

FROM THE UNFOLDING PROCESS TO SELF-REGULATION IN JOB SEARCH: INTEGRATING BETWEEN- AND WITHIN-PERSON APPROACHES

Serge P. da Motta Veiga, Daniel B. Turban,
Allison S. Gabriel and Nitya Chawla

ABSTRACT

Searching for a job is an important process that influences short- and long-term career outcomes as well as well-being and psychological health. As such, job search research has grown tremendously over the last two decades. In this chapter, the authors provide an overview of prior research, discuss important trends in current research, and suggest areas for future research. The authors conceptualize the job search as an unfolding process (i.e., a process through which job seekers navigate through stages to achieve their goal of finding and accepting a job) in which job seekers engage in self-regulation behaviors. The authors contrast research that has taken a between-person, static approach with research that has taken a within-person, dynamic approach and highlight the importance of combining between- and within-person designs in order to have a more holistic understanding of the job search process. Finally, authors provide some recommendations for future research. Much remains to be learned about what influences job search self-regulation, and how job self-regulation influences job search and employment outcomes depending on individual, contextual, and environmental factors.

Keywords: Job search; unfolding process; self-regulation; within-person; between-person; employment; unemployment

INTRODUCTION

Individuals will conduct multiple job searches throughout their lifetime, with each having a significant influence on their employment outcomes and psychological health (Saks & Ashforth, 2000, 2002; Vuori & Silvonon, 2005; Vuori & Vinokur, 2005). Therefore, and perhaps not surprisingly, job search research has burgeoned. One result of this burgeoning literature is the number of meta-analyses (Kanfer, Wanberg, Kantrowitz, 2001; Liu, Huang, & Wang, 2014; McKee-Ryan, Song, Wanberg, & Kinicki, 2005; Wanberg, Kanfer, Hamann, & Zhang, 2016) that provide important information about empirical relationships and the state of the literature. Our intent with this chapter is slightly different. Specifically, we plan to provide an overview of prior research, discuss important trends in current research – including the prominent role of self-regulation in job search – and then provide some recommendations for future scholarship.¹ We should note, however, that although economists and sociologists conduct research pertaining to the job search process (e.g., Gautier, Teulings, & van Vuuren, 2010; Manroop & Richardson, 2016; Mouw, 2003), our focus for the chapter is on behavioral research primarily conducted by applied psychology and management scholars.

Job search can be broadly defined as “the pursuit of new employment” (Kanfer et al., 2001, p. 837). Job seekers are individuals who devote time and effort toward generating new employment opportunities (Boswell, Zimmerman, & Swider, 2012). In their review, Boswell et al. (2012) noted that there are three major categories of job seekers: new labor market entrants (typically graduating students), job losers (unemployed individuals), and employed job seekers (who may leave one employer for another). The authors argued that researchers examining these different types of job seekers have drawn upon different theoretical frameworks. Our sense of the literature, which is consistent with Boswell et al. (2012), is that research examining employed job seekers who quit their current position adopt different theoretical lenses compared to research examining new labor market entrants and long-term unemployed individuals. Nonetheless, the predominant theoretical framework used by all three research streams is self-regulation, broadly defined. In general, self-regulation frameworks propose that how individuals regulate their cognitions, affect, and behaviors during a self-regulated process, such as the job search, influences their success (Lord, Diefendorff, Schmidt, & Hall, 2010).

Importantly, there are many self-regulation theories and frameworks for job search scholars to draw upon (for a recent review, see Vohs & Baumeister, 2016), including social cognitive theory (Bandura, 1991, 2012), problem-focused coping (Folkman & Lazarus, 1985; Folkman & Moskowitz, 2000), control theory

(Carver & Scheier, 2012), and the theory of planned behavior (TPB) (Ajzen, 1991, 2012). Although these frameworks differ in terms of their specific variables and processes, there are considerable areas of overlap in the ways these theories are applied in examining the job search. Conceptually, most self-regulation processes begin with the setting of a goal; in the case of job search, this is typically conceptualized and studied as securing a job. The job seeker then engages in actions that lead to – or are intended to lead to – obtaining employment. These phases of job search have been referred to as the goal-setting phase and the goal-striving phase, respectively. Although these two phases can be further differentiated into additional phases (Van Hooft, Wanberg, & Van Hooft, 2013), we focus on these two general categories given their prominence in the literature (e.g., Barber, Daly, Giannantonio, & Phillips, 1994; Kanfer et al., 2001; Wanberg, Zhu, & Van Hooft, 2010).

Self-regulation frameworks serve as a useful lens given that the job search process is a goal-oriented and relatively unstructured process in which applicants seek employment opportunities, interact with potential employers, and receive positive and negative feedback from employers (da Motta Veiga & Gabriel, 2016; da Motta Veiga & Turban, 2014; Wanberg et al., 2010). As such, scholars have noted that the job search is like a roller coaster with emotional ups and downs (Barber et al., 1994; Wanberg et al., 2010), which, importantly, necessitates theorizing and empirics that capture this dynamic, cyclical process (Barber et al., 1994). More specifically, during the job search individuals have considerable variability in their cognitions, motivation, affect, and effort over time (da Motta Veiga & Turban, 2014; van Hooft Born, Taris, Flier, & Blonk, 2004; Wanberg, Glomb, Song, & Sorenson, 2005; Wanberg et al., 2010). Furthermore, job seekers who are able to exert more effort or have greater job search intensity are more likely to have a successful job search (Kanfer et al., 2001; Saks, 2006). Therefore, and perhaps not surprisingly, much of the job search research has examined predictors of job search intensity and effort² (e.g., da Motta Veiga & Turban, 2014; van Hooft et al., 2004; Wanberg et al., 2010). To summarize, job search research and theory largely emphasizes that job seekers need to continuously regulate their cognitions, motivation, emotions, behaviors, and effort or intensity as they seek employment.

Based upon these theoretical and conceptual assumptions, we organize the chapter as follows. First, we review research that has conceptualized job search as an unfolding process (i.e., a process through which job seekers navigate various stages to achieve their goal of finding and accepting a job). We then review research that has conceptualized job search as a self-regulated process, including scholarship examining the TPB, coping mechanisms, control theory, and social cognitive theory. We follow this section with a comparison of research that has taken a between-person, static approach versus research that has taken a within-person, dynamic approach given that such temporal lenses are crucial for studying job search (da Motta Veiga & Gabriel, 2016). We further highlight the importance of combining between- and within-person designs in order to have a more holistic understanding of the job search. Finally, we conclude by proposing

some directions for future research that further advance our understanding of the complexities surrounding job search self-regulation.

UNFOLDING PROCESS OF JOB SEARCH

After realizing a discrepancy between one's current (e.g., being unemployed) and desired employment state (e.g., obtaining a job with stable benefits), a person prepares and executes his/her job search. Blau (1993, 1994) proposed several stages, or sets of behaviors, that a job seeker typically goes through. For instance, there are preparatory job search behaviors, including activities such as preparing or revising a résumé; reading materials about getting a job/the job search; and talking with friends, relatives, business acquaintances, and even previous employers about jobs. Active job search behaviors, conversely, include activities such as completing a job application; sending a résumé to a potential employer or headhunter; and having a job interview with a prospective employer. Blau's (1993, 1994) seminal work involved creating scales that captured preparatory and active job search behaviors, with respondents indicating the frequency of engaging in each activity over a specific period of time. Additionally, Blau created a four-item measure of job search effort. Blau's measures, sometimes supplemented with additional, more current items (e.g., using the Internet) are, perhaps, the most common measures of job search behavior/intensity. Although some job search researchers have differentiated preparatory from active job search behaviors (e.g., Chen & Lim, 2012; Saks & Ashforth, 1999, 2002), most studies combine the items to create an overall measure of job search behavior or intensity (e.g., Crossley & Stanton, 2005; da Motta Veiga & Turban, 2014; van Hooft et al., 2004), likely due to the dynamic nature of job search. For example, it seems likely that job seekers may revise their résumé (a preparatory behavior) after having a job interview and receiving preliminary feedback (an active behavior). In any case, after realizing a discrepancy between their current and desired employment state, and setting a goal to reduce or eliminate that discrepancy, job seekers engage in job search behaviors. Following these behaviors, a job seeker may be invited for an interview (first interview), which can occur in person or over the phone (or Skype). A first interview may be followed by a second interview, which can be a site visit, and eventually lead to a job offer, as shown in Fig. 1.

Although many studies conceptualized job search intensity, number of interviews, number of offers, and employment status as separate job search criteria (e.g., Noordzij, van Hooft, van Mierlo, Dam, & Born, 2013; Shirom, Vinokur, & Price, 2008; Tay, Ang, & Van Dyne, 2006), others studies, recognizing that these events are sequential, examined what has been called the unfolding process of job search³ (e.g., Côté, Saks, & Zikic, 2006; Moynihan, Roehling, LePine, & Boswell, 2003; Saks, 2006; Turban, Stevens, & Lee, 2009; Turban, Lee, da Motta Veiga, Haggard, & Wu, 2013). In general, such studies have used structural models hypothesizing that, for example, job search intensity influences the number of first interviews, which influences the number of second interviews, which subsequently influences the number of job offers and then one's ultimate employment

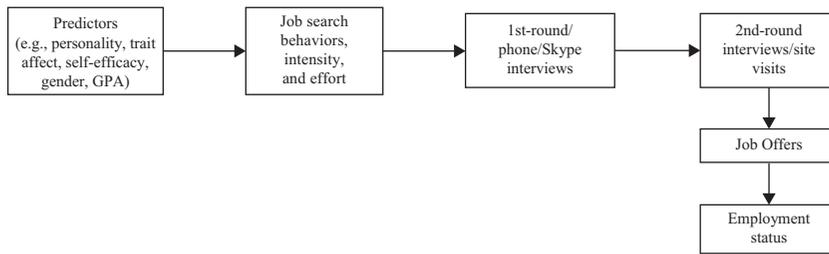


Fig. 1. Unfolding Process of Job Search.

status. Such research is important as it can provide insight into variables that moderate the relationship of an earlier job search process with a later job search process, such as the extent to which job seekers convert interviews into job offers. For example, Moynihan et al. (2003.) hypothesized and found that job search self-efficacy moderated the relationship between the number of interviews and the number of job offers obtained: the number of interviews was related to the number of job offers only for job seekers with higher job search self-efficacy. Saks (2006) also found that job search self-efficacy moderated the relationship of job offers with employment status, such that lower self-efficacy job seekers were more likely to accept a job offer than job seekers with higher job search self-efficacy who had more confidence in their ability to be successful on the job market. Finally, a recent study reported that individuals with a very strong striving for self-verification (top 10%) were more likely to receive a job offer following an interview than individuals with lower self-verification striving (Moore, Lee, Kim, & Cable, 2017). Although this study was not designed to examine the job search process, the results suggest that highly qualified applicants (job seekers) who act authentically during the job interview have a greater probability of receiving a job offer than highly qualified applicants who act less authentically (lower self-verification striving).

Beyond moderating effects, other studies found variables that predicted later job search success controlling for earlier job search success. For example, Turban et al. (2009) found that positive emotions predicted the number of second interviews and job offers beyond the effects of first interviews and second interviews, respectively. They suggested that applicants with positive emotions may have influenced interviewers' ratings through emotional contagion. Similarly, in another study examining the unfolding process of job search, procrastination was negatively related to the number of first interviews and second interviews controlling for, respectively, job search intensity and the number of first interviews (Turban et al., 2013). As noted by Turban et al. (2013), results indicating that procrastination and positive emotions influence later success after controlling for prior success suggests that researchers should examine measures of job search quality (van Hooft et al., 2013) as well as job search quantity (i.e., intensity). Indeed, scholars have noted that because job search intensity captures only the quantity of the search and the relationship between job search intensity and employment

success is relatively modest, researchers should also examine job search quality (van Hooft et al., 2013).

More broadly, scholars have noted that, although job offers and employment status are important job search outcomes, they are not the “ultimate” outcome, since jobs vary in their quality. Thus, scholars have called for research examining indicators of the quality of the obtained job (Brasher & Chen 1999; Saks, 2006). For example, prior work has examined these indicators of job quality: starting salary, indicators of fit (e.g., person-job, person-organization fit, needs-supplies fit), job attitudes (e.g., job satisfaction, turnover intentions, organizational commitment), and concordance between desired and accepted job (e.g., Kinicki, Prussia, & McKee-Ryan, 2000; Koen, Klehe, Van Vianen, Zikic, & Nauta, 2010; Lim, Chen, Aw, & Tan, 2016; Saks, 2006; Saks & Ashforth, 2002; Song, Wanberg, Niu, & Xie, 2006; van Hooft et al., 2004; van Hooft, Born, Taris, Van der Flier, & Blonk 2005; Wanberg, Hough, & Song, 2002; Wanberg, Kanfer, & Banas, 2000; Wanberg, Kanfer, & Rotundo, 1999). Thus, although job search intensity or effort has been and continues to be the outcome of choice for many studies (e.g., da Motta Veiga & Turban, 2014; van Hooft et al., 2004; Wanberg et al., 2005, 2010), more nuanced examinations in this line of research are needed.

JOB SEARCH AS A SELF-REGULATED PROCESS

As noted earlier, the job search is conceptualized as a self-regulated process that starts with the setting of an employment goal, followed by behaviors job seekers engage in to accomplish that goal (e.g., Barber et al., 1994; Kanfer et al., 2001). In their meta-analysis, Kanfer et al. (2001) noted that a typical model of job search has antecedent variables influencing the regulation of job search behavior, which in turn influences employment outcomes, although the antecedent variables also may have a direct relationship with employment outcomes. That is, in their heuristic job search model (Kanfer et al., 2001), which is shown in Fig. 2, the antecedent variables included personality traits, generalized expectancies (locus of control and optimism), self-evaluations (job search self-efficacy and self-esteem), motives (financial need and employment commitment), social context (social support), and biographical variables. Job search behaviors were conceptualized as job search intensity and/or effort, which job seekers regulate during the search. Job search and employment outcomes included employment status, job search duration, and number of job offers. Much of the job search research conducted before and since Kanfer et al.’s (2001) meta-analysis has been relatively consistent with this model.

Importantly, although there seems to be widespread agreement that a self-regulation framework is useful in studying the job search, different scholars have used different theories and focused on different aspects of the self-regulation process, as we briefly describe in the following section. Although these theories tend to, in general, lead to consistent predictions, there are also differences in predicted relationships between variables, as will be discussed in the following section.

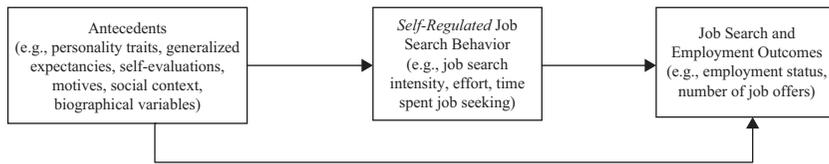


Fig. 2. Heuristic Job Search Model. *Source:* Adapted from Kanfer et al. (2001, p. 838).

Job Seeking as a Coping Mechanism for Job Search Stress

Considerable evidence indicates that searching for a job is stressful as job seekers need to deal with ambiguity and rejection from employers (Jalajas, 1994; Song, Foo, Uy, & Sun, 2011; Song, Uy, Zhang, & Shi, 2009; Steffy, Shaw, & Noe, 1989; van Hooff & Crossley, 2008). Thus, some researchers have examined stress as an outcome of the job search (e.g., Song et al., 2009; Wanberg et al., 1999). However, other researchers have noted that the relationships of perceived stress are not only influenced by the job search but can also influence job search behavior and effort (e.g., Crossley & Stanton, 2005; da Motta Veiga & Turban, 2014; McKee-Ryan et al., 2005; Song et al., 2009; Wanberg, 1997). For example, consistent with control theory, some evidence indicates that increased stress signals a discrepancy between desired and actual goals, which leads job seekers to increase their intensity (Crossley & Stanton, 2005; Song et al., 2009). A recent within-person study examining the relationship of perceived stress with job search intensity found that increases in perceived stress were positively related to subsequent job search intensity, although only for job seekers high in learning goal orientation (LGO) (da Motta Veiga & Turban, 2014). Thus, while searching for a job can lead to increased perceived stress, some individuals (i.e., those higher in LGO) maintain their intensity during the job search process.

More broadly, because searching for a job is stressful (Creed, King, Hood, & McKenzie, 2009; Crossley & Stanton, 2005; Song et al., 2009; Wanberg et al., 1999), researchers have examined coping behaviors used by job seekers, frequently drawing on Folkman and Lazarus's (1985) model of coping with stress. In general, coping behaviors are categorized as problem-focused or emotion-focused coping (Carver, Scheier, & Weintraub, 1989; Folkman & Lazarus, 1985; Folkman & Moskowitz, 2000). Problem-focused coping behavior encompasses actions individuals take to alter the source of the stress, whereas emotion-focused coping attempts to reduce the negative emotions and distress associated with the stressor (e.g., job loss). In general, problem-focused coping is thought to be a more effective coping strategy than emotion-focused coping (Folkman & Lazarus, 1985; Folkman & Moskowitz, 2000).

It is difficult, however, to draw conclusions from studies examining how coping influences job search as researchers have conceptualized problem-focused coping differently, utilizing varying operationalizations. For example, in their meta-analysis, McKee-Ryan et al. (2005) differentiated problem-focused coping measures, which they defined as the effort to manage or control the stressors associated

with unemployment, from job search effort measures, which they defined as the level of engagement in job search activities. However, Chen and Lim (2012) conceptualized and measured problem-focused coping as seeking employment assistance and found that it was positively related to preparatory and active job search behaviors. Problem-focused coping has also been conceptualized as the job search behavior itself (Gowan, Riordan, & Gatewood, 1999; van Hooft & Crossley, 2008). As such, the different operationalizations of problem-focused coping mechanisms limit our understanding of the relationships between coping mechanisms and job search outcomes. Perhaps, since problem-solving coping is such a broad construct, future research could better define what aspects of the job search can serve as problem-focused coping mechanisms, which would provide a consistent framing for future work.

Further, one alternative that has not been properly explored, but ties to tenets of control theory, would be whether job seekers cope with job search stress via goal abandonment (i.e., changing one's career aspirations, abandoning job seeking altogether; for similar arguments of goal abandonment, see Diefendorff & Gosslerand, 2003). For instance, is there a point at which job seekers determine that the most effective way to cope is exiting the search? Identifying who these individuals are, and the conditions under which this occurs, would be fruitful.

Theory of Planned Behavior

The TPB is a cognitive self-regulation theory (Ajzen, 1991) used to examine job search processes and outcomes (Caska, 1998; Song et al., 2006; van Hooft & de Jong, 2009; van Hooft et al., 2004, 2005; Van Hoye, Saks, Lievens, & Weijters, 2015; van Ryn & Vinokur, 1992; Wanberg et al., 2005; Zikic & Saks, 2009). The TPB, which is an extension of the theory of reasoned action that incorporates perceived behavior control, proposes that the direct antecedent of behavior is the intention to engage in that behavior (Ajzen, 1991, 2012). Thus, research using the TPB as an explanatory framework has examined predictors of intentions to engage in a job search. According to the TPB, intentions are theorized to be influenced by the following: attitudes, which are evaluations of the behavior; subjective norms, which are the expectations of important referents about engaging in the behavior; and perceived behavioral control, which is the ease or difficulty of performing the behavior. As noted by Ajzen (1991), individuals will have greater intentions to engage in a behavior when they believe that performing the behavior will lead to positive outcomes (attitude toward the behavior), when they believe that relevant others expect them to engage in the behavior (subjective norms), and when they believe they are capable of performing the behavior (perceived behavioral control).

In general, the TPB has received considerable support in the job search literature (e.g., van Hooft et al., 2004; Wanberg et al., 2005; Zikic & Saks, 2009). As noted by Van Hoye et al. (2015), job search intentions predict job search intensity and, as predicted by the TPB, job search attitudes, subjective norms, and perceived behavior control, are proximal predictors of intentions. Additionally, some evidence suggests that job search interventions influence job search behavior, though

the mechanisms through which the interventions influenced behavior differed slightly from TPB predictions (van Ryn & Vinokur, 1992; Vinokur & Caplan, 1987). Nonetheless, the TPB has received good support in the job search literature and has been a useful self-regulation framework to understand job search.

Notably, recent research has extended the TPB by examining moderators of relationships and predictors of attitudes, subjective norms, and perceived behavior control. For example, Song et al. (2006) found that the relationships of attitudes with intentions and of intentions with job search intensity were stronger for job seekers with higher action-state orientation than for those with lower action-state orientation. Similarly, some evidence indicates that the relationships of job search intentions with job search attitudes and subjective norms differed for job seekers with families versus job seekers who were single, although the specific pattern differed for attitudes and subjective norms (van Hooft et al., 2005). A recent study also found support for a structural model in which personality characteristics and contextual variables (distal predictors) predicted job search attitudes (instrumental and affective), subjective norms, and job search efficacy (proximal predictors), which in turn predicted job search intentions and ultimately predicted job search behavior (Van Hooft et al., 2015). Thus, these authors extended the TPB by examining distal predictors of the proximal determinants of job search intentions, finding that most of the relationships of the distal predictors with job search behaviors were fully mediated by the TPB variables. In another extension, implementation intentions mediated (albeit only partially) the relationships of job search intentions with job search behavior (van Hooft et al., 2005).

In summary, the TPB has provided a useful framework for understanding the job search process, especially variables that predict job search intentions and behavior or intensity. Although the recent extensions to the theory (i.e., moderators, mediators, and distal predictors) are valuable, we found only one study (Wanberg et al., 2005) that used a within-subject design to examine variability in the TPB variables (job search attitude, subjective norm, and job search self-efficacy) during the job search. Results indicated that increases in the subjective norms and job search self-efficacy were associated with subsequent increases in job search intensity and that these relationships were mediated by job search intentions. As will be discussed more fully below, we hope more studies will use within-subject designs to examine the TPB in job search, since job search is a dynamic, self-regulated process that varies over time.

Control Theory and Affect-as-Information Model

As noted above, the job search process begins when an individual notes a discrepancy between the current employment state and a desired employment state (i.e., one's job search goal). The idea of a discrepancy between a current and desired state is consistent with control theory (Carver & Scheier, 1981, 1982, 2012), which proposes that when individuals perceive a discrepancy between their current and desired state, they adjust their behavior to reduce this discrepancy. Thus, control theory is a discrepancy-reducing (i.e., negative feedback) theory

proposing that individuals are motivated to exert effort to reduce a discrepancy between the current situation and a desired situation (or, conversely, abandon the goal originally established; Lord et al., 2010). Focusing on the job search, when individuals are not satisfied with their current employment state they may engage in behaviors aimed at yielding a job offer that reflects a better employment situation. According to control theory (Carver & Scheier, 2012), as job seekers engage in job search, they evaluate whether their behaviors and subsequent results reduce the discrepancy detected (i.e., whether the behaviors have gotten them an acceptable job). The extent to which the discrepancy, conceptualized as perceived progress toward the goal of securing an acceptable job, is reduced is theorized to influence subsequent effort. For example, when job seekers perceive that they are making excellent progress toward their employment goal, control theory posits that they will maintain or reduce effort in order to allocate effort toward other goals that may be co-occurring. However, when job seekers perceive they are not making sufficient progress toward their goal, they are theorized to increase their effort in order to reduce the discrepancy. In sum, control theory (Carver & Scheier, 2012) proposes that individuals continuously evaluate the extent to which they are making progress toward goal achievement, using various cues (see below) that signal their progress.

More specifically, a sub-model of control theory, affect-as-information model (Carver & Scheier, 1990; Schwarz & Clore, 1983, 2003), proposes that changes in affect provide an internal signal about progress toward goal accomplishment and this signal, in turn, influences subsequent actions. Accordingly, when individuals experience negative affect, they interpret such emotions as indicating they are not making sufficient progress toward the goal (e.g., finding a job; Carver, 2003). As such, negative affect is interpreted as a signal that more effort or intensity is needed. Conversely, increases in positive affect signal that things are going well, and thus more intensity is not needed. Importantly, individuals are also thought to rely on other internal signals beyond affect that provide information about whether the discrepancy between the current and desired state is reduced; perceived stress (da Motta Veiga & Turban, 2014) and employment self-efficacy (Liu, Wang, Liao, & Shi, 2014) have been proposed as other signals of progress.

Several studies have utilized control theory and affect-as-information model to examine whether and how predictors, such as affect, self-efficacy, or perceived progress are related to job search processes and outcomes (e.g., da Motta Veiga & Turban, 2014; Liu, Wang et al., 2014; Song et al., 2009; Sun, Song, & Lim, 2013; Wanberg et al., 2010). Consistent with the idea that job search is a self-regulated process, most of these have used a within-person design. Unfortunately, however, these studies have provided mixed results. For example, some evidence suggests that job seekers who make greater perceived progress on a given day exert less effort the following day (i.e., a negative relationship), presumably because of the reduced discrepancy between the current and desired states (Wanberg et al., 2010). Yet, another study found a positive relationship between perceived progress and intensity (Liu, Wang et al., 2014). Furthermore, studies that examined the relationship between affect and job intensity or effort

have also provided mixed support for the affect-as-information model (da Motta Veiga & Turban, 2014; Song et al., 2009; Wanberg et al., 2010). For example, Wanberg et al. (2010) reported null within-person effects of both positive and negative affect on job search effort, whereas Song et al. (2009) found a positive relationship between negative affect and effort. Furthermore, da Motta Veiga and Turban (2014) reported a negative effect of positive affect on job search effort for job seekers lower in LGO, and a positive effect of negative affect on job search effort for job seekers higher in LGO.

In summary, studies have provided mixed support for control theory and affect-as-information theory predictions (Liu, Wang et al., 2014; Song et al., 2009; Wanberg et al., 2010). One explanation for this is that the relationships of signals, such as affect or perceived progress, with subsequent job search processes and outcomes are moderated by individual differences, such as LGO (da Motta Veiga & Turban, 2014) or self-efficacy (Sun et al., 2013).

Social Cognitive Theory and Self-Efficacy

Social cognitive theory is another self-regulation framework that assumes that individuals set goals, assess progress, and adjust actions as needed in an attempt to accomplish them (Bandura, 1986, 1991). Specifically, social cognitive theory suggests that perceptions of one's performance influence evaluative self-reactions, which in turn influence motivation and effort. For example, progress toward goal achievement reinforces one's confidence and is likely to stimulate individuals to spend more time and energy toward reaching their goal (Bandura, 1986).

Central to social cognitive theory is the concept of self-efficacy, typically defined as the confidence or belief in one's capability to perform tasks required to accomplish a goal (Bandura, 1991, 2001). As proposed by Bandura (1991), self-efficacy is a key self-regulatory variable that positively influences motivation, goals, and emotions. Individuals with higher self-efficacy tend to set higher goals and persist following failures compared to those with lower self-efficacy. Stated differently, when faced with difficulties, individuals who experience self-doubt about their capabilities are more likely to decrease their efforts or give up compared to individuals with a stronger belief in their capabilities (Bandura, 1991). Thus, self-efficacy is proposed to have a positive relationship with motivation and performance, and considerable evidence indicates that individuals with higher self-efficacy are better performers than those with lower self-efficacy (e.g., Stajkovic & Luthans, 1998). In light of this, Bandura (2001) stated that self-efficacy plays a pivotal role in social cognitive theory through influencing the self-regulation of motivation. Self-efficacy beliefs are theorized to influence goals and challenges undertaken, effort expended to accomplish such goals, whether setbacks are seen as motivating or demotivating, and perseverance when facing obstacles (Bandura, 2001). Considerable evidence supports the social cognitive theory proposition that self-efficacy positively influences goal setting, persistence in pursuing goals, and subsequent performance (Bandura, 2001, 2012; Bandura & Locke, 2003).

Self-efficacy plays an important role in self-regulation, and since the job search is a self-regulated process that involves goals and persistence, self-efficacy is one of the most studied variables in the job search literature (Saks, Zikic, & Koen, 2015). Saks et al. (2015) noted that most job search studies have included job search self-efficacy as a context-specific predictor. Job search self-efficacy is typically defined as the belief that one can perform specific behaviors required to obtain employment (Saks & Ashforth, 2000; Saks et al., 2015). Results from two meta-analyses indicate that job search self-efficacy is positively related to job search intensity and job search success (Kanfer et al., 2001; Liu, Huang et al., 2014). In their meta-analyses of job search training interventions, Liu, Huang et al. (2014) found that interventions that boosted self-efficacy resulted in increased job search intensity and greater employment success compared to interventions that did not boost self-efficacy. Furthermore, Kanfer et al. (2001) found that self-efficacy had a positive relation with job search intensity and employment status, and a negative relation with the duration of the search. Thus, job seekers with higher self-efficacy had more job search intensity, resulting in finding a job sooner, than job seekers with lower self-efficacy.

In an early job search study, Ellis and Taylor (1983) differentiated global self-esteem from task-specific self-esteem. Although global self-esteem was measured with Rosenberg's (1965) 10-item scale, the authors created a new 10-item scale to measure task-specific self-esteem in the job search. Results indicated that both global and task-specific self-esteem were important predictors of job search outcomes, although they had different patterns of relationships with job search processes and outcomes. Notably, only task-specific self-esteem was positively related to the number of job offers. Ellis and Taylor (1983) suggested that future research should examine the self-esteem component (i.e., global or specific) that is most relevant to the dependent variables of interest. Critically, these authors did not describe their measure as job search self-efficacy and did not cite Bandura or discuss self-efficacy in their paper.

In another early study specifically examining self-efficacy in the job search, Kanfer and Hulin (1985) hypothesized and found that laid-off employees with greater confidence in their ability to successfully perform job search activities (e.g., finding job openings, filling out applications to one's best advantage) engaged in more job search behaviors and were more likely to be employed one month later than employees with lower confidence. Thus, Kanfer and Hulin (1985) concluded that job search behavior self-efficacy is important for job search success.

Furthermore, Van Ryn and Vinokur (1992) found that a job search skills workshop intervention influenced job search self-efficacy, which positively influenced job search behavior. In this study, job search self-efficacy was conceptualized and measured through six items in which respondents were asked to rate how confident they felt about being able to carry out the following job search activities successfully: "make the best impression and get points across in an interview," "contact and persuade employers to consider them for the job," "complete a good job application or résumé," "use friends or other contact to discover promising job openings," "use friends and others to find out about employers who need their

skills,” and “make a good list of all the skills they have which can be used to find a job.”

As noted by Saks et al. (2015), most subsequent measures of job search self-efficacy used or adapted items from the three scales discussed above (Ellis & Taylor, 1983; Kanfer & Hulin, 1985; Van Ryn & Vinokur, 1992). However, these scales appear to measure different types of self-efficacy including both knowledge of the job search process *and* confidence in one’s ability to secure a job (Saks et al., 2015). Importantly, confidence in one’s ability to obtain a job, which Wanberg et al. (2010) called (re)employment efficacy, may have a different influence on job search intensity than confidence in one’s ability to successfully perform job search behaviors. For example, based on social cognitive theory, job search self-efficacy is expected to have a positive relationship with effort (Liu, Wang et al., 2014; Saks et al., 2015). However, scholars also have argued that job seekers will exert less effort when they are confident that they can easily find an acceptable job (Liu, Wang et al., 2014; McFayden & Thomas, 1997; Van Hooft & Crossley, 2008). Similarly, McFayden and Thomas (1997) noted that rationale choice models propose that an individual who has high confidence in finding a job will either exert little effort toward the job search or delay the job search. Thus, self-efficacy about activities or behaviors may have a different relationship with effort and motivation than self-efficacy about outcomes, although only recently have such distinctions been made explicitly (Liu, Wang et al., 2014; Saks et al., 2015).

Beyond these studies, other types or levels of self-efficacy have been investigated in job search. Some scholars examined general self-efficacy (GSE), though results were mixed (Creed et al., 2009; Eden & Aviram, 1993; Shirom et al., 2008): using an experimental design, Shirom et al. (2008) found no effect of a job search intervention on GSE, whereas Eden and Aviram (1993) reported that a field experiment intervention influenced GSE, which in turn led to increased job search intensity. Additionally, in support of Brockner’s (1988) behavioral plasticity theory, results indicated that individuals lower in initial GSE benefitted more from the experimental intervention than individuals with higher initial GSE (Eden & Aviram 1993). In another study, Tay et al. (2006) found that interviewing self-efficacy, defined as the belief about one’s capability in job interviews, partially mediated the relationships of extraversion and conscientiousness with interviewing success, operationalized as the number of offers received.

In sum, research has examined GSE and interviewing self-efficacy in addition to job search self-efficacy. In general, results suggest that more specific types of self-efficacy, such as job search behavior or interviewing self-efficacy, may be better predictors of job search success than broader types of self-efficacy, such as GSE. Such evidence suggests that different types and levels of self-efficacy will have different relationships with outcomes during self-regulated processes, such as job search, which is consistent with recent research (Liu, Wang et al., 2014; Saks et al., 2015; Yeo, Loft, Xiao, & Kiewitz, 2009; Yeo & Neal, 2006).

Perceived Job Search Control and Employability

Based on various theoretical perspectives, scholars have also measured other variables that are conceptually similar to self-efficacy. For example, Saks and Ashforth (1999) examined job seekers' perceived control over job search outcomes, which captured the extent to which job seekers thought that they could control the likelihood of finding a job. Although results indicated that perceived control and self-efficacy were moderately positively correlated, these two variables had somewhat different patterns of relationships with job search behavior, effort, and employment outcomes. Notably, self-efficacy was positively related to job search behavior and effort, whereas perceived control was negatively related to active job search behavior and effort. van Hooft and Crossley (2008) further examined the extent to which job seekers believe they can influence or control job search outcomes, although they called their variable job search locus of control (JSLOC). They conducted two studies, one in the Netherlands and one in the United States, with both studies finding an interaction between JSLOC and financial need on job search intensity. Specifically, JSLOC was not related to job search intensity when financial need was lower, but was negatively related to intensity when financial need was higher. As they noted, their results are consistent with predictions from economic rational choice theory and control theory (Klein, 1989; McFadyen & Thomas, 1997), which propose that when job seekers are confident in attaining a goal they may reduce effort or redirect effort toward another goal. Results from these studies suggest that perceived control over job search outcomes (also called JSLOC) has a different pattern of relationships with job search intensity than does job search self-efficacy.

Finally, perceived employability, which is defined as "the perceived ability to attain sustainable employment appropriate to one's qualification level" (Rothwell, Herbert, & Rothwell, 2008, p. 2) is a multifaceted construct, which is broader than self-efficacy. Specifically, perceived employability consists of internal employability items measuring confidence in one's ability to secure employment, and external employability items measuring beliefs about the external labor market demands and the reputation of their graduating university (Rothwell et al., 2008). Presumably, whether a broader construct, which includes perceptions of internal and external dimensions, is appropriate will depend on the specific research question.

Taken together, considerable job search research has examined job search self-efficacy and related constructs (i.e., perceived control, employability). These appear to be different, albeit related, constructs that draw from different theoretical perspectives. Although most scholars believe that self-efficacy plays an important role in self-regulation processes, there is considerable variability regarding how self-efficacy in job search is measured, which in turn influences the pattern of relationships with job search processes and outcomes (Liu, Wang et al., 2014; Saks et al., 2015). For example, understanding whether and how between-person differences in self-efficacy and within-person changes in self-efficacy influence self-regulation processes is an important area for future research. Indeed, most studies examining self-efficacy in job search have been between-subject studies

that examine relationships of self-efficacy with job search outcomes across job seekers (e.g., Côté et al., 2006; Saks, 2006; Zikic & Saks, 2009). Yet, between-person differences in self-efficacy is different than within-person variability in self-efficacy, and these different measures have the potential to yield different relationships with job search and employment outcomes (Vancouver & Kendall, 2006; Vancouver, Thompson, Tischner, & Putka, 2002; Vancouver, Thompson, & Williams, 2001). Furthermore, since self-regulation is a within-person process, a within-subject design that tracks individuals over time better aligns with self-regulatory theorizing (Lord et al., 2010).

BETWEEN-PERSON AND WITHIN-PERSON APPROACHES TO JOB SEARCH SELF-REGULATION

An important advancement in job search research has been the adoption of study designs that track job seekers over time and measure variables multiple times during the job search. This has been an important development because many of the studies discussed above have used a between-subject design to examine self-regulation, although self-regulation processes are best studied by examining intra-individual processes over time (da Motta Veiga & Gabriel, 2016). Thus, we now distinguish between- and within-person approaches to study job search self-regulation. Between-person approaches generally use structural models to capture the influence of stable variables (e.g., stable individual differences) on self-regulation variables, which in turn influence job search behaviors and outcomes. In contrast, within-person studies take a more dynamic approach examining whether and how changes in job search processes over time within persons are related to changes in criteria.⁴ Importantly, we argue that integrating between- and within-person approaches can provide a more holistic view of the job search process. Indeed, scholars can investigate not only whether and how changes in processes are related to changes in outcomes, but also the influence of stable, individual differences on those dynamic relationships.

As noted earlier, job search is generally conceptualized as a self-regulatory process in which job seekers regulate their cognitions, affect, motivation, and behaviors as they attempt to secure a job (e.g., Barber et al., 1994; Kanfer et al., 2001). In general, a relatively common between-person design examining self-regulation in the job search process has two or three time periods and proposes that personality characteristics, as antecedent variables, influence indicators of self-regulation, which subsequently influence job search behavior and employment success. A prototypical example of such research is a study by Turban et al. (2009), who found that the personality traits of conscientiousness and extraversion measured at the beginning of the job search influenced metacognitive activities and positive emotions measured four months later; in turn, these metacognitive strategies influenced job search success measured another four months later (Turban et al., 2009). Similarly, Turban et al. (2013) found that trait positive affect, but not negative affect, both measured at the beginning of the job search,

influenced procrastination and motivation control measured four months later; motivation control, in turn, influenced job search success also measured at that time. As a final example, Brown, Cober, Kane, Levy, and Shalhoop (2006) found that proactive personality influenced self-efficacy both measured three to four months before graduation, which in turn influenced job search behavior, effort, and success measured two to three months *after* graduation.

Thus, adopting a self-regulation approach, researchers have examined the job search process and developed structural models consistent with the heuristic job search model (see Fig. 2). Nonetheless, within the past 10–15 years, scholars have more fully discussed the assumptions and realized the limitations of such between-person studies. First, note that studies using a between-person design examine differences *between* job seekers. That is, the underlying assumption of this research is that differences between job seekers in personality characteristics influence differences between individuals in self-regulation variables, such as self-efficacy or metacognitive activities, which in turn lead to between-person differences in job search behavior and success. Although between-person studies can provide insight into differences between job seekers, such studies provide limited insight into how individuals' actual, dynamic self-regulatory actions during job search influence job search success. Second, and relatedly, studies examining between-person differences make the assumption that the variables measured are relatively stable or constant across time periods. Although the assumption of stability is probably accurate for some variables, such as personality traits and biographical variables, recent evidence indicates that many other variables do vary during the job search. For example, although self-efficacy has been examined in between-person studies as an antecedent variable and as a mediator between personality and job search behavior and employment success, recent evidence indicates that self-efficacy varies substantially during job search (Liu, Wang et al., 2014; Sun et al., 2013), as do various forms of motivation (da Motta Veiga & Gabriel, 2016). Of course, the value of a between- or within-subject design depends on the research questions examined. Nonetheless, it is important to acknowledge that between-person studies are not able to examine changes in cognitions, emotions, or actions of job seekers as they search for a job, which may be an important limitation given that job search is conceptualized as a *dynamic* self-regulated process during which job seekers need to manage their actions, thoughts, and emotions.

Within-Person Approach to Job Search Self-Regulation

To model the dynamic and within-person nature of self-regulation, data must be collected from individuals across multiple time periods (Beal, Weiss, Barros, & MacDermid, 2005; Liu, Wang et al., 2014; Lord et al., 2010; Sun et al., 2013). An ever-growing body of empirical evidence indicates that job seekers' behaviors, affect, motivation, and cognitions vary during the job process (e.g., da Motta Veiga & Gabriel, 2016; da Motta Veiga & Turban, 2014; Song et al., 2009; Wanberg et al., 2010). A within-person design, which collects data from job seekers across multiple time periods (e.g., days, weeks, months), allows examination

of whether intra-individual changes in a variable (e.g., motivation, affect, self-efficacy) are related to intra-individual changes in a criterion at a subsequent time period (e.g., job search intensity, effort). Using multilevel modeling analytic techniques, researchers can examine whether a change in a variable, relative to an individual job seeker's own personal baseline, is related to a change in a criterion of interest. For example, scholars can determine whether an increase in self-efficacy is associated with an increase in subsequent job search intensity (e.g., Liu, Wang et al., 2014; Sun et al., 2013; Wanberg et al., 2005). Of considerable importance is that, for many research questions, within-person designs provide a better test of propositions derived from self-regulation theories as they offer insights into individuals over time, in contrast to between-person designs that compare individuals irrespective of time. Fig. 3 depicts a traditional within-person model, in which affective, cognitive, and motivation self-regulation (i.e., changes in affect, motivation, progress) influence subsequent behavioral self-regulation (i.e., changes in behaviors, intensity, effort), which, in turn, influence subsequent job search and employment outcomes.

Perhaps the first within-person study examining the dynamic nature of job search over time was conducted by Wanberg et al. (2005) who collected bi-weekly data of job seekers. They reported that job search intentions, norms, attitudes, self-efficacy, and intensity, which were measured every two weeks, varied considerably during the search. Importantly, the authors reported differences in trajectories of job search intensity over time across job seekers. Examining propositions from a theoretical lens associated with TPB, they also found that self-efficacy was related to job search intensity measured at the subsequent time period, although this relationship was mediated by job search intentions, in support of TPB (Ajzen, 1991, 2012). Following this intra-individual research, a within-person study surveying 100 unemployed job seekers daily for 14 days found that effort and stress were reciprocally related to each other; effort was positively related to stress measured on the subsequent day and stress was positively related to effort measured on the subsequent day (Song et al., 2009).

In a daily diary study, Wanberg et al. (2010) tested competing predictions from control theory and social cognitive theory about the relationships of perceived progress, positive and negative affect, and reemployment efficacy with job search effort the next day. Results indicated that when job seekers reported greater perceived progress on a given day, they also reported more positive affect and reemployment efficacy and less negative affect on that same day. However, only perceived progress was related, albeit negatively, to *next day* job search effort. This result provides support for propositions from control theory, in that perceived

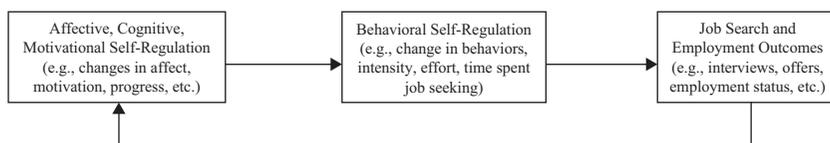


Fig. 3. Within-Person Model of Job Search Self-Regulation.

progress was negatively related to next-day effort. Of considerable importance is that Wanberg et al. (2010) note that within- and between-person analyses led to *opposite* conclusions regarding the relationship of perceived progress with next-day effort (i.e., negative at the within-person level but positive at the between-person level), highlighting an interesting effect in multilevel scholarship known as a lack of homology (i.e., consistency) in findings across levels of analysis (e.g., Bliese, Chan, & Ployhart, 2007; Chen, Bliese, & Mathieu, 2005).

In another within-subject design study that collected data twice a week, Liu, Wang et al. (2014) found a positive correlation between perceived progress and job search intensity, which is the opposite pattern found by Wanberg et al. (2010). One possible explanation for this different pattern of results between Wanberg et al. (2010) and Liu, Wang et al. (2014) is that the different time lags between measures led to differences in how the actions leading to progress were perceived (Fishbach, Dhar, & Zhang, 2006). Specifically, a short-term temporal focus leads individuals to think about progress toward goal accomplishment, which tends to lead to either maintaining or reducing effort, whereas a longer temporal focus is more likely to lead individuals to think about their goal commitment, which tends to lead to increased effort (Fishbach et al., 2006). Thus, when job seekers reflected on daily progress they perceived they were getting closer to their employment goal and thus reduced effort the next day (Wanberg et al., 2010) whereas when job seekers reflected on their progress for a longer time period they saw themselves as committed to the process of searching for a job and thus increased their effort (Liu, Wang et al., 2014).

Finally, in two recent weekly studies, Wanberg, Zhu, Kanfer, and Zhang (2012) and da Motta Veiga and Gabriel (2016) examined the role of motivation dynamics in job search self-regulation. Wanberg et al. (2012) collected data weekly for 20 weeks from newly unemployed job seekers to understand whether and how within-person motivation influenced job search intensity and mental health. They found that changes in motivation control were positively related to changes in job search intensity and mental health, while changes in self-defeating cognition were negatively related to changes in mental health. Conversely, da Motta Veiga and Gabriel (2016) extended prior between-person research (Vansteenkiste, Lens, De Witte, De Witte, & Deci, 2004) to investigate whether and how self-determined motivation changes at different points during the job search. Specifically, they found that autonomous motivation decreased as the job search process progressed yet remained positively related to metacognitive activities, and in turn to job search effort. However, controlled motivation was negatively related to effort via metacognitive activities early in the job search, but became positively related to metacognitive activities, and in turn to effort, as the job search progressed and time elapsed during the job search became more salient. As such, these studies highlight the importance of considering motivation dynamics in job search self-regulation, and explicitly modeling the effects of time elapsed during job seeking.

Despite the value – and necessity – of intra-individual research, we do not believe that scholars should stop exploring between-person differences. Rather, both self-regulation theories and some within-person studies, which we will

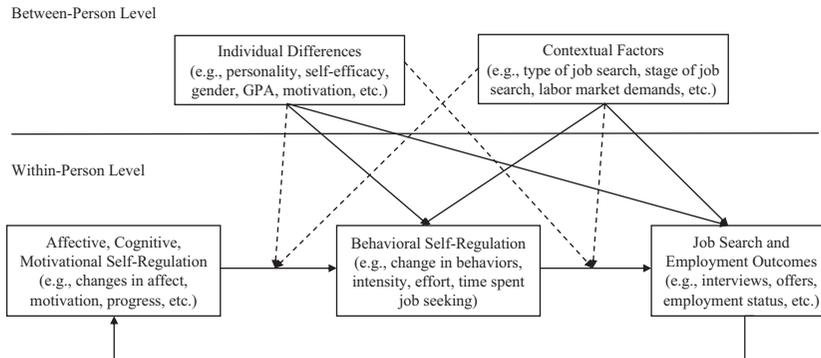


Fig. 4. Within- and Between-Person Model of Job Search Self-Regulation.

Note: Solid arrows represent main effects whereas dashed arrows represent moderating effects.

describe later, have highlighted the need to integrate within- and between-person designs and approaches. For example, Carver and Scheier (2012) suggested that within-person relationships in self-regulated processes are likely to be influenced by stable, between-person differences; that is, individuals will vary in how they react to changes in their cognitions, motivation, and affect, which will lead them to regulate their subsequent effort or intensity differently depending on these individual differences (e.g., LGO, regulatory focus). Fig. 4 illustrates a model integrating between-person differences and within-person dynamics in job search self-regulation. More specifically, Fig. 4 indicates that job search self-regulation at the within-person level of analysis can be influenced by variables that vary between individuals, such as personality traits, biographical variables, and contextual and situational variables. As shown in Fig. 4, these between-person differences can either moderate within-person relationships during the job search process, or have direct effects on within-person variables, such as job search processes and outcomes.

As an example of research examining how between-person differences influence within-person self-regulation processes, Sun et al. (2013) extended Wanberg et al.'s (2005) study and found that regulatory focus, a between-person individual difference, moderated the within-person relation between job search self-efficacy and effort (both measured monthly), such that the relation was positive for job seekers with strong prevention focus, and negative for those with strong promotion focus. Such findings demonstrate the strength of a within-person design as scholars can understand whether and how changes in one variable (i.e., self-efficacy) influence another variable (i.e., effort), while also investigating whether between-person differences (i.e., regulatory focus) influence the within-person relations of self-efficacy with job search processes.

In another study, da Motta Veiga and Turban (2014) collected data every two weeks from job seekers and found that perceived stress was positively related to subsequent job search intensity. Importantly, however, job seekers' LGO

moderated the relationship such that perceived stress was more strongly positively related to subsequent intensity for job seekers higher in LGO than for those lower in LGO. The authors also found that job seekers higher in LGO maintained their intensity following increased positive affect, whereas job seekers lower in LGO decreased their intensity. Again, these findings demonstrate the importance of integrating between-person individual differences, such as LGO, to better understand within-person relationships in job search self-regulation.

In their daily diary study, Wanberg et al. (2010) found that the relationships of perceived progress with affect, and of positive affect with subsequent effort, were moderated by individual differences in financial hardship and action-state orientation, respectively. Specifically, the authors found that the relationship between perceived progress and positive affect was stronger for job seekers with low, rather than high, financial hardship. However, the relationship between perceived progress and negative affect was more negative for individuals with higher, rather than lower, levels of financial hardship. Furthermore, Liu, Wang et al. (2014) found that the relationships between perceived progress and job search and employment self-efficacy were moderated by between-person differences in job seekers' level of internal attribution of their progress, such that the relationships were only positive for job seekers with high internal attribution (i.e., higher trait-level beliefs that their progress is due to their own efforts).

Finally, Wanberg et al. (2012) examined not only the within-person relationships between motivations and job search intensity and mental health, but also whether and how between-person differences in approach and avoidance motivation influenced those within-person variables. Specifically, they found that job seekers higher in between-person approach motivation had higher levels of job search intensity and better mental health, while those higher in between-person avoidance motivation had lower levels of mental health.

To summarize, within-person studies have provided important information about whether and how job seekers regulate their cognitions, motivation, affect, stress, and behaviors during job search; what influences job search self-regulation; and how job search self-regulation in turn influences job search and employment outcomes. Yet, although scholars recognize the importance of considering the time lag between measures (Beal et al., 2005), there is little theory or empirical evidence to guide the choice of a time lag in job search (for a review on time, see: Monge, 1990). Some studies have taken a daily approach (Song et al., 2009; Wanberg et al., 2010), while others have taken a weekly (da Motta Veiga & Gabriel, 2016), bi-weekly (da Motta Veiga & Turban, 2014; Wanberg et al., 2005), or even monthly approach (Sun et al., 2013). We hope research will continue using within-person designs to examine self-regulation processes in job search. Furthermore, as mentioned earlier, we hope scholars will continue examining between-person individual differences, such as trait affect (e.g., Turban et al., 2009), regulatory focus (e.g., Sun et al., 2013), goal orientation (e.g., da Motta Veiga & Turban, 2014), motivation orientations (e.g., Wanberg et al., 2012), and internal attributions (e.g., Liu, Wang et al., 2014), that may influence within-person relationships (as depicted in Fig. 4).

DIRECTIONS FOR FUTURE RESEARCH

Like many topics, job search scholarship has continued to evolve and grow increasingly more complex as scholars seek to unpack the dynamics tied to this self-regulated phenomenon. Although a study encompassing all within- and between-person processes tied to job search (see Fig. 4) is a challenge, we encourage future work that continues to address several nascent – and dynamic – topics, including: determinants of job search progress; adaptive and maladaptive behaviors; hierarchical goal levels and time lags; and environmental factors in job search.

Determinants of Job Search Progress

The conceptualization of the job search as a self-regulatory process is based on the premise that job seekers adjust their behaviors and effort as they continuously receive information regarding their progress directed toward securing employment (Liu, Wang et al., 2014). Despite this, there have been relatively few studies that have empirically explored the sources of information that influence perceptions of job search progress and thereby trigger job seekers' self-regulation. More broadly, information regarding job seekers' current state, relative to their desired state, can typically emerge from two sources: (1) through feedback from the environment about the effectiveness of their own search strategies and progress (e.g., a rejection letter); and/or (2) from the socio-contextual environment (e.g., peers' job offers). Studies that do exist have typically examined the impact of the socio-contextual environment. For instance, Lopez-Kidwell, Grosser, Dineen, and Borgatti (2013) studied peers' job search effort as a form of socio-contextual influence. These authors noted that job seekers' search efforts are influenced by the search efforts of their peers, especially during the early stages of the search. This finding was attributed to the likelihood that there is greater uncertainty early during the job search, as well as greater information sharing due to lower levels of time pressure.

Importantly, however, the socio-contextual environment can also be detrimental: job search envy – envy that arises from the success of peers' job search relative to one's own – can lead to increased résumé fraud when temporal pressures were higher and when market-based pressures were lower (Dineen, Duffy, Henle, and Lee, 2017). Thus, it is clear that job seekers are acutely aware of information from their socio-contextual environments. Importantly, however, several questions remain unanswered. For instance, are certain job seekers more attentive to the socio-contextual environment? Given that job seekers with high employment efficacy are confident in their ability to obtain a job, they may be less likely to attend to peers' effort and/or success. Alternatively, although primarily studied as a stable, trait variable (see Liu, Wang et al., 2014, for a notable exception), it may be the case that job seekers' employment efficacy is impacted by information gleaned from the socio-contextual environment. Employment efficacy may decrease as job seekers discover that their peers have had greater success in their search efforts. Second, based on what characteristics do job seekers choose their comparison targets (i.e., peers)? Do all peers impact job seekers' perceptions of

progress in a uniform way? Social comparison research suggests that individuals engage in upward and downward comparisons, which can prompt distinct reactions (Buunk & Gibbons, 2007). Thus, the impact of comparisons may be dependent on both the type of comparison made and the stage of the job search. For example, upward comparisons may be motivating early during the job search, while downward comparisons may result in withdrawal of effort as feelings of anxiety and uncertainty are legitimized (Bandura, 1981). Additionally, job seekers' comparison targets may shift during the course of the job search as they receive information about their own job search progress.

As an additional aspect of the job search context, the impact of feedback regarding job seekers' progress is an underdeveloped area of study. This is surprising given that the job search is inherently feedback-laden: job seekers receive feedback in the form of interview offers, job offers, and rejections. Aside from these objective types of feedback, however, job seekers likely also often receive feedback on their applications (e.g., emphasizing certain skills), indicators of fit (person-job fit, person-organization fit, etc.), and the search itself (e.g., applying to a broader range of jobs). Thus, we encourage scholars to examine the manner in which these types of feedback influence job search self-regulation. Research on feedback outside of the job search has delineated that there are various aspects of feedback to consider, including the quality of the feedback message received, as well as the credibility of the feedback source, and the content of the feedback message (e.g., Steelman, Levy, & Snell, 2004); we encourage multifaceted research that examines the impact of these various feedback characteristics. Further, in thinking of ways to integrate within- and between-person constructs, people likely vary in their receptivity to receiving feedback – a person-level trait known as feedback orientation (Linderbaum & Levy, 2010). As scholars consider intra-individual feedback processes, we encourage integration of such trait-level effects. Further, it may be worthwhile to uncover how job seekers reconcile, and process, contradictory forms of feedback (e.g., receiving an interview offer and a job rejection).

Finally, we encourage scholars to begin to push the envelope with regard to within-person processes that are already being extensively studied. For example, within-person research has looked at the effects of positive and negative emotions as separate, weekly predictors of job search processes, albeit to mixed success. Specifically, some research has found no relationship between within-person positive or negative affect and job search effort (da Motta Veiga & Turban, 2014; Wanberg et al., 2010). Conversely, Song et al. (2009) found a positive relationship between within-person negative affect and job search effort experienced the next day. One way to reconcile these conflicting findings may be studying more specific forms of discrete emotions (e.g., guilt, anxiety, pride, envy), or examining complex states like emotional ambivalence (i.e., comparably high levels of positive and negative affect; Fong, 2006; Rothman & Melwani, 2017).

Adaptive versus Maladaptive Behaviors during Job Search

Outside of the job search, scholars have begun to examine the extent to which stressors at work translate to “bad” or maladaptive behaviors outside of the work

environment; such work has been limited in job search scholarship, but we suspect a similar line of inquiry would be valuable to understand the health of job seekers. For instance, Liu et al. (2017) found that when employees experienced higher levels of job demands, they were more likely to eat unhealthy – compared to healthy – foods later in the day (i.e., in the evening after work). Likewise, in a daily study focused on the consequences of customer mistreatment Song et al. (in press) found that employees who experienced such negative work events were more likely to engage in dysfunctional coping responses, including maladaptive shopping behaviors (e.g., buying things that employees did not need or could not afford) and increased rumination after work. Given that the job search is a stressful process, it would be of interest to see how stressors tied to the job search spill over negatively into non-job search domains (e.g., job seeker's current job if they are an incumbent job seeker; job seeker's home life), and how certain individual differences (e.g., job search self-efficacy, mindfulness) can buffer job seekers from these ramifications. It may also be worthwhile to explore how these negative coping mechanisms subsequently impact job seekers' search strategies and behaviors. As an important note, most job search research has focused strictly on criteria tied directly to the job search (e.g., effort, intensity, interviews, offers), making this a rather fruitful area of research.

Further building from scholarship outside of job search research, a vast literature exists in within-person scholarship focusing on the daily enactment of recovery experiences by employees to recuperate from depletion stemming from work stressors (Sonnentag & Fritz, 2007). Within this research, scholars have examined the extent to which psychologically detaching and relaxing after working hours promotes restorative experiences for employees as they “recharge” (e.g., Bennett, Gabriel, Calderwood, Dahling, & Trougakos, 2016). These restorative experiences can occur during breaks at work (e.g., Trougakos, Beal, Green, & Weiss, 2008), during off-work or evening hours (e.g., Sonnentag, Binnewies, & Mojza, 2008), and during weekends (e.g., Fritz & Sonnentag, 2005); given that the job search transcends all hours of the day, it would be of interest to see whether and how such restorative experiences occur within this unique context. For instance, do experiences tied to recovery yield the same uniformly beneficial effects for job seekers? Or, is it the case that as job seekers' disengage (e.g., psychologically detach), their effort and intensity decline which has negative ramifications for job seekers? We suspect that, similar to recent findings surrounding controlled motivation from da Motta Veiga and Gabriel (2016), the effects of recovery on job search processes depend on the time elapsed during the job search: psychologically detaching from the job search early on when one is first getting started may hinder sufficient progress, but detaching later in the job search may be necessary to regain depletion psychological resources. Thus, rather than focusing purely on coping surrounding the job search, we encourage increased scholarship surrounding the broader well-being of job seekers, including behaviors and outcomes that may be beneficial or maladaptive in nature.

Hierarchical Goal Levels and Time Lags in Job Search

Despite recent advances in job search research, two important questions also call for future attention: what are the appropriate time lags between measures, and at what

hierarchical goal level should a within-person variable be measured? Indeed, as mentioned earlier, self-regulation frameworks note that individuals are attempting to simultaneously accomplish multiple goals, which can be hierarchically ordered. Some job search goals are proximal, such as applying for jobs and interviewing with companies; others are distal, such as obtaining employment. For example, Liu, Wang et al. (2014) noted that job seekers had multiple hierarchical goals and explicitly differentiated job search behavior self-efficacy from employment self-efficacy. Specifically, they theorized and found that job search behavior self-efficacy was positively related, whereas employment self-efficacy was negatively related, to subsequent job search intensity (Liu, Wang et al., 2014). Thus, evidence suggests that the hierarchical goal level at which job search variables, such as self-efficacy, are conceptualized and operationalized influences relationships with motivation and performance. Future research could further examine whether and how variables related to proximal job search goals versus distal job search goals differently influence subsequent job search self-regulation and job search outcomes.

Furthermore, to understand self-regulation processes, data must be collected from participants over time and we have learned a lot about job search processes by conducting within-person longitudinal studies. However, based on evidence that different time lags influence how individuals focus on their goals, and progress toward their goals (Fishbach et al., 2006), research is needed to explicitly examine whether and how time lags influence within-person relationships during job search. Indeed, a temporal focus influences how actions are represented, such that a short-term temporal focus leads individuals to think about regulation toward goal accomplishment, whereas a longer temporal focus leads individuals to think about goal commitment (Fishbach et al., 2006). In general, when actions are perceived as indicating regulation toward goal accomplishment, individuals tend to maintain or reduce effort, whereas actions seen as indicating commitment toward the goal tend to lead to increased effort (Fishbach et al., 2006; Koo & Fishbach, 2008, 2010). This is important for longitudinal research examining self-regulation processes that researchers understand the appropriate temporal unit (Beal et al., 2005). For example, a field experiment could randomly assign job seekers to complete identical measures daily, bi-weekly, or monthly to examine the effects of time lag on self-regulation processes. Moreover, most job search studies have examined job search processes over a relatively short time period. As such, future researchers might examine longer time periods. Specifically, it could be interesting to capture the job search process from start to finish, although we acknowledge challenges in tracking applicants for extended time periods.

In summary, it is important for future research to further investigate both within- and between-person measures of variables involved in job search self-regulation, while also taking into account different time lags (e.g., daily vs weekly vs monthly) and different hierarchical goal levels (e.g., job search behaviors vs employment attainment).

Environmental Factors and Job Search Self-Regulation

While conducting a job search, individuals are exposed to (external) factors that originate in the environment, such as labor markets (e.g., Mortensen, 1986;

Mortensen & Pissarides, 1999), unemployment conditions (e.g., Krueger & Mueller, 2011), or geographical preferences (e.g., Marinescu & Rathelot, in press; Van Ommeren, Rietveld, & Nijkamp, 1997; Wasmer & Zenou, 2002). Much of this research originated in the labor economics literature and has taken a relatively static approach to examining the influence of these environmental factors on job search and employment success. As such, our knowledge is limited when it comes to the role that these environmental variables have on job search self-regulation. Indeed, little is known about whether and how factors such as narrow-focused versus broad-focused job search location and unemployment conditions influence the extent to which job seekers adapt their job search. Notably, recent work by Wanberg, van Hooft, Dossinger, van Vianen, and Klehe (2017) found that perceived unemployment insurance (UI) generosity – payments made to individuals in an effort to replace part of their pre-job loss income during their job search – yielded several benefits to job seekers. For instance, perceived UI generosity reduced mental health issues by helping alleviate time pressure and financial strain stemming from job search. We encourage more scholarship to focus on such environmental factors.

In considering geographic location, when job seekers are looking for a new job, they are going to conduct (1) a narrow, localized job search within one city or metropolitan area; (2) a broad geographical search across one country (or multiple countries); or (3) anything in between. What is currently unknown is whether having a narrower versus broader job search would be detrimental for job seekers. As one alternative, if job seekers conduct a narrow search, they may have a smaller pool of jobs to apply to. Of interest would be determining whether certain job seekers perceive this smaller pool to be more stressful or limiting to their search. Additionally, it would be of interest to see if a narrower pool restricted the extent to which job seekers felt as though they could obtain jobs that would maximize their person-job and/or person-organization fit (i.e., having a smaller pool may cause individuals to feel as though they are “settling for a job”). In contrast, if job seekers conduct a broader geographical search, they are likely to have a much larger pool of potential companies and jobs. For some job seekers, this may prove advantageous, as they have a wider range of possibilities; for others, however, we suspect that such a broad job search may be ambiguous and overwhelming, reducing their effectiveness in navigating the job search process. Indeed, prior work suggests that job seekers can suffer from a choice overload, since they may have “too” many options (i.e., job offers) to choose from (Iyengar, Wells, & Schwartz, 2006; Scheibehenne, Greifeneder, & Todd, 2010), which could in turn cause lower satisfaction (Iyengar et al., 2006). If job seekers are considering an international job search, there may be additional factors to consider, such as differences in job search behaviors and processes across countries and cultures, or individual differences that may affect one’s job search in different countries (e.g., Boswell et al., 2012). As evidenced here, there are a wide variety of experiences job seekers may have depending on the narrowness or breadth of their job search pool, making this a wide-open area for inquiry.

CONCLUSION

Although job search research has grown tremendously, much remains to be learned about what influences job search self-regulation, and how self-regulation influences job search and employment outcomes depending on individual, contextual, and environmental factors. We provided an initial overview of how job search research has evolved and outlined a multilevel approach to further examine this phenomenon. We hope researchers continue conceptualizing the job search as a self-regulatory process and use a multilevel approach to examine its complexities.

NOTES

1. Although recruitment practices (e.g., delay in responding to job seekers after application receipt or after interview) are likely to influence job search behaviors, in this chapter, we do not consider whether and how recruitment practices influence job search processes. For a recent review of research investigating the role of recruitment in job search as well as suggestions for future research in that area, see da Motta and Turban (in press).

2. As a point of clarity, the terms job search behavior and job search intensity tend to be used interchangeably – or, stated differently, the same construct is called job search behavior in some studies and job search intensity in others. Presumably, both terms have been used because the measure used to operationalize the construct asks job seekers to indicate the frequency or intensity of certain job search behaviors during a specific time period. Furthermore, effort and intensity have also both been used to measure the extent to which individuals spend time job seeking or engage in job search activities, although Blau (1993, 1994) created different measures for intensity and effort. Following this precedent in the job search literature, we also use these terms somewhat interchangeably throughout the chapter.

3. As mentioned earlier, there are three broad types of job seekers: new labor markets entrants, job losers, and employed job seekers (Boswell et al., 2012). The unfolding model of turnover is different from the unfolding *process* of job search in that the former focuses on only one of these categories: employed job seekers (i.e., employed individuals who voluntarily decide to quit their employer). Furthermore, the unfolding model of turnover refers to different paths, not necessarily sequential, which employed job seekers take when leaving their job as a result of some situation that causes them to evaluate their job (Lee & Mitchell, 1994).

4. As an important caveat, although we are advocating for a within-person view of self-regulation, we note that this recommendation is theoretically aligned with self-regulation ideas and related constructs. If scholars do *not* believe that their constructs and/or criteria are dynamic over brief periods of time (e.g., within-day, -week, and -month), then such an approach is likely to be inappropriate. For a recent overview of within-person research and various timeframes that need to be considered, please see Beal and Gabriel (in press).

REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211. doi:10.1016/0749-5978(91)90020-T
- Ajzen, I. (2012). Attitudes and persuasion. In K. Deaux & M. Snyder (Eds.), *The Oxford handbook of personality and social psychology* (pp. 367–394). New York, NY: Oxford University Press.
- Bandura, A. (1981). Self-referent thought: A developmental analysis of self-efficacy. In J. H. Flavell & L. Ross (Eds.), *Social cognitive development: Frontiers and possible futures* (pp. 200–239). New York, NY: Cambridge University Press.

- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, 50, 248–287. doi:10.1016/0749-5978(91)90022-L
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1–26. doi:10.1146/annurev.psych.52.1.1
- Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited. *Journal of Management*, 38, 9–44. doi:10.1177/0149206311410606
- Bandura, A., & Locke, E. A. (2003). Negative self-efficacy and goal effects revisited. *Journal of Applied Psychology*, 88, 87–99. doi:10.1037/0021-9010.88.1.87
- Barber, A. E., Daly, C. L., Giannantonio, C. M., & Phillips, J. M. (1994). Job search activities: An examination of changes over time. *Personnel Psychology*, 47, 739–766. doi:10.1111/j.1744-6570.1994.tb01574.x
- Beal, D. J., & Gabriel, A. S. (in press). Looking within: An examination, combination, and extension of within-person methods across multiple levels of analysis. In S. E. Humphrey & J. M. LeBreton (Eds.), *The Handbook for Multilevel Theory, Measurement, and Analysis*. Washington, DC: American Psychological Association.
- Beal, D. J., Weiss, H. M., Barros, E., & MacDermid, S. M. (2005). An episodic process model of affective influences on performance. *Journal of Applied Psychology*, 90, 1054–1068. doi:10.1037/0021-9010.90.6.1054
- Bennett, A. A., Gabriel, A. S., Calderwood, C., Dahling, J. J., & Trougakos, J. P. (2016). Better together? Examining profiles of employee recovery experiences. *Journal of Applied Psychology*, 101, 1635–1654. doi:10.1037/apl0000157
- Blau, G. (1993). Further exploring the relationship between job search and voluntary individual turnover. *Personnel Psychology*, 46, 313–330. doi:10.1111/j.1744-6570.1993.tb00876.x
- Blau, G. (1994). Testing a two-dimensional measure of job search behavior. *Organizational Behavior and Human Decision Processes*, 59, 288–312. doi:10.1006/obhd.1994.1061
- Bliese, P. D., Chan, D., & Ployhart, R. E. (2007). Multilevel methods: Future directions in measurement, longitudinal analyses, and nonnormal outcomes. *Organizational Research Methods*, 10, 551–563. doi:10.1177/1094428107301102
- Boswell, W. R., Zimmerman, R. D., & Swider, B. W. (2012). Employee job search: Toward an understanding of search context and search objectives. *Journal of Management*, 38, 129–163. doi:10.1177/0149206311421829
- Brasher, E. E., & Chen, P. Y. (1999). Evaluation of success criteria in job search: A process perspective. *Journal of Occupational and Organizational Psychology*, 72, 57–70. doi:10.1348/096317999166491
- Brockner, J. (1988). *Self-esteem at work: Research, theory, and practice*. Lexington, MA: Lexington Books.
- Brown, D. J., Cober, R. T., Kane, K., Levy, P. E., & Shalhoop, J. (2006). Proactive personality and the successful job search: A field investigation with college graduates. *Journal of Applied Psychology*, 91, 717–726. doi:10.1037/0021-9010.91.3.717
- Buunk, A. P., & Gibbons, F. X. (2007). Social comparison: The end of a theory and the emergence of a field. *Organizational Behavior and Human Decision Processes*, 102, 3–21. doi:10.1016/j.obhdp.2006.09.007
- Carver, C. (2003). Pleasure as a sign you can attend to something else: Placing positive feelings within a general model of affect. *Cognition & Emotion*, 17, 241–261. doi:10.1080/026999303022294
- Carver, C. S., & Scheier, M. F. (1981). The self-attention-induced feedback loop and social facilitation. *Journal of Experimental Social Psychology*, 17, 545–568. doi:10.1016/0022-1031(81)90039-1
- Carver, C. S., & Scheier, M. F. (1982). Control theory: A useful conceptual framework for personality–social, clinical, and health psychology. *Psychological Bulletin*, 92, 111–135. doi:10.1037/0033-2909.92.1.111
- Carver, C. S., & Scheier, M. F. (1990). Origins and functions of positive and negative affect: A control-process view. *Psychological Review*, 97, 19–35. doi:10.1037/0033-295X.97.1.19
- Carver, C. S., & Scheier, M. F. (2012). *Attention and self-regulation: A control-theory approach to human behavior*. New York, NY: Springer-Verlag.
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, 56, 267–283.

- Caska, B. A. (1998). The search for employment: Motivation to engage in a coping behavior. *Journal of Applied Social Psychology, 28*, 206–224. doi:10.1111/j.1559-1816.1998.tb01702.x
- Chen, D. J., & Lim, V. K. (2012). Strength in adversity: The influence of psychological capital on job search. *Journal of Organizational Behavior, 33*, 811–839. doi:10.1002/job.1814
- Chen, G., Bliese, P. D., & Mathieu, J. E. (2005). Conceptual framework and statistical procedures for delineating and testing multilevel theories of homology. *Organizational Research Methods, 8*, 375–409. doi:10.1177/1094428105280056
- Côté, S., Saks, A. M., & Zikic, J. (2006). Trait affect and job search outcomes. *Journal of Vocational Behavior, 68*, 233–252. doi:10.1016/j.jvb.2005.08.001
- Creed, P. A., King, V., Hood, M., & McKenzie, R. (2009). Goal orientation, self-regulation strategies, and job-seeking intensity in unemployed adults. *Journal of Applied Psychology, 94*, 806–813. doi:10.1037/a0015518
- Crossley, C. D., & Stanton, J. M. (2005). Negative affect and job search: Further examination of the reverse causation hypothesis. *Journal of Vocational Behavior, 66*, 549–560. doi:10.1016/j.jvb.2004.05.002
- da Motta Veiga, S. P., & Gabriel, A. S. (2016). The role of self-determined motivation in job search: A dynamic approach. *Journal of Applied Psychology, 101*, 350–361. doi:10.1037/apl0000070
- da Motta Veiga, S. P., & Turban, D. B. (2014). Are affect and perceived stress detrimental or beneficial to job seekers? The role of learning goal orientation in job search self-regulation. *Organizational Behavior and Human Decision Processes, 125*, 193–203. doi:10.1016/j.obhdp.2014.09.007
- da Motta Veiga, S. P., & Turban, D. B. (in press). Who is searching for whom? Integrating recruitment and job search research. In U.-C. Klehe & E. A. J. van Hooft (Eds.), *The Oxford handbook of job loss and job search*. Oxford: Oxford University Press.
- Diefendorff, J. M., & Gosserand, R. H. (2003). Understanding the emotional labor process: A control theory perspective. *Journal of Organizational Behavior, 24*, 945–959. doi:10.1002/job.230
- Dineen, B. R., Duffy, M. K., Henle, C. A., & Lee, K. (2017). Green by comparison: Deviant and normative transmigrations of job search envy in a temporal context. *Academy of Management Journal, 60*, 295–320. doi:10.5465/amj.2014.0767
- Eden, D., & Aviram, A. (1993). Self-efficacy training to speed reemployment: Helping people to help themselves. *Journal of Applied Psychology, 78*, 352–360. doi:10.1037/0021-9010.78.3.352
- Ellis, R. A., & Taylor, M. S. (1983). Role of self-esteem within the job search process. *Journal of Applied Psychology, 68*, 632–640. doi:10.1037/0021-9010.68.4.632
- Fishbach, A., Dhar, R., & Zhang, Y. (2006). Subgoals as substitutes or complements: The role of goal accessibility. *Journal of Personality and Social Psychology, 91*, 232–242. doi:10.1037/0022-3514.91.2.232
- Folkman, S., & Lazarus, R. S. (1985). If it changes it must be a process: Study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology, 48*, 150–170. doi:10.1037/0022-3514.48.1.150
- Folkman, S., & Moskowitz, J. T. (2000). Positive affect and the other side of coping. *American Psychologist, 55*, 647–654. doi:10.1037/0003-066X.55.6.647
- Fong, C. T. (2006). The effects of emotional ambivalence on creativity. *Academy of Management Journal, 49*, 1016–1030. doi:10.5465/AMJ.2006.22798182
- Fritz, C., & Sonnentag, S. (2005). Recovery, health, and job performance: Effects of weekend experiences. *Journal of Occupational Health Psychology, 10*, 187–199. doi:10.1037/1076-8998.10.3.187
- Gautier, P. A., Teulings, C. N., & Van Vuuren, A. (2010). On-the-job search, mismatch and efficiency. *The Review of Economic Studies, 77*, 245–272. doi:10.1111/j.1467-937X.2009.00565.x
- Gowan, M. A., Riordan, C. M., & Gatewood, R. D. (1999). Test of a model of coping with involuntary job loss following a company closing. *Journal of Applied Psychology, 84*, 75–86. doi:10.1037/0021-9010.84.1.75
- Iyengar, S. S., Wells, R. E., & Schwartz, B. (2006). Doing better but feeling worse: Looking for the “best” job undermines satisfaction. *Psychological Science, 17*, 143–150. doi:10.1111/j.1467-9280.2006.01677.x
- Jalajas, D. S. (1994). The role of self-esteem in the stress process: Empirical results from job hunting. *Journal of Applied Social Psychology, 24*, 1984–2001. doi:10.1111/j.1559-1816.1994.tb00571.x

- Kanfer, R., & Hulin, C. L. (1985). Individual differences in successful job searches following lay-off. *Personnel Psychology, 38*, 835–847. doi:10.1111/j.1744-6570.1985.tb00569.x
- Kanfer, R., Wanberg, C. R., & Kantrowitz, T. M. (2001). Job search and employment: A personality-motivational analysis and meta-analytic re-view. *Journal of Applied Psychology, 86*, 837–855. doi:10.1037/0021-9010.86.5.837
- Kinicki, A. J., Prussia, G. E., & McKee-Ryan, F. M. (2000). A panel study of coping with involuntary job loss. *Academy of Management Journal, 43*, 90–100. doi:10.2307/1556388
- Klein, H. J. (1989). An integrated control theory model of work motivation. *Academy of Management Review, 14*, 150–172. doi:10.5465/AMR.1989.4282072
- Koen, J., Klehe, U. C., Van Vianen, A. E., Zikic, J., & Nauta, A. (2010). Job-search strategies and reemployment quality: The impact of career adaptability. *Journal of Vocational Behavior, 77*, 126–139. doi:10.1016/j.jvb.2010.02.004
- Koo, M., & Fishbach, A. (2008). Dynamics of self-regulation: How (un) accomplished goal actions affect motivation. *Journal of Personality and Social Psychology, 94*, 183–195. doi:10.1037/0022-3514.94.2.183
- Koo, M., & Fishbach, A. (2010). Climbing the goal ladder: How upcoming actions increase level of aspiration. *Journal of Personality and Social Psychology, 99*, 1–13. doi:10.1037/a0019443
- Krueger, A. B., & Mueller, A. (2011). Job search, emotional well-being, and job finding in a period of mass unemployment: Evidence from high-frequency longitudinal data. *Brookings Papers on Economic Activity, 2011*, 1–57. doi:10.1353/eca.2011.0001
- Lee, T. W., & Mitchell, T. R. (1994). An alternative approach: The unfolding model of voluntary employee turnover. *Academy of Management Review, 19*, 51–89. doi:10.5465/AMR.1994.9410122008
- Lim, V. K., Chen, D., Aw, S. S., & Tan, M. (2016). Unemployed and exhausted? Job-search fatigue and reemployment quality. *Journal of Vocational Behavior, 92*, 68–78. doi:10.1016/j.jvb.2015.11.003
- Linderbaum, B. A., & Levy, P. E. (2010). The development and validation of the Feedback Orientation Scale (FOS). *Journal of Management, 36*, 1372–1405. doi:10.1177/0149206310373145
- Liu, S., Huang, J. L., & Wang, M. (2014). Effectiveness of job search interventions: A meta-analytic review. *Psychological Bulletin, 140*, 1009–1041. doi:10.1037/a0035923
- Liu, Y., Song, Y., Koopmann, J., Wang, M., Chang, C. H. D., & Shi, J. (2017). Eating your feelings? Testing a model of employees' work-related stressors, sleep quality, and unhealthy eating. *Journal of Applied Psychology, 102*, 1237–1258. doi:10.1037/apl0000209
- Liu, S., Wang, M., Liao, H., & Shi, J. (2014). Self-regulation during job search: The opposing effects of employment self-efficacy and job search behavior self-efficacy. *Journal of Applied Psychology, 99*, 1159–1172. doi:10.1037/a0036692
- Lopez-Kidwell, V., Grosser, T. J., Dineen, B. R., & Borgatti, S. P. (2013). What matters when: A multi-stage model and empirical examination of job search effort. *Academy of Management Journal, 56*, 1655–1678. doi:10.5465/amj.2011.0546
- Lord, R. G., Diefendorff, J. M., Schmidt, A. M., & Hall, R. J. (2010). Self-regulation at work. *Annual Review of Psychology, 61*, 543–568. doi:10.1146/annurev.psych.093008.100314
- Manroop, L., & Richardson, J. (2016). Job search: A multidisciplinary review and research agenda. *International Journal of Management Reviews, 18*, 206–227. doi:10.1111/ijmr.12066
- Marinescu, I., & Rathelot, R. (in press). Mismatch unemployment and the geography of job search. *American Economic Journal: Macroeconomics*.
- McFadyen, R. G., & Thomas, J. P. (1997). Economic and psychological models of job search behavior of the unemployed. *Human Relations, 50*, 1461–1484. doi:10.1177/001872679705001201
- McKee-Ryan, F., Song, Z., Wanberg, C. R., & Kinicki, A. J. (2005). Psychological and physical well-being during unemployment: A meta-analytic study. *Journal of Applied Psychology, 90*, 53–76. doi:10.1037/0021-9010.90.1.53
- Monge, P. R. (1990). Theoretical and analytical issues in studying organizational processes. *Organization Science, 1*, 406–430. doi:10.1287/orsc.1.4.406
- Moore, C., Lee, S. Y., Kim, K., & Cable, D. M. (2017). The advantage of being oneself: The role of applicant self-verification in organizational hiring decisions. *Journal of Applied Psychology, 102*, 1493–1513. doi:10.1037/apl0000223
- Mortensen, D. T. (1986). Job search and labor market analysis. *Handbook of Labor Economics, 2*, 849–919. doi:10.1016/S1573-4463(86)02005-9

- Mortensen, D. T., & Pissarides, C. A. (1999). New developments in models of search in the labor market. *Handbook of Labor Economics*, 3, 2567–2627. doi:10.1016/S1573-4463(99)30025-0
- Mouw, T. (2003). Social capital and finding a job: do contacts matter?. *American Sociological Review*, 68, 868–898. doi: 10.2307/1519749
- Moynihan, L. M., Røhling, M. V., LePine, M. A., & Boswell, W. R. (2003). A longitudinal study of the relationships among job search self-efficacy, job interviews, and employment outcomes. *Journal of Business and Psychology*, 18, 207–233. doi:10.1023/A:1027349115277
- Noordzij, G., van Hooft, E. A., van Mierlo, H., Dam, A., & Born, M. P. (2013). The effects of a learning-goal orientation training on self-regulation: A field experiment among unemployed job seekers. *Personnel Psychology*, 66, 723–755. doi:10.1111/peps.12011
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Rothman, N. B., & Melwani, S. (2017). Feeling mixed, ambivalent and in flux: The social functions of emotional complexity for leaders. *Academy of Management Review*, 42, 259–282. doi:10.5465/amr.2014.0355
- Rothwell, A., Herbert, I., & Rothwell, F. (2008). Self-perceived employability: Construction and initial validation of a scale for university students. *Journal of Vocational Behavior*, 73, 1–12. doi:10.1016/j.jvb.2007.12.001
- Saks, A. M. (2006). Multiple predictors and criteria of job search success. *Journal of Vocational Behavior*, 68, 400–415. doi:10.1016/j.jvb.2005.10.001
- Saks, A. M., & Ashforth, B. E. (1999). Effects of individual differences and job search behaviors on the employment status of recent university graduates. *Journal of Vocational behavior*, 54, 335–349. doi: 10.1006/jvbe.1998.1665
- Saks, A. M., & Ashforth, B. E. (2000). Change in job search behaviors and employment outcomes. *Journal of Vocational Behavior*, 56, 277–287. doi:10.1006/jvbe.1999.1714
- Saks, A. M., & Ashforth, B. E. (2002). Is job search related to employment quality? It all depends on the fit. *Journal of Applied Psychology*, 87, 646–654. doi:10.1037/0021-9010.87.4.646
- Saks, A. M., Zikic, J., & Koen, J. (2015). Job search self-efficacy: Reconceptualizing the construct and its measurement. *Journal of Vocational Behavior*, 86, 104–114. doi:10.1016/j.jvb.2014.11.007
- Scheibehenne, B., Greifeneder, R., & Todd, P. M. (2010). Can there ever be too many options? A meta-analytic review of choice overload. *Journal of Consumer Research*, 37, 409–425. doi:10.1086/651235
- Schwarz, N., & Clore, G. L. (1983). Mood, misattribution, and judgments of well-being: Informative and directive functions of affective states. *Journal of Personality and Social Psychology*, 45, 513–523. doi:10.1037/0022-3514.45.3.513
- Schwarz, N., & Clore, G. L. (2003). Mood as information: 20 years later. *Psychological Inquiry*, 14, 296–303. doi:10.1080/1047840X.2003.9682896
- Shirom, A., Vinokur, A., & Price, R. (2008). Self-efficacy as a moderator of the effects of job-search workshops on re-employment: A field experiment. *Journal of Applied Social Psychology*, 38, 1778–1804. doi:10.1111/j.1559-1816.2008.00369.x
- Song, Y., Liu, Y., Wang, M., Lanaj, K., Johnson, R., & Shi, J. (in press). A social mindfulness approach to understanding experienced customer mistreatment: A within-person field experiment. *Academy of Management Journal*. doi:10.5465/amj.2016.0448
- Song, Z., Foo, M. D., Uy, M. A., & Sun, S. (2011). Unraveling the daily stress crossover between unemployed individuals and their employed spouses. *Journal of Applied Psychology*, 96, 151–168.
- Song, Z., Uy, M. A., Zhang, S., & Shi, K. (2009). Daily job search and psychological distress: Evidence from China. *Human Relations*, 62, 1171–1197. doi:10.1177/0018726709334883
- Song, Z., Wanberg, C., Niu, X., & Xie, Y. (2006). Action–state orientation and the theory of planned behavior: A study of job search in China. *Journal of Vocational Behavior*, 68, 490–503.
- Sonnentag, S., Binnewies, C., & Mojza, E. J. (2008). “Did you have a nice evening?” A day-level study on recovery experiences, sleep, and affect. *Journal of Applied Psychology*, 93, 674–684. doi:10.1037/0021-9010.93.3.674
- Sonnentag, S., & Fritz, C. (2007). The recovery experience questionnaire: Development and validation of a measure for assessing recuperation and unwinding from work. *Journal of Occupational Health Psychology*, 12, 204–221. doi:10.1037/1076-8998.12.3.204

- Stajkovic, A. D., & Luthans, F. (1998). Self-efficacy and work-related performance: A meta-analysis. *Psychological Bulletin*, *124*, 240–261. doi:10.1037/0033-2909.124.2.240
- Steelman, L. A., Levy, P. E., & Snell, A. F. (2004). The feedback environment scale: Construct definition, measurement, and validation. *Educational and Psychological Measurement*, *64*, 165–184. doi:10.1177/0013164403258440
- Steffy, B. D., Shaw, K. N., & Noe, A. W. (1989). Antecedents and consequences of job search behaviors. *Journal of Vocational Behavior*, *35*, 254–269. doi:10.1016/0001-8791(89)90029-8
- Sun, S., Song, Z., & Lim, V. K. G. (2013). Dynamics of the job search process: Developing and testing a mediated moderation model. *Journal of Applied Psychology*, *98*, 771–784. doi:10.1037/a0033606
- Tay, C., Ang, S., & Van Dyne, L. (2006). Personality, biographical characteristics, and job interview success: A longitudinal study of the mediating effects of interviewing self-efficacy and the moderating effects of internal locus of causality. *Journal of Applied Psychology*, *91*, 446–454. doi:10.1037/0021-9010.91.2.446
- Trougakos, J. P., Beal, D. J., Green, S. G., & Weiss, H. M. (2008). Making the break count: An episodic examination of recovery activities, emotional experiences, and positive affective displays. *Academy of Management Journal*, *51*, 131–146. doi:10.5465/AMJ.2008.30764063
- Turban, D. B., Stevens, C. K., & Lee, F. K. (2009). Effects of conscientiousness and extraversion on new labor market entrants' job search: The mediating role of meta-cognitive activities and positive emotions. *Personnel Psychology*, *62*, 553–573. doi:10.1111/j.1744-6570.2009.01148.x
- Turban, D. B., Lee, F. K., da Motta Veiga, S. P., Haggard, D. L., & Wu, S. Y. (2013). Be happy, don't wait: The role of trait affect in job search. *Personnel Psychology*, *66*, 483–514. doi:10.1111/peps.12027
- Vancouver, J. B., & Kendall, L. N. (2006). When self-efficacy negatively relates to motivation and performance in a learning context. *Journal of Applied Psychology*, *91*, 1146–1153. doi:10.1037/0021-9010.91.5.1146
- Vancouver, J. B., Thompson, C. M., Tischner, E. C., & Putka, D. J. (2002). Two studies examining the negative effect of self-efficacy on performance. *Journal of Applied Psychology*, *87*, 506–516. doi:10.1037/0021-9010.87.3.506
- Vancouver, J. B., Thompson, C. M., & Williams, A. A. (2001). The changing signs in the relationships among self-efficacy, personal goals, and performance. *Journal of Applied Psychology*, *86*, 605–620. doi:10.1037/0021-9010.86.4.605
- van Hooft, E. A., Born, M. P., Taris, T. W., van der Flier, H., & Blonk, R. W. (2004). Predictors of job search behavior among employed and unemployed people. *Personnel Psychology*, *57*, 25–59. doi:10.1111/j.1744-6570.2004.tb02483.x
- van Hooft, E. A., Born, M. P., Taris, T. W., van der Flier, H., & Blonk, R. W. (2005). Bridging the gap between intentions and behavior: Implementation intentions, action control, and procrastination. *Journal of Vocational Behavior*, *66*, 238–256. doi:10.1016/j.jvb.2004.10.003
- van Hooft, E. A., & Crossley, C. D. (2008). The joint role of locus of control and perceived financial need in job search. *International Journal of Selection and Assessment*, *16*, 258–271. doi:10.1111/j.1468-2389.2008.00432.x
- van Hooft, E. A., & de Jong, M. (2009). Predicting job seeking for temporary employment using the theory of planned behaviour: The moderating role of individualism and collectivism. *Journal of Occupational and Organizational Psychology*, *82*, 295–316. doi:10.1348/096317908X325322
- van Hooft, E. A., Wanberg, C. R., & Van Hove, G. (2013). Moving beyond job search quantity: Towards a conceptualization and self-regulatory framework of job search quality. *Organizational Psychology Review*, *3*, 3–40. doi:10.1177/2041386612456033
- Van Hove, G., Saks, A. M., Lievens, F., & Weijters, B. (2015). Development and test of an integrative model of job search behaviour. *European Journal of Work and Organizational Psychology*, *24*, 544–559. doi:10.1080/1359432X.2014.964214
- Van Ommeren, J., Rietveld, P., & Nijkamp, P. (1997). Commuting: In search of jobs and residences. *Journal of Urban Economics*, *42*, 402–421. doi:10.1006/juec.1996.2029
- Van Ryn, M., & Vinokur, A. D. (1992). How did it work? An examination of the mechanisms through which an intervention for the unemployed promoted job-search behavior. *American Journal of Community Psychology*, *20*, 577–597. doi:10.1007/BF00941773

- Vansteenkiste, M., Lens, W., De Witte, S., De Witte, H., & Deci, E. L. (2004). The “why” and “why not” of job search behavior: Their relation to searching, unemployment experience and well-being. *European Journal of Social Psychology, 34*, 345–363. doi:10.1002/ejsp.202
- Vinokur, A., & Caplan, R. D. (1987). Attitudes and social support: Determinants of job-seeking behavior and well-being among the unemployed. *Journal of Applied Social Psychology, 17*, 1007–1024. doi:10.1111/j.1559-1816.1987.tb02345.x
- Vohs, K. D., & Baumeister, R. F. (Eds.). (2016). *Handbook of self-regulation: Research, theory, and applications*. New York, NY: Guilford Publications.
- Vuori, J., & Silvonen, J. (2005). The benefits of a preventive job search program on re-employment and mental health at 2-year follow-up. *Journal of Occupational and Organizational Psychology, 78*, 43–52. doi:10.1348/096317904X23790
- Vuori, J., & Vinokur, A. D. (2005). Job-search preparedness as a mediator of the effects of the Työhoön Job Search Intervention on re-employment and mental health. *Journal of Organizational Behavior, 26*, 275–291. doi:10.1002/job.308
- Wanberg, C. R. (1997). Antecedents and outcomes of coping behaviors among unemployed and reemployed individuals. *Journal of Applied Psychology, 82*, 731–744. doi:10.1037/0021-9010.82.5.731
- Wanberg, C. R., Glomb, T. M., Song, Z., & Sorenson, S. (2005). Job-search persistence during unemployment: A 10-wave longitudinal study. *Journal of Applied Psychology, 90*, 411–430. doi:10.1037/0021-9010.90.3.411
- Wanberg, C. R., Hough, L. M., & Song, Z. (2002). Predictive validity of a multidisciplinary model of reemployment success. *Journal of Applied Psychology, 87*, 1100–1120. doi:10.1037/0021-9010.87.6.1100
- Wanberg, C. R., Kanfer, R., & Banas, J. T. (2000). Predictors and outcomes of networking intensity among unemployed job seekers. *Journal of Applied Psychology, 85*, 491–503. doi:10.1037/0021-9010.85.4.491
- Wanberg, C. R., Kanfer, R., Hamann, D. J., & Zhang, Z. (2016). Age and reemployment success after job loss: An integrative model and meta-analysis. *Psychological Bulletin, 142*, 400–426. doi:10.1037/bul0000019
- Wanberg, C. R., Kanfer, R., & Rotundo, M. (1999). Unemployed individuals: Motives, job-search competencies, and job-search constraints as predictors of job seeking and reemployment. *Journal of Applied Psychology, 84*, 897–910. doi:10.1037/0021-9010.84.6.897
- Wanberg, C., van Hooft, E. A. J., Dossinger, K., van Vianen, A. E. M., & Klehe, U.-C. (2017, August). How strong is my safety net? Perceived unemployment insurance generosity and implications for job search, mental health, and reemployment. In N. Chawla & A. S. Gabriel (Eds.) (Chairs), *What contributes to job search self-regulation? Understanding individual and contextual factors*. Symposium presented at the 77th Annual Conference of the Academy of Management, Atlanta, GA.
- Wanberg, C. R., Zhu, J., Kanfer, R., & Zhang, Z. (2012). After the pink slip: Applying dynamic motivation frameworks to the job search experience. *Academy of Management Journal, 55*, 261–284. doi:10.5465/amj.2010.0157
- Wanberg, C. R., Zhu, J., & Van Hooft, E. (2010). The job search grind: Perceived progress, self-reactions, and self-regulation of search effort. *Academy of Management Journal, 53*, 788–807. doi:10.5465/AMJ.2010.52814599
- Wasmer, E., & Zenou, Y. (2002). Does city structure affect job search and welfare? *Journal of Urban Economics, 51*, 515–541. doi:10.1006/juec.2001.2256
- Yeo, G., Loft, S., Xiao, T., & Kiewitz, C. (2009). Goal orientations and performance: Differential relationships across levels of analysis and as a function of task demands. *Journal of Applied Psychology, 94*, 710–726. doi:10.1037/a0015044
- Yeo, G., & Neal, A. (2006). An examination of the dynamic relationship between self-efficacy and performance across levels of analysis and levels of specificity. *Journal of Applied Psychology, 91*, 1088–1101. doi:10.1037/0021-9010.91.5.1088
- Zikic, J., & Saks, A. M. (2009). Job search and social cognitive theory: The role of career-relevant activities. *Journal of Vocational Behavior, 74*, 117–127. doi:10.1016/j.jvb.2008.11.001