are guided by the established goal, depend on individual characteristics and contextual

conditions, and requires cyclical adjustments (Zimmerman, 2000).

Planning and its components have been given some attention in the career decision-making and job search literatures. For example, Savickas (1997) identified planfulness as a critical dimension of career adaptability, necessary to successfully manage career transitions. Soelberg (1967) described a job search planning phase during which people develop a plan to attain the employment goal. Also some empirical studies on job seeking (Côté et al., 2006; Saks & Ashforth, 2002; Turban et al., 2009; Zikic & Klehe, 2006) included items referring to planning (e.g., having clarity about how to search for a job, having developed a coherent plan to guide one's job search).

Integrating both self-regulation theory and the job search literature, we propose that in a high-quality job search process the planning phase encompasses processes related to deciding upon the global *strategy* to be used, deciding on which search generators to use and allocating resources to the selected activities (i.e., *tactical* planning), determining when, where, and how to act (*implementation intentions*), and *preparing* the actual performance of search activities. Extending previous job search theory and research, we argue that explicit attention to *prioritizing* and *deadline-setting* is crucial in a high-quality job search process.

Strategy selection. A job search strategy refers to the general behavioral path that one is going to follow towards the selected goal. Stumpf et al. (1983) and Stevens and Beach (1996) distinguished between systematic and focused versus fortuitous, haphazard, or random job search strategies, arguing that a systematic strategy should relate to more positive job search outcomes. Extending this line of thought, Crossley and Highhouse (2005) operationalized three job search strategies: a focused strategy (i.e., concentrating search efforts on a small number of carefully screened potential employers), an exploratory strategy

(i.e., examining several potential employment options and actively gathering information), and a haphazard strategy (i.e., passively gathering information both inside and outside one's area of expertise using a trial and error approach). Empirical results (Crossley & Highhouse, 2005; Koen, Klehe, van Vianen, Zikic, & Nauta, 2010) indicate that exploratory and focused strategies positively, and a haphazard strategy negatively relates to the number of job offers. In addition, a focused strategy positively and a haphazard strategy negatively related to the quality of the attained job. In contrast to Crossley and Highhouse's (2005) behavioral operationalization of job search strategies, and consistent with self-regulation theory, the concept "strategy selection" in our process quality model is *cognitive* in nature, referring to *intended* strategy use.[2]

Selecting and forming intentions for a diverse set of job search tactics. Once the strategy is chosen, appropriate tactics should be selected. In the context of job search, this refers to the selection of search generators or job information sources (i.e., the channels that job seekers use to acquire information about job opportunities), which can be classified into formal and informal channels (Barber et al., 1994; Blau, 1994; Saks, 2005). Whereas formal channels refer to public intermediaries such as recruitment advertisements, search firms, on-campus placement offices, and employment agencies, informal channels relate to private intermediaries such as personal contacts (e.g., relatives, friends) and professional contacts (e.g., current/former colleagues, teachers, or business contacts). Selection of tactics refers to deciding upon whether to use formal or informal channels, or both, and the selection of the specific channels (e.g., where to search for advertisements, who in one's network to contact), as well as deciding on the intended effort to allocate.

Meta-analytic research (Kanfer et al., 2001) suggests that using multiple and diverse search tactics increases the likelihood of finding a (new) job. However, popular literature lists networking and direct contact with prospective employers as the most effective job search tactics (e.g., Bolles, 2010; Liptak, 2005). Supporting this recommendation, the academic literature suggests that a large proportion of jobs are found through networking and direct contacts, with estimates varying between 29% and 90% (Schwab et al., 1987; van Hoye et al., 2009; Wanberg et al., 2000). In contrast, only 11–35% are estimated to have found jobs through formal sources (Wanberg et al., 2000). Furthermore, the intensity with which people use networking in their job search positively predicted the number of job offers that people received (van Hoye et al., 2009) as well as the chances to find employment (Wanberg et al., 2000).

Because job search intentions strongly predict actual search behavior and job attainment (van Hooft, Born, Taris, & van der Flier, 2004, 2005; Wanberg et al., 2005), in the planning phase a high-quality job search entails the formation of intentions to allocate time and effort to a diverse range of search generators. Intentions should particularly stress informal sources, because information obtained from informal sources likely is richer and more detailed, increasing the opportunities to meet the expectations of the recruiting organizations.

Prioritizing, deadline-setting, and forming implementation intentions. Although conscious intentions are important drivers of nonhabitual behaviors (Ouellette & Wood, 1998) such as job seeking, intentions do not always result in actions. Because a high-quality job search process involves engaging in a diverse range of search methods, it involves a multiple-task context in which individual tasks can conflict or compete for the same resources (e.g., one cannot browse the Internet for vacancies and at the same time visit a number of employment agencies). To increase the likelihood that intentions are acted upon and procrastination is minimized, the self-regulation literature has

theorized and demonstrated the effectiveness of cognitive self-regulatory mechanisms such as prioritizing, deadline-setting, and implementation intentions (Gollwitzer & Sheeran, 2006; Lord et al., 2010; P. Steel & König, 2006). A high-quality search process therefore entails that the selected job search activities are prioritized, scheduled (i.e., deadline-setting), and planned in terms of where and how to perform them. These concepts, however, have received hardly any attention in the job search literature.

Prioritizing is the part of planning that refers to the setting of the order in which tasks will be performed (Claessens, van Eerde, Rutte, & Roe, 2010). It involves the intended spacing or allocation of available resources across multiple tasks, which is an important part of self-regulation in multiple-task contexts (Lord et al., 2010; Mitchell, Harman, Lee, & Lee, 2008). Prioritizing the intended activities during the planning phase increases the chances that the activities are performed, because when the task order is set, one does not need to switch back and forth between the goal striving and planning phase once the goal striving has started. Prioritizing also minimizes distractive reminders of other activities, freeing resources for the ongoing activity. In addition to prioritizing, deadline-setting facilitates self-regulation during the goal-striving phase. Temporal motivation theory (P. Steel & König, 2006) suggests that deadlines have strong motivational impact because an approaching deadline diminishes the effects of temporal discounting, increasing the task's utility. Supporting the use of deadlines as a self-regulation strategy, Ariely and Wertenbroch (2002) demonstrated that self-imposed deadlines result in less task delay and higher performance as compared to having no intermediate deadlines. However, externally imposed deadlines lead to even better results. These findings suggest that in the context of job search, which usually is a self-initiated and self-managed process without externally assigned deadlines, self-imposed deadline-setting (and

sharing those deadlines with important others) is a useful self-regulatory strategy.

A related concept is implementation intentions, referring to if-then plans specifying when, where, and how to instigate responses that promote goal realization (Gollwitzer, 1990). By linking a desired response to the occurrence of a specific situation, performance of the response is more automatic and less effortful. Meta-analytic findings have shown that implementation intentions positively affect goal attainment (Gollwitzer & Sheeran, 2006). Implementation intentions can be used to facilitate the initiation of goal-directed behavior (e.g., "If it's Monday morning 10 a.m., then I will sit down at my computer and write the application letter for job X"). Van Hooft, Born, Taris, van der Flier, and Blonk (2005) found support for implementation intentions in facilitating the initiation of job search behavior, showing that people who specifically planned when, where, and how to perform their job search activities reported higher job search intensity 4 months later. Implementation intentions can also serve to facilitate the prioritization of intended activities, freeing the executive system from distracting reminders during goal striving. Masicampo and Baumeister (2011), for example, showed that intended but unfinished activities cause intrusive thoughts that hinder performance of other ongoing activities. The formation of implementation intentions for such intended activities not only facilitated the performance of those activities at the planned moment, but also freed cognitive resources improving the performance of the current activity.

Preparation. A high-quality job search process further involves a thorough preparation of the selected job search tactics. For example, a networking effort is of higher quality if one prepares the conversation with the contact by collecting information about the contact. Caldwell and Burger (1998) found that both social preparation (i.e., talking to friends, relatives,

faculty, and job incumbents to prepare for the interview) and background preparation (i.e., looking for and reading background information about the company and industry to prepare for the interview) predicted the number of follow-up interviews among graduating students. Social preparation also predicted the number of job offers. Other research has suggested that preparation of job interviews is important to raise interview self-efficacy and reduce interview anxiety. Such preparation may contain engaging in positive self-talk, self-persuasion, and training of self-promotion skills (Latham & Budworth, 2006), as well as rehearsing, thinking about possible questions and answers, and focusing on task-related rather than evaluative thoughts prior to (and also during) the interview (Ayres, Keereetaweep, Chen, & Edwards, 1998).

In summary, after goal establishment, a high-quality job search process continues with a thorough planning phase. Based on a synthesis of extant theory and new developments on self-regulation theory and relevant job search research, we pose that:

> Proposition 4: A high-quality job search in the planning phase refers to (a) adopting an exploratory or focused (rather than haphazard) job search strategy, (b) making strong intentions for using a wide range of job search tactics with special attention for informal sources, (c) prioritizing and making a solid planning of when (with self-imposed deadlines), where, and how to act on the intentions, and (d) conducting thorough preparation of the planned activities.

Phase 3: Goal striving

The third self-regulation phase is the phase of goal striving, characterized by processes involving the (sustained) performance of behaviors towards the goal (Vancouver & Day, 2005). In order to ensure the actual initiation of the planned behavior and the sustained

allocation of resources over time, the self-regulation literature (e.g., Diefendorff & Lord, 2008; Lord et al., 2010; Zimmerman, 2000) has identified self-control, goal shielding and maintenance, self-monitoring, and feedback-seeking as important self-regulatory mechanisms. The job search literature has emphasized the importance of devoting time and effort to a series of job search activities (i.e., job search quantity), but paid little attention to self-regulatory processes in the goal-striving phase that facilitate the performance of the planned job search activities. Because obstacles, setbacks, and difficulties are abundant during job search, and likely distract job seekers from their goal pursuit, a high-quality job search process must encompass self-regulatory techniques that help initiating and maintaining the planned job search activities despite temptations, obstacles, and setbacks. A few job search studies have directly or indirectly addressed self-regulatory mechanisms that are relevant during goal striving (i.e., Caplan, Vinokur, Price, & van Ryn, 1989; Song, Wanberg, Niu, & Xie, 2006; van Hooft, Born, Taris, van der Flier, & Blonk, 2005; Wanberg, Kanfer, & Rotundo, 1999; Wanberg, Zhu, Kanfer, & Zhang, 2012; Wanberg et al., 2010). Integrating insights from these studies with self-regulation theory, we propose that a high-quality job search process involves using *self-control* (of attention, thoughts, emotions, and behavior) and *self-monitoring* of goal progress and performance. Extending the job search literature, we argue, based on self-regulation theory and research, for the importance of *goal shielding* and active *feedback-seeking* techniques in a high-quality job search process.

Self-control. Self-control refers to attention focusing (i.e., improving one's concentration and screening out other processes; Zimmerman, 2000), thought control (e.g., suppressing ruminative or escapist thoughts), emotion control (e.g., not allowing to have anxiety, worry, and discouragement overtake during performance

of the behavior; Wanberg & Kammeyer-Mueller, 2008), motivation control (e.g., strengthening the intention's motivational basis and protecting one's motivation from waning; Kanfer & Heggestad, 1997), and behavioral control (e.g., sustained effort, persistence, and avoiding procrastination). Self-control processes are crucial in the goal-striving phase to ensure the initiation of scheduled job search activities, to focus on the task at hand and optimize effort, and to persist over time. Recent theorizing has suggested that self-control can help performance via two different pathways, that is, by assisting the initiation of goal-directed behavior (start control or initiatory control) and by the inhibition of short-term attractive behaviors that disrupt the goal pursuit (stop control or inhibitory control; De Boer, van Hooft, & Bakker, 2011; De Ridder, De Boer, Lugtig, Bakker, & van Hooft, 2011). As Kanfer (2012) notes, self-control is especially needed for sustaining effort when working towards attaining complex goals over time, and under conditions of difficulties, environmental distractions, and emotions. Thus self-control is even more relevant when the going gets tough, which almost inevitably happens during job seeking.

Although most components of self-control have received wide research attention in general, studies on self-control during job seeking are scarce. Among the exceptions are studies by Wanberg and colleagues (Wanberg et al., 1999; Wanberg et al., 2012), showing the importance of motivation control in predicting job search intensity and persistence over time. Also the JOBS training program (Caplan et al., 1989; Vinokur, Schul, Vuori, & Price, 2000) indirectly acknowledges the importance of self-control, as a central element in this intervention is the "inoculation against setbacks," consisting of having trainees anticipate situations in which setbacks are likely, generating methods for overcoming dysfunctional responses, and acquiring skills to cope with setbacks.

Goal-shielding and goal maintenance. Two specific self-control mechanisms are goal-shielding and maintenance, which refer to keeping the focal goal accessible and active and protecting it from interference by information related to other, competing goals (Lord et al., 2010). Successful self-regulation requires that contemporaneous alternative pursuits are (at least temporarily) put aside during goal striving, and dysfunctional temptations are avoided, such that all attentional resources are available for the current task pursuit. Shah, Friedman, and Kruglanski (2002), for example, found that both the extent to which the focal goal is accessible and the extent to which an alternative goal is inhibited positively predict task persistence and performance.

While goal-shielding processes often occur automatically and subconsciously, there are also conscious self-regulatory strategies facilitating the maintenance of a goal and shielding it from distractions. For example, Trope and Fishbach (2000) demonstrated that in order to maintain a goal that has long-term benefits but short-term costs, people engage in counteractive control strategies such as bolstering the goal's value and its associated activities. Moreover, control strategies such as reminding oneself and elaborating on what makes the attainment of the goal (e.g., finding a job) important and gratifying help toward goal attainment by overcoming short-term costs associated with the goal pursuit. Also research on delay of gratification examined a number of control strategies that facilitate maintenance of behavior towards long-term beneficial goals in the face of short-term attractive but long-term harmful temptations (e.g., Metcalfe & Mischel, 1999). Examples of strategies to control temptations are (a) avoiding the temptation or avoiding paying attention to the temptation, (b) shifting the attention away from the temptation by seeking actual or cognitive distraction, or (c) reconstruing the meaning of the temptation such that it is less tempting.

A helpful strategy to facilitate the activation of control strategies to shield goal-directed

behavior from unwanted influences such as distraction and obstacles is the formation of goal-shielding implementation intentions (Achtziger, Gollwitzer, & Sheeran, 2008). Goal-shielding implementation intentions are if-then statements that specify potentially disruptive states, thoughts, or situations in the if-component and link it to an instrumental coping response in the then-component (e.g., a job seeker who plans to finalize his résumé on Monday morning but expects distractions by friends may intend: "If a friend calls me for help on Monday morning, then I will tell him that I'm only available in the afternoon and not in the morning"). Such implementation intentions make activation of instrumental coping responses more automatic and therefore easier, which benefits the ongoing goal striving.

Self-monitoring and feedback-seeking. We further propose that using self-monitoring and feedback-seeking techniques to control both goal progress and the content and level of one's ongoing behavior and performance are important aspects of a high-quality job search process. Similar to TQM which highlights that quality encompasses continuous improvement, which cannot occur without process analysis and feedback from the environment (Dean & Bowen, 1994), a high-quality job search process cannot occur without continuous self-monitoring and active feedback-seeking. That is, diagnostic information about ongoing search activities and progress towards the employment/job search goals is needed to correct, adjust, or improve the job search process such that it results in better quality job search behaviors/products.

Self-monitoring refers to the tracking of specific aspects of one's ongoing behavior, including its antecedent conditions and consequences. Based on self-regulation theory (Kanfer & Ackerman, 1989; Karoly, 1993; Zimmerman, 2000), we suggest that successful job search self-monitoring requires job seekers to consciously attend to their job search behaviors in relation

to their job search/employment goals. Self-monitoring is essential in a high-quality job search process, because systematic, self-consciously guided movement towards a goal cannot occur without having detailed and accurate information about one's behavior. High-quality self-monitoring should be proximal in time rather than delayed, and accurate rather than self-distorted, because only immediate and accurate monitoring yields information that is helpful in adjusting and improving one's goal striving towards goal attainment.

A specific component of self-monitoring is the monitoring of discrepancies and progress. Self-regulation theory (Bandura, 1991; Carver & Scheier, 1990; Kluger & DeNisi, 1996) poses that large negative discrepancies or low progress serve as motivator to work harder towards the goal, but only if people maintain self-confident that they can attain the goal. When low progress is interpreted in terms of the self, leading to lowered self-confidence, large negative discrepancies result in disengagement and withdrawal. This suggests that for a high-quality job search process, low progress should be interpreted in terms of the task, rather than the self, to protect motivation and persistence. Carver and Scheier (1990) further discuss a metamonitoring function, which involves monitoring the progress or velocity of discrepancy reduction. Recent research (Chang, Johnson, & Lord, 2010; Elicker et al., 2010) suggests that velocity, or the rate at which individuals move towards their goals, positively impacts cognitive (e.g., mental focus) and affective reactions (e.g., satisfaction), independent of goal–performance discrepancies. Wanberg et al. (2010) highlighted the importance of goal progress in job search self-regulation, demonstrating its relationship with daily affect, reemployment efficacy, and job search effort. Illustrating its motivating function, low perceived progress on one day was found to result in higher job search intensity the next day.

Diagnostic information about performance quality and goal progress can also be obtained

from others (i.e., feedback-seeking behavior). Such external feedback may complement self-monitoring by providing diagnostic information that does not suffer from self-serving biases. Ashford and Tsui (1991) described feedback-seeking as actively seeking information from others about one's behavior and performance, and portrayed it as the essence of discrepancy-detection, which is crucial for self-regulation. Although feedback-seeking has not directly been examined in the job search literature, giving feedback on job search behaviors is included in various effective job search training programs (e.g., Eden & Aviram, 1993; van Hooft & Noordzij, 2009). We propose that active feedback-seeking is an important aspect of a high-quality job search, as it provides external (i.e., non-self-biased) diagnostic information for adjusting and improving one's job search behaviors. Feedback should be obtained from knowledgeable others, which may involve professionals that assist job seekers (e.g., career/outplacement counselors, trainers, job coaches) or representatives of the demanding parties of the labor market (e.g., recruiters, psychological assessors, hiring managers).

In summary, a high-quality job search during the goal-striving phase entails applying self-regulatory techniques to initiate and maintain the planned goal-directed job search activities. Integrating self-regulation theory and relevant job search research, we argued for the importance of employing self-control of thoughts, emotions, attention, motivation, and behavior to both initiate (start control) and maintain job search behaviors by inhibiting temptations (stop control). Based on self-regulation research we argued that goal shielding is especially important for a high-quality job search process, as job seeking typically consists of multiple tasks, and is associated with distracting obstacles, setbacks, disruptive temptations, debilitating thoughts, emotions, or affective states. Although to date no research has examined goal shielding in the context of job search, we propose that goal-shielding techniques (e.g.,

bolstering the value of finding employment and its associated job search activities, physically avoiding temptations, seeking distraction when temptations occur, reconstruing the meaning of the temptation such that it becomes less attractive, forming goal-shielding implementation intentions) are crucial in a high-quality job search process. Extending the job-seeking literature, based on recent developments in self-regulation theory, we argued that a high-quality job search process is impossible without self-monitoring and active feedback-seeking (from knowledgeable and skilled others) to get information about both quality of performance, goal progress, and velocity. Such feedback should be interpreted with a task-focus rather than with a self-focus, in order to maintain motivation and avoid disengagement and withdrawal. Thus:

> Proposition 5: A high-quality job search in the goal-striving phase refers to employing (a) self-control of attention, thoughts, emotions, motivation, and behavior to initiate and maintain one's job search, (b) goal-shielding to manage distractions, and (c) self-monitoring and active feedback-seeking to inform one's behavior, goal progress, and rate of progress, and to detect discrepancies, interpreting this diagnostic information task-related rather than self-related.

Phase 4: Reflection

A last but crucial phase in most self-regulation theories (e.g., Austin & Vancouver, 1996; Diefendorff & Lord, 2008; Zimmerman, 2000) is the phase of reflection. Reflection relates to the evaluation of the goal striving in the light of the established goals to determine whether goal striving has been successful. Proper reflection cannot occur without having set clear goals in the goal establishment phase and without having monitored one's behavior in the goal-striving phase. Reflection processes influence one's responses to one's performance and feed

back to subsequent goal establishment, planning, and goal-striving phases (e.g., resulting in possible changes and adaptations to the goal, the strategies, the shielding of the goal). Zimmerman (2000) identified *self-evaluation* of one's performance, the *attribution* of causal significance to it, and *self-reactions* (e.g., self-satisfaction, affect, self-reward, and adaptive inferences) as three core components of reflection.

As applied to the job search process, the reflection phase refers to evaluating whether one's job search has been effective, for example after one application round. That is, after establishing the goal of trying to obtain a job in a certain industry, planning and preparing one's job search activities, initiating and maintaining the activities (e.g., seeking for job leads in that industry, submitting résumés to the selected job leads, and depending on the firms' responses going on job interviews), the reflection phase consists of evaluating the firms' responses, making attributions whether these responses relate to one's performance of the various job search activities, reinforcing oneself, and deciding whether and how to continue (i.e., whether the set goals need revision). Reflection is indispensable for a high-quality job search process as it enables learning and informs the adjustment and improvement of job search behaviors/products via its effects on subsequent goal establishment, planning, and goal striving. In order to secure a high-quality process, it is therefore important to know what job seekers should pay attention to in the reflection phase. Although reflection has hardly been considered in the job search literature, there is some indirect evidence of the importance of this fourth self-regulation phase.

Self-evaluation, learning from failures, and causal attributions. Regarding self-evaluation of one's performance, previous research indicates that differences exist in how people react to errors and failures. Both training and organizational research has shown that an emphasis on

learning from errors and failures is beneficial for performance (Keith & Frese, 2005; van Dyck, Frese, Baer, & Sonnentag, 2005). Noordzij, van Hooft, van Mierlo, Born, and van Dam (in press) adapted this concept to job seeking, and demonstrated that evaluating failures during the job search process in a positive, learning-oriented fashion is beneficial in terms of subsequent job search intensity. Thus similar to high reliability organizations, we pose that a high-quality job search process is characterized by an active, learning-oriented evaluation of failures, as this facilitates improvement and adjustment of job search behaviors/products to the labor market demands.

Extant job search theory posited that having an internal locus of control (i.e., attributing outcomes to internal factors) should benefit the job search process (Leana & Feldman, 1988; Wanberg, 1997; Wanberg et al., 2005), although cumulative evidence for this position is weak (Kanfer et al., 2001). A possible explanation for these findings relates to the idea that not all internal attributions are beneficial in the job search process. That is, in his attribution model of motivation and emotion, Weiner (1985) stated that perceived causes of success and failure can be classified along three dimensions: locus of causality (i.e., internal vs. external), stability (i.e., stable vs. unstable), and controllability (i.e., under volitional control or not). Only internal attributions of failure that involve unstable and controllable and therefore changeable factors are beneficial, because those especially lead to learning from failures and future improvements (e.g., van Dyck, van Hooft, De Gilder, & Liesveld, 2010). Thus a high-quality job search process is characterized by attributing failures to internal, but changeable causes.

Self-reactions and self-rewarding. Zimmerman (2000) highlighted the importance of self-satisfaction and subsequent affect in the self-regulation cycle. When self-satisfaction is made conditional on reaching one's goal,

satisfaction and positive affect serve as self-incentives, motivating continued effort and persistence (Bandura, 1991). Self-reactions can be made more positive by using self-administered rewards or praise. Self-rewards can be actual events (e.g., go shopping) or cognitive pleasures (e.g., taking a break). Larsen and Prizmic (2004) discussed several studies indicating that both types of self-rewards may help in reducing negative affect. Bandura (1991) states that people who engage in self-rewards usually accomplish more than those who do not use self-incentives. Although no research has examined these processes in the context of job seeking, we argue that contingent self-rewarding facilitates persistence, and as such is an important element of a high-quality job search process.

In summary, the last phase in our high-quality job search process cycle refers to reflection. Based on self-regulation theory and research, we propose:

> Proposition 6: A high-quality job search in the reflection phase refers to (a) paying attention to the evaluation of one's performance in line with the established job search/employment goals, (b) attributing failures to internal, changeable causes and trying to learn from failures, and (c) administering self-rewards contingent on one's performance.

Interrelations between process quality components

High-quality processes (cf. TQM) are characterized by *cycles* of performance enhancement and adjustment to the environment, based on monitoring one's performance and feedback from the environment. Self-regulation systems are also characterized by processes of *cyclical* adaptation towards the attainment of one's goals (e.g., Bandura, 1991; Carver & Scheier, 1982; Zimmerman, 2000). Synthesizing these TQM and self-regulation principles with job search phase models we therefore proposed that

a high-quality job search process is characterized by consciously cycling through the four self-regulatory phases as depicted in the job search process quality cycle in Figure 1. Thus, in essence this cycle (and the Propositions 3–6) embodies a prescriptive process model of what a high-quality job search process entails (see Proposition 2).

Because of the cyclical nature of both the job search process and self-regulation systems, the four phases of a high-quality job search are not independent. Quality in each phase is assumed to be a continuum ranging from low quality to high quality (i.e., each of the listed aspects in the propositions per phase can range from low to high, which combines into an overall degree of job search process quality per phase). Based on the cyclical nature, we propose that each phase strongly impacts the subsequent phases. That is, high quality in one phase is more likely when the quality in previous phases was high too. For example, *quality in the goal establishment phase* (Phase 1) positively impacts quality in the subsequent planning and goal-striving phases (Phases 2 and 3). More specifically, the higher the goal clarity (high quality in Phase 1) the more likely that a focused strategy is adopted (high quality in Phase 2), and the easier the goal-shielding because of less contemplations (cf. Wanberg et al., 2002) and distractions during goal-striving (high quality in Phase 3). In contrast, adopting a vague goal (low quality in Phase 1) likely induces a more haphazard strategy without any priority- and deadline-setting (low quality in Phase 2), which subsequently results in poor goal-shielding (low quality in Phase 3) because it is more difficult to form implementation intentions for a very broad and vague range of unordered activities. Also, as argued before and demonstrated by Shah et al. (2002), attaching importance to a goal (i.e., strong goal commitment; high quality in Phase 1) makes goal shielding and maintenance easier (high quality in Phase 3). Based on expectancy-value theories and the theory of planned behavior (see van Hooft, Born, Taris,

van der Flier, & Blonk, 2004), suggesting that commitment to employment goals positively predicts intention formation and subsequent goal-striving behavior, the goal commitment–goal maintenance relationship is likely mediated by strong intention formation and proper prioritizing (high quality in Phase 2).

Furthermore, *quality in the planning phase* (Phase 2) positively influences quality in the subsequent goal-striving phase (Phase 3). For example, making strong intentions (high quality in Phase 2) supports the exercising of self-control of attention and behavior in initiating and persisting on the intended job search activities, because strong intentions likely induce goal-shielding mechanisms such as bolstering the value of the employment goal and associated job search activities (high quality in Phase 3). Also, strong intentions furnished with implementation intentions, clear priorities, and deadlines (high quality in Phase 2), facilitate concentration and attention during goal striving (high quality in Phase 3), because there is no need to switch back and forth between planning and execution when all activities are clearly planned in advance. Furthermore, implementation intentions and deadlines increase action initiation and decrease procrastination (e.g., Ariely & Wertenbroch, 2002; Gollwitzer & Sheeran, 2006; P. Steel & König, 2006), which is a form of low self-control.

Examples supporting the rationale that *quality in the goal striving phase* (Phase 3) impacts quality in the reflection phase (Phase 4) relate toself-monitoring and feedback-seeking. The more proximal and accurate the gathering of diagnostic information about one's performance (e.g., by proximal self-monitoring and active feedback-seeking; high quality in Phase 3), the more likely individuals also pay attention to evaluation (high quality in Phase 4), that is, the comparison of the diagnostic information about one's performance with the established goals. In fact, evaluation is not possible without diagnostic information about one's performance. Detailed self-monitoring and external feedback

not only inform the evaluation, but also influence the attribution process. That is, to be able to attribute failures to internal changeable causes (high quality in Phase 4), which is crucial for performance improvement, one needs detailed information about one's behavior and performance (high quality in Phase 3).

Lastly, *quality in the reflection phase* (Phase 4) positively affects goal establishment, planning, and striving (Phases 1–3) in the next round. For example, thorough evaluation of one's performance regarding the search for job opportunities (high quality in Phase 4) may inform the job seeker about why no job leads were found (e.g., sought at the wrong spots and with inappropriate channels). This may lead to adjustment of the goal, by elaborating the goal hierarchy and subsequent intention formation with specific channels for searching. Also, reflection (e.g., caused by external feedback or repeated rejections) may give a boost to quality in the continuation of the job search process, by clarifying one's goals and increasing one's attention for selecting strategies and appropriate tactics.

In summary, based on TQM principles, self-regulation theory, job search phase models, and the research discussed on the elements of quality in each of the four phases we argue that the degree of quality in each phase depends on the degree of quality in the preceding phases. As such, the job search process quality cycle of Figure 1 not only embodies a prescriptive process model, but can also be interpreted as a variance model, displaying the cyclical relationships between the four phases. Thus:

> Proposition 7: Quality in each phase of the job search process quality cycle positively affects quality in the subsequent phases.

Job search process quality and job search product quality

As stated in Proposition 1, job search process quality is proposed to positively affect job

search product quality. Job search product quality entails the quality of the behaviors and products generated during the job search process. A distinction can be made regarding job search product quality pertaining to activities aimed at generating potential job leads through formal and informal sources (e.g., quality of Internet search behavior, vacancy search quality, quality of networking), and activities aimed at the active pursuit of the identified job leads (e.g., résumé quality, application letter quality, interview quality). Job search product quality, that is the extent to which these behaviors/products meet or exceed the expectations of the demanding parties in the labor market, can be assessed for each of these components by having their quality rated by knowledgeable others (e.g., recruiters, psychological assessors, job counselors).

Job search product quality is rather difficult to standardize because recruiters are heterogeneous, having rather idiosyncratic ideas about what constitutes high quality. Nevertheless, based on previous research on networking, résumés, and interview behavior some commonalities regarding job search product quality may be inferred. For example, *high-quality networking* relies on the use of weak rather than strong ties, because weak ties lead to less redundant and more unique information about job opportunities (Brown & Konrad, 2001; Granovetter, 1973). Wanberg et al. (2000) suggested that quality of performing networking behaviors involves social interaction skills, self-presentation skills, and networking comfort. *High-quality résumés* use formal formats (Arnulf, Tegner, & Larssen, 2010; Bird & Puglisi, 1986), and include competency statements (Bright & Hutton, 2000) and detailed information about work-related experience (McNeilly & Barr, 1997). Research on job interviews suggests that *high-quality interview behavior* includes having a professional appearance (i.e., appropriate professional demeanor, grooming, and dress; Barrick, Shaffer, & DeGrassi, 2009), acting

confidently (Latham & Budworth, 2006; Tay, Ang, & van Dyne, 2006) and not anxiously (McCarthy & Goffin, 2004; Saks & Ashforth, 2000), being articulate, fluent, concise, to-the-point, and cooperative (Bretz, Rynes, & Gerhart, 1993; Hollandsworth, Kazelskis, Stevens, & Dressel, 1979; Kinicki & Lockwood, 1985), varying in pitch and volume (DeGroot & Motowidlo, 1999), maintaining appropriate eye contact (Ayres et al., 1998; Liden, Martin, & Parsons, 1993; Tessler & Sushelsky, 1978), and engaging in other nonverbal behaviors such as smiling, being energetic, sitting upright, appearing at ease, and having an attentive posture (e.g., Barrick et al., 2009; Hollandsworth et al., 1979; Imada & Hakel, 1977; Liden et al., 1993; McGovern & Tinsley, 1978).

As summarized in Proposition 1, we argue that job search product quality is positively affected by job search process quality. Specifically, the more job seekers conduct their job search according to the standards and specifications detailed in the Propositions 2–6, the more likely their job search behaviors/products are of high quality, that is, meet the expectations of the demanding parties at the labor market. The rationale for this proposition is based on the idea that because the labor market is a complex market, characterized by low transparency and high heterogeneity, it is unclear at first sight what one needs to do to obtain a job in terms of locating job leads and meeting the expectations of recruiting organizations. The job search process quality cycle functions as a spiral, such that by analyzing their search behaviors (i.e., self-monitoring, external feedback, evaluation, attribution, learning from failures), job seekers learn about the labor market and the expectations of the demanding parties, leading to adjustment of the goals, planning, and behaviors based on this analysis and learning, and thereby moving closer towards the expectations of the demanding parties (i.e., job search product quality).

Outcomes of job search quality

Figure 2 displays the broader net of antecedents and consequences of job search quality, as well as potential moderators in these relationships. With respect to consequences of the job search process, previous theorizing and research (e.g., Boswell et al., 2012; Brasher & Chen, 1999; Kanfer et al., 2001; Saks, 2005, 2006; Schwab et al., 1987; Wanberg et al., 2000) distinguished between various types of job search success indicators. The most commonly studied indicators are *quantitative employment outcomes* such as employment status or turnover (i.e., whether or not a [new] job is obtained after a specified period) and employment speed or search duration (i.e., length of time that it took to find [new] employment). In addition, some studies have included outcomes relating to the *quality of the newfound job* (e.g., extent of underemployment, degree of fit, job satisfaction, salary improvement, staying intentions) and career growth. In addition to these distal employment outcomes, recent theorizing emphasized a category of more proximal outcomes, that is, *outcomes occurring during the search process*. These may involve outcomes of active pursuit behaviors (i.e., number of job interviews, number of job offers), but also outcomes of behaviors aimed at generating potential job leads (i.e., number of fitting job opportunities located).

We propose that job search process quality positively affects both proximal and distal indicators of job search success, and that these relationships are mediated by job search product quality. The reasoning for this proposition is twofold. First, because the job search process is lengthy, difficult, and complex, and setbacks and obstacles are abundant, self-regulation is needed to obtain the goal of finding employment. Because a high-quality job search process implies high self-regulation, it is more likely that job seekers obtain their goals when their job search process is of high quality (i.e., highly self-regulated as defined in Propositions 2–6) rather than low quality (i.e., not conforming to the standards as defined in Propositions 3–6, or not conforming to the specified order, thus basically referring to a non-goal-directed, unsystematic, unplanned, random, and haphazard job search). Second, engagement in a high-quality job search process evokes a learning process regarding the identification of suitable job leads, increasing the chances that job seekers learn what employers want. As such, job seekers conducting a high-quality search process are more likely to find a larger number of fitting job opportunities, more likely to draft résumés and cover letters that meet/exceed the expectations of hiring organizations, and more likely to engage in high-quality interview behaviors (i.e., higher quality job search products/behaviors). Because high-quality job search products meet/exceed the expectations of demanding parties at the labor market, it is more likely that job seekers are invited for job interviews and receive job offers. Thus:

> Proposition 8: (a) Job search process quality positively affects job search success, (b) as mediated by job search product quality.[3]

This proposition concerns job search process and product quality in general, but may also be applied to specific quality components. Regarding such specific quality components, some indirect or partial support has been documented in the literature. For example, Turban et al. (2009) reported positive relationships of metacognitive activities (which relate to high self-regulation) with number of interviews and job offers. Studies using ratings of interview quality (Cable & Judge, 1997; Crossley & Stanton, 2005; Graves & Powell, 1996) found positive relationships between interview quality and interview outcomes such as hiring recommendations and likelihood of job offer.
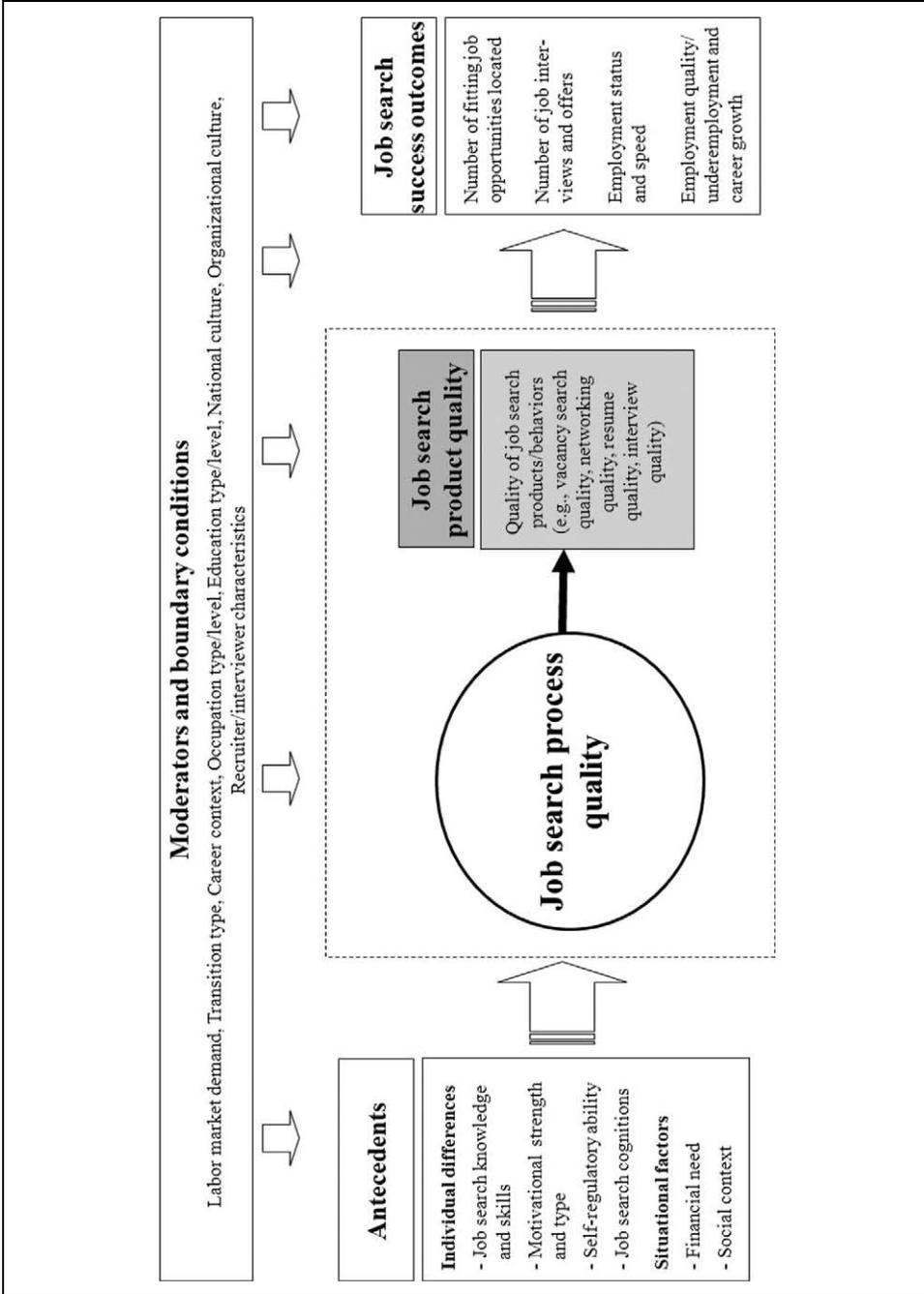
Figure 2. Antecedents and outcomes of job search quality and potential moderators in these relationships.

Antecedents and boundary conditions of job search quality

Given the proposed importance of job search process quality in affecting job search success, it is of interest to understand how, when, why, or under which conditions process quality is more or less likely to occur. Similar to self-regulation, job search process quality may vary both between individuals and within individuals over time. Thus, both individual differences and situational factors may explain process quality.

Individual difference antecedents

Although a plethora of individual differences may predict whether job seekers are more or less inclined to conduct a high-quality job search, in the present paper we focus on the most proximal individual difference predictors. As displayed in Figure 2, these relate to job search knowledge and skills, motivational strength and type, self-regulation ability, and job search cognitions.

   Job search knowledge and skills refers to having the knowledge and skills to perform a high-quality job search, and as such is a necessary precondition for job search process quality. For example, when job seekers do not know that goal setting, planning, monitoring, and reflection are important for a high-quality and effective job search, they will be less likely to engage in those activities, and therefore less likely to conduct a high-quality job search. While having the knowledge and skills is a prerequisite for job search process quality, and makes quality more likely, it does not guarantee quality. That is, there is a difference between having the knowledge and skills, and using them in one's job search, with the latter being indicative of high job search process quality. Although various authors have noted that job search skills are important in predicting employment success (e.g., Fleig-Palmer, Luthans, & Mandernach, 2009; Saks, 2005;

Vuori & Vinokur, 2005; Wanberg et al., 2002; Wanberg et al., 2000), little research has empirically investigated this predictor. Among the few exceptions, is a study by Schmit, Amel, and Ryan (1993), demonstrating that self-reported assertive job search skills are predictive of future employment status. In addition, several effective job search training interventions (Azrin, Flores, & Kaplan, 1975; Caplan et al., 1989; Eden & Aviram, 1993; van Ryn & Vinokur, 1992) include a component of job search skills in their training programs. Based on these studies and our rationale, we suggest that job search knowledge and skills affect employment success through their impact on job search process quality.

Motivational strength and type. Self-regulation and therefore also a high-quality job search process is effortful and demands resources. The stronger job seekers' motivation to obtain a (new) job, the more likely they will allocate those resources needed to self-regulate and to conduct a high-quality search. In addition to this general rationale, the effects of motivational strength on job search process quality can also be based on specific quality components. From an expectancy-value perspective (Feather & O'Brien, 1987; van Hooft, Born, Taris, van der Flier, & Blonk, 2004), motivational strength is commonly defined based on job seekers' subjective values of having a job (*employment commitment*), and their expectations about the chance to be able to find a job (*outcome expectancy*). Unemployed job seekers who are more committed to employment, will likely demonstrate stronger commitment to their specific job search goals (i.e., high quality in Phase 1), and will be more likely to shield their goals when distractions occur (i.e., high quality in Phase 3). As another example, when job seekers have an internal locus of control (high outcome expectancy), they will perceive higher control over their situation, and therefore more likely make constructive causal attributions (i.e., high quality in Phase 4), and persist after failures,

inducing continued self-regulation rather than withdrawal.

The motivation underlying people's job search may not only vary in strength but also in type (Vansteenkiste, Lens, De Witte, De Witte, & Deci, 2004), as explained by self-determination theory (SDT; Deci & Ryan, 2000). That is, motivation to search may be *autonomous* (i.e., engaging in job seeking because it is interesting/enjoyable or because it serves an outcome that people themselves value) or *controlled* (i.e., engaging in job seeking because people perceive pressure, internally or externally). Based on SDT, autonomous job search motivation should lead to greater learning and understanding of job seeking, more adaptive coping with failures, less anxiety, and greater persistence than controlled motivation. Thus, job search process quality is more likely when job seekers have autonomous rather than controlled motivation to search.

Self-regulatory ability. Because job search process quality entails self-regulation, it is likely affected by individual differences in self-regulatory ability or capacity. Tangney, Baumeister, and Boone (2004) developed a measure for *trait self-control*, referring to people's ability to override or change one's inner responses, interrupt unwanted thoughts, and refrain from engaging in undesired behaviors. Trait self-control was demonstrated to vary between individuals, and to relate positively to psychological adjustment, adaptive emotional responses and interpersonal behavior, and academic performance. Indicative of low self-regulatory ability, *trait procrastination* refers to the tendency to postpone that which is necessary to reach some goal (Lay, 1986). Trait procrastination involves the irrational delay of decisions and/or behaviors, and as such is likely negatively related to job search process quality both in the decisional goal establishment and planning phases, and in the more behavioral goal-striving phase. Research on trait procrastination in the context of job search provides some indirect evidence for this reasoning, indicating that trait procrastination negatively relates to implementation intention formation (van Hooft, Born, Taris, van der Flier, & Blonk, 2005) and positively predicts intention–behavior discrepancies and the extent to which job seekers do other things instead of performing planned job search activities (Lay & Brokenshire, 1997).

Another index of self-regulatory ability is *action-state orientation*, which refers to individual differences in the ability to initiate and maintain goal-directed behaviors (Diefendorff, Hall, Lord, & Strean, 2000; Kuhl, 1985). Action-state orientation is composed of three underlying dimensions: (a) initiative (capability to prioritize tasks and initiate action), (b) persistence (ability to stay focused until task completion), and (c) disengagement (ability to detach from interfering thoughts). These dimensions cover several components that are listed in our job search process quality cycle, suggesting that high levels of action orientation should more likely lead to a high-quality job search process. Supporting this idea, research on job seeking has found that unemployed individuals high on action orientation were more likely to form implementation intentions to search (van Hooft, Born, Taris, van der Flier, & Blonk, 2005), and to translate their job search intentions into actual job search behavior (Song et al., 2006).

According to Kruglanski et al.s' (2000) theory of regulatory mode, any self-regulatory activity involves *assessment* aspects related to comparing and evaluating goals, means, and states, and *locomotion* aspects related to moving from one state to another by initiating and maintaining goal-related activity without distractions and delays. Thus, for optimal self-regulation both assessment and locomotion are needed. Kruglanski et al. (2000) demonstrated that individuals differ in the extent to which they are focused on assessment versus locomotion aspects of the self-regulatory system. In support of their theory, individuals scoring high

on both dimensions were found to be more likely to complete a difficult training program, suggesting a higher level of self-regulation success. Based on this theory and findings, a combination of high assessment and high locomotion is likely also beneficial for developing a high-quality job search process.

In addition to relatively stable individual differences, self-regulation capacity varies momentarily within individuals. For example, research by Baumeister and colleagues (see Muraven & Baumeister, 2000) demonstrated that self-regulation capacity relies on a limited resource that gets depleted when it is used, resulting in diminished self-control, persistence, and performance on subsequent self-regulatory tasks. Thus, *self-regulatory depletion* in terms of temporarily diminished levels of state self-regulation likely negatively impacts job search process quality.

Job search cognitions. Lastly, based on self-regulation theory and job-seeking research, job search cognitions such as self-efficacy and achievement goal orientation likely impact the extent to which individuals develop a high-quality job search process. *Job search self-efficacy* refers to people's confidence in their ability to perform various job search activities. According to Bandura's (1991) social cognitive theory of self-regulation, self-efficacy importantly determines the self-regulatory system via its influence on processes related to goal-setting, self-monitoring, interpretation of negative goal–performance discrepancies, and forming causal attributions. Specifically, the higher people's job search self-efficacy, the higher goals they set, the more committed they are to these goals, and the less likely they give up after failures and setbacks. Thus, job search self-efficacy should positively relate to job search process quality, especially in Phases 1, 3, and 4. Job search self-efficacy has been demonstrated to relate positively to employment success (Kanfer et al., 2001). Our theory suggests that this relationship is explained by the higher levels of

job search process and product quality. Indirect evidence for this idea comes from research by Moynihan, Roehling, LePine, and Boswell (2003), which showed that job seekers with high self-efficacy more often converted job interviews into offers, suggesting that they displayed higher quality interview behaviors.

Achievement goal orientation refers to people's goal preferences in achievement situations (Payne, Youngcourt, & Beaubien, 2007), in terms of the purpose, focus, or framing of the goal. Goal orientation theory (Dweck, 1986; Elliot & McGregor, 2001; Kanfer & Heggestad, 1997; Vandewalle, 1997) suggests that when individuals perceive achievement situations with an approach focus directed at possibilities to increase one's competence and to master something new (i.e., learning goal orientation, mastery-approach, personal mastery), people set higher goals and are more likely to engage in challenging and difficult tasks, to exert effort, to engage in motivational and emotional control, and to interpret failures as useful feedback on their effort level and strategy use. Based on this theorizing, a general dispositional mastery orientation and/or a domain-specific job search mastery orientation (i.e., viewing the job search as a task that involves development of one's competencies, learning something new, and task mastery) should positively relate to job search process quality. Recent job-seeking studies demonstrated some indirect support for this reasoning. Van Hooft and Noordzij (2009), for example, found that a learning-approach goal orientation increased reemployment success, because it presumably leads job seekers not only to increase effort but also to analyze and change strategies (i.e., higher job search quality). Wanberg et al. (2012) demonstrated that job seekers high on personal mastery displayed higher levels of motivational control (e.g., staying focused on job seeking despite difficulties, boosting motivation to search) and persistence throughout their job search, indicative of a high-quality job search process.

In summary, based on our conceptualization of job search process quality and extant theory and research on motivation, self-regulation, and job seeking we propose:

> Proposition 9: Job search knowledge and skills, motivational strength, autonomous motivation, self-regulatory ability, and job search cognitions such as self-efficacy and personal mastery positively affect job search process quality.

Situational antecedents

We further propose that situational factors such as financial need and social context may impact job search process quality. That is, *financial need* imposes a strong psychological demand on job seekers, with negative effects on well-being (McKee-Ryan, Song, Wanberg, & Kinicki, 2005). Research has documented contrasting effects, in that financial need relates positively to job search intensity but negatively to employment success (Kanfer et al., 2001). These contrasting effects may be explained by job search process quality, such that financial need urges people into job search without much forethought and reflection, resulting in lower goal clarity, less planning, and a more haphazard search (all indicators of a lower quality search process).

Another important situational antecedent refers to the social context. Having useful contacts in one's social circle likely has positive effects on job search process quality. Social contacts can offer *emotional social support* in terms of encouragement during the job search process, aiding job seekers' emotional control. Furthermore, social contacts can provide *instrumental social support*, such as giving advice, information, assistance, and feedback on job search activities, which may help job seekers with forming clear goals, developing suitable plans, and obtaining diagnostic information about their goal striving (all elements of a high-quality job search process). Thus:

> Proposition 10: Financial need negatively, and social support (both instrumental and emotional) positively affects job search process quality.

Boundary conditions

In addition to situational factors that may differ between individuals, more macrolevel factors may impact job search quality and its relevance. An important macrolevel boundary condition is the *labor market demand*. In times of tight labor markets or for individuals with unique skills that are in high demand, it may be very easy to find (new) employment such that quality of the job search process and products make less of a difference. Alternatively, when jobs are scarce, job seekers are more likely competing with many others for the same limited number of jobs. Holding applicant characteristics (e.g., education level, job experience, cognitive ability, etc.) constant, those conducting a high-quality job search process will be more likely to meet/exceed hiring organizations' expectations because of higher commitment, better preparation, improved control of emotions and thoughts, and better self-monitoring. Thus, job search quality is proposed to be especially important in affecting job search success when labor market demand is low.

In addition, feedback from the labor market in terms of failure to locate suitable job leads or (repeated) rejections may evoke the development of a high-quality job search process. For example, in a labor market with many vacancies, a job seeker may more easily go ahead searching in a unplanned, haphazard manner with little thought and preparation, because jobs are abundant. However, in a poor labor market situation, failures and rejections are highly likely, and may induce job seekers to reflect upon their goals, strategies, and behaviors, causing a boost to quality in the continuation of the job search process, by clarifying one's goals and increasing one's

attention for selecting strategies and appropriate tactics.

> Proposition 11: Labor market demand (a) negatively affects job search quality, and (b) negatively moderates the impact of job search quality on job search success (i.e., the quality–success relation is stronger when labor demand is low).

In addition to labor market demand, there likely are other boundary conditions and moderators. Developing specific theoretical rationales for all such factors falls beyond the scope of the present paper, and are therefore discussed as suggestions for future research.

Future research on job search quality

In the present paper we defined and conceptualized job search quality and built theory on the relationships between the quality components, and on the antecedents and consequences of job search quality. By introducing this theory on job search quality, we offer new and more detailed explanations for established effects (e.g., personal mastery and self-efficacy lead to employment success because of increased process and product quality; using informal sources leads to more employment success because of increased product quality), as well as introduce new variables of interest. As such, we aim to push research on job seeking among unemployed, employed, and student job seekers into new directions. Specifically, we suggest future studies to include job search quality measures, examine its importance, and test the propositions developed in the present paper. For example, research should empirically test the proposed antecedents of job search quality (Propositions 9–10), whether higher process quality leads to higher product quality (Proposition 1), and to higher employment success (e.g., more job interviews, job attainment, higher employment quality; Proposition 8).

The propositions should not only be tested at a composite level, including all proposed process quality elements, but also at a more detailed level for each process quality element separately (e.g., for each of the four self-regulation phases, or for one or more aspects within a self-regulation phase). Based on such research, we can ultimately verify to what extent all listed self-regulation aspects (i.e., Propositions 3–6) are important for job search process quality, compose explanatory mechanisms for the effects of individual differences, and contribute to the prediction of job search product quality and employment success.

Measurement of job search quality

In order to test the propositions, future research should develop valid measures for job search process and product quality. Regarding *job search process quality*, such measure(s) should reflect the standards and specifications of high quality in each of the four phases as theorized before. More specifically, a comprehensive job search process quality measure should be a multidimensional measure, consisting of items asking to what extent job seekers are engaging in each of the activities listed in Propositions 3–6, and to what extent they do this in the listed order (cf. Proposition 2).

Although some may debate whether job search quality can be adequately measured by using self-report, previous research has developed self-report scales for some job search process quality elements (e.g., strategy development, Crossley & Highhouse, 2005; planning and implementation intentions, Saks & Ashforth, 2002; metacognitive activities, Turban et al., 2009; van Hooft, Born, Taris, van der Flier, & Blonk, 2005; job search clarity, Wanberg et al., 2002; motivation and emotion control, Wanberg et al., 1999). Because these elements were found to be valid predictors, developing a broader and more inclusive job search process quality scale holds great promise. Nevertheless, future research is needed to

not only develop such self-report measure, but also to test its reliability and validity, for example by using ratings of employment counselors, partners of the job seekers, or other parties involved in the job search process.

The measurement of *job search product quality* should rely on ratings of the quality of job search products and behaviors generated during the various phases of the job search process. These ratings should be provided by relevant, knowledgeable others. The job search product quality of generating job leads (e.g., quality of Internet search, quality of networking) is likely to be rated best by experts such as job search skills trainers, or employment, career, or outplacement counselors. The job search product quality of the active pursuit behaviors (e.g., résumé quality, interview quality) may also be rated by those experts using mock applications, or by relevant experts such as recruiters, hiring managers, or psychological assessors. Importantly, such ratings should reflect the quality of the job search products and behaviors, rather than quality of the job seeker/applicant (such as human capital, education, work experience).

Job search quality versus quantity

Previous research almost exclusively focused on job search quantity, which refers to the time/ effort that one invests in job seeking. Thus, a high level of job search quantity basically means spending a lot of time on job search. Cumulative research (Kanfer et al., 2001) showed that job search quantity moderately positively relates to job search success. In the present paper, we argued for the importance of job search quality in predicting job search success. Future research is needed to investigate the relationship between job search quantity and quality, and their possible joint effects on job search success.

Theoretically, quality and quantity should be moderately positively related. That is, engaging in a high-quality job search process involves engaging in all activities as listed in our job search process quality cycle, which likely takes more time than a low-quality job search process. However, high quantity is not equal to high quality, because spending a lot of time on job search does not automatically mean that the job search is directed by clear goals, organized in a hierarchy, strong intentions furnished with implementation intentions, etcetera. Based on this rationale, job search quality may explain the positive relationship between job search quantity and job search success. That is, job search quantity may lead to higher job search success *because* those with a high-quality search likely spend more time on their search than those with a low-quality search. Future research should test this reasoning by verifying whether job search quantity predicts job search success when job search quality is controlled for.

Alternatively, job search quantity and quality may interact in the prediction of job search success. That is, spending much time and effort on job seeking may only increase the chances to find employment if the search efforts are of high quality. Initial (indirect) support for this reasoning is reported by van Hoye et al. (2009), who found that networking intensity predicted employment success only when the networking behavior was of high quality (i.e., networking with high-status ties). Future research is needed to more generally test possible interactive effects between job search quantity and quality.

Model extensions

In addition to testing the propositions and variables listed in the model, future theorizing and research is needed to deepen our understanding of job search quality and its components. For example, future research should determine the relative importance or weight of each job search quality element (e.g., is each component as essential for a high-quality search process?). Another question for future research relates to whether process quality in

the four phases jointly or interactively affect product quality and job search success outcomes (e.g., does high-quality goal establishment result in higher product quality because it leads to high-quality planning, or does high-quality goal establishment influence product quality only when planning is of high quality as well?).

Furthermore, future research can examine to what extent individual differences or situational factors are of differential importance for the development of quality in each phase. For example, it may be expected that self-regulatory traits are more predictive of high quality in the goal-striving phase than in the other phases. Also, future research can examine other antecedents, outcomes, and moderators than those included in the propositions. For example, job search quality may not only affect job search success, but also mental health and well-being of the job seeker. Also, it may influence several factors that are included as individual difference antecedents in our model. For example, engaging in a high-quality search may bolster one's job search self-efficacy and increase one's job search knowledge and skills.

Future research should also address other moderators and boundary conditions of job search quality in addition to labor market demand. For example, research is needed to examine whether job search quality works differently or is of differential importance for various groups of job seekers in terms of transition types (e.g., job loss, job-to-job, new entrants), career stages, occupation type/level, and education type/level. However, because previous research has demonstrated that self-regulatory skills (e.g., goal-setting, identifying obstacles, self-monitoring, self-reward) are important for all kinds of employees (i.e., blue-collar workers, general managers; for a review of studies see Latham & Locke, 1991), it seems likely that job search quality (at least to some extent) applies to all kinds of job seekers, although the specifics may vary across occupation and education. Similarly, future

research is needed to determine if and how job search process and product quality differs according to the context or situation (e.g., organizational and national culture, characteristics of the hiring organization, recruiter, and interviewer).

Practical implications and conclusion

Although the importance of job search quality is evident, theory on job search quality is lacking, and empirical research scarce, indirect, and fragmented. Previous theory and research has almost exclusively focused on job search quantity (i.e., effort and intensity). The present paper challenges existing conceptualizations of the job search domain by introducing a theoretical framework of job search quality. Synthesizing theory and research on total quality management and self-regulation, we distinguished between job search product quality and job search process quality. We argued that a high-quality job search process is essential for achieving high-quality job search products and increasing job search success. Based on extant job search literature and developments in self-regulation theory, we developed the job search process cycle, specifying process quality standards in each of the four phases that a quality process is composed of.

By building theory on job search quality we increase our understanding of the underlying mechanisms that explain employment success and aim to stimulate future theorizing and empirical research on unemployment, career transitions, turnover, and job seeking. The specifications of job search quality also serve as important guidelines for practice (e.g., job seekers, organizations and professionals in the field of employment, career, and outplacement counseling). For example, knowing what a high-quality job search process exactly entails, helps counselors in assisting unemployed job seekers to get reemployed or graduating students to find their first job after graduation.

Also, understanding the antecedents of low job search quality may inform counselors in identifying job seekers in need of help to improve the quality of their job search. Finally, our depiction of a high-quality job search may help designing effective training programs.

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Notes

1. Clearly, this model is *prescriptive* rather than *descriptive*. Thus, we do not propose that all job seekers always cycle through these phases in the proposed order, and conform to the listed specifications. We are aware that in reality job seekers may skip phases, run through the phases in a different order, or do not perform one or more of the listed specifications. Nevertheless, we propose that a high-quality job search process consists of going through these phases in the prescribed order (see Proposition 2), and that a high-quality job search process is more likely to result in high-quality products and behaviors, such as high-quality résumés, applications letters, and job interviews, for example (see Proposition 1).

2. In the management literature (e.g., Mintzberg, 1987) it is noted that realized strategies may differ from intended strategies, and that strategies may also appear without clear intentions (emergent strategies). We propose, however, that such emergent strategies are essentially strategies that evolve over time by adapting to the environment, and thus result from cycling through the self-regulatory model.

3. It should be noted that this proposition does not suggest that every job seeker will find employment by cycling through the four phases in the proposed sequence (e.g., the economic situation may make it impossible to find employment). Furthermore, job seekers may find employment without cycling through these phases (e.g., people may just be lucky, or be at the right place at the right time). We just argue that it is more likely to obtain employment with a high-quality rather than a low-quality job search.

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