THE EFFECTS OF A LEARNING-GOAL ORIENTATION TRAINING ON SELF-REGULATION: A FIELD EXPERIMENT AMONG UNEMPLOYED JOB SEEKERS

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Finding reemployment after job loss is a complex and difficult task that requires extensive motivation and self-regulation. This study aimed to examine whether improving unemployed job seekers’ cognitive self-regulation can increase reemployment probabilities. Based on the goal orientation literature, we developed a learning-goal orientation (LGO) training, which focused on goal setting aimed at improving rather than demonstrating competences and creating a climate of development and improvement. We predicted that the LGO training would influence peoples’ goal orientation towards job seeking, which in turn would relate to learning from failure, strategy awareness, and self-efficacy, leading to job-search intentions, resulting in increased reemployment status. Using a 2-group quasi-experimental design with 223 unemployed job seekers, we found support for these predictions, except for self-efficacy. The results suggest that an LGO training is a promising tool to improve self-regulation in and effectiveness of job search.

Losing one’s job is a life event with far-reaching economic, psychological, and physical consequences (McKee-Ryan, Song, Wanberg, & Kinicki, 2005; Paul & Moser, 2009). Coping with job loss in terms of...
finding employment is a difficult task during which people are forced to cope with failure and disappointing experiences. Self-regulation during the dynamic process of searching for employment is therefore essential (Kanfer, Wanberg, & Kantrowitz, 2001). Self-regulation in job search refers to cognitions and behaviors such as forming intentions, putting sustained effort into job search, coping with rejection, and persisting in the face of failure. These cognitions and behaviors have been found to increase the probability of reemployment (Kanfer et al., 2001), raising the question whether job-search effectiveness can be enhanced by interventions aimed at increasing job seekers’ self-regulation skills. Previous studies provided important insights into training and development of self-regulation skills in general (e.g., Baumeister, Gaillot, DeWall, & Oaten, 2006; Bell & Kozlowski, 2008; Keith & Frese, 2008; Schunk & Ertmer, 2000). Furthermore, research has shown that unemployed people’s self-efficacy, job-search skills, and reemployment status can be improved by training (Azrin, Flores, & Kaplan, 1975; Caplan, Vinokur, Price, & Van Ryn, 1989; Eden & Aviram, 1993; Rife & Belcher, 1994; Van Hooft & Noordzij, 2009). However, very little is known about training and development of self-regulation in the context of job search, raising the question whether knowledge about self-regulation training can be generalized to the context of job search.

In this study, we integrate this training research with more recent developments in the job-search literature related to the role of goal orientation (Creed, King, Hood, & McKenzie, 2009; Van Hooft & Noordzij, 2009). Goal orientation refers to people’s goal preferences in achievement situations (Payne, Youngcourt, & Beaubien, 2007). Based on goal-orientation theory (Dweck & Leggett, 1988; Elliot & McGregor, 2001; VandeWalle, 1997), we propose that goal orientation importantly affects self-regulation during job search. Conceptualizing job search as a self-regulatory and goal-oriented process, we introduce a training program designed to change goal orientation in job search, which should, in turn, improve job-search self-regulation and reemployment success. We compare this “goal-orientation” training program with a training program on “choice making” in job search. The choice-making training is a commonly used training program in employment counseling to help people making choices about what type of job to pursue.

This study contributes to the unemployment literature by (a) developing an intervention (i.e., learning-goal training) that is more useful in employment counseling compared to existing interventions (i.e., choice-making training) and (b) improving our understanding of the effects of goal orientation on self-regulation during job search. With this intervention study, we extend previous research on goal orientation and job search (Creed et al., 2009; Van Hooft & Noordzij, 2009) by examining
the causal effects of goal orientation rather than its correlates and by explicitly measuring the cognitive self-regulatory mechanisms that are triggered by changes in goal orientation. To achieve those aims, we compared the effects of a learning-goal training and a choice-making training on self-regulation and reemployment using a three-wave pretest-posttest quasi-experimental field study in a sample of unemployed people searching for a job.

**Self-Regulation and Job Search**

Self-regulation refers to processes of “self-generated thoughts, feelings, and actions that are planned and cyclically adapted to the attainment of personal goals” (Zimmerman, 2000, p. 14). These self-regulatory mechanisms enable individuals to guide their goal-directed activities over time and across changing situations. The literature on self-regulation distinguishes different phases of self-regulation, describing the distinct phases that individuals go through when pursuing goals (e.g., Ajzen, 1985; Gollwitzer, 1990; Karoly, 1993; Vancouver & Day, 2005; Zimmerman, 2000). Although researchers have proposed up to five phases of self-regulation, the core distinction is between goal choice and goal striving. Goal choice refers to the process of selecting one or more goals, whereas goal striving refers to the process of implementing an existing goal by initiating action and putting forth effort, reflecting a continuous interplay of behavior and cognitions (Diefendorff & Lord, 2008; Gollwitzer & Brandstätter, 1997). Applying the two core phases of self-regulation to job search, the goal-choice phase reflects processes related to setting a reemployment goal, which is relatively straightforward, whereas the goal-striving phase refers to processes related to finding employment, which is often difficult and ambiguous. Our current focus is on the goal-striving phase of job search because this phase requires extensive self-regulation. Specifically, job seekers need to manage their thoughts, attention, emotions, and motivation to control the search process and deal with rejections, obstacles, and failure (Wanberg, Kanfer, & Rotundo, 1999).

Self-regulation comprises three interdependent activities: self-monitoring, self-evaluation, and self-reaction (Kanfer & Ackerman, 1989). Self-monitoring refers to the self-observation of thoughts and actions. Self-evaluation refers to the comparison of current performance to the desired goal. Finally, self-reactions such as self-satisfaction and self-efficacy influence the reallocation of effort to achieve a goal or to withdraw. In this study we use several cognitive self-regulatory constructs to assess job seekers’ self-monitoring, self-evaluation, and self-reaction: (a) the cognition that one can learn from search experiences and the failures and rejections associated with these experiences, (b) the awareness that
there are alternative strategies one can use in case of failure or negative experiences, (c) self-efficacy about accomplishing job-search activities, and (d) planning to allocate effort to the job-search process by means of forming job-search intentions. The more job seekers are aware that they can learn from failure, that there are alternative strategies they can use, and that they are able to accomplish the task (i.e., self-efficacy), the more plans they make to search for a job and, ultimately, the more likely they are to find a job.

Goal Orientation and Job Search

Kanfer et al. (2001) defined job search as a dynamic self-regulatory and goal-oriented process, occurring as a response to a discrepancy between people's employment goal and their current situation, and argued that job-search behavior is similar to other self-regulated behaviors such as requisite behavior in highly autonomous jobs. Button, Mathieu, and Zajac (1996) stated “goal orientation may have an important impact on self-regulatory processes that influence job performance over time” (p. 41). This statement is supported by Payne et al.’s (2007) meta-analysis, which demonstrated that goal orientation is related to self-regulation variables and job performance. Synthesizing these theoretical perspectives and empirical findings, we propose that goal orientation strongly influences self-regulatory processes during job search.

Goal orientation can be viewed both as a personality trait and as a personal preference that may be affected by situational characteristics (DeShon & Gillespie, 2005). Trait goal orientation represents one’s general goal preferences that are stable over time and across situations, whereas situational goal orientation represents specific goal preferences for the task and context at hand (Payne et al., 2007). Recent goal orientation theory and research has integrated the traditional distinction between learning and performance goal orientations (PGO; Dweck, 1986) with classic achievement motivation theories (e.g., McClelland, Atkinson, Clark, & Lowell, 1953), which state that behavior in achievement settings can be oriented towards the attainment of success (approach) or the avoidance of failure. This integration has resulted in a 2 × 2 framework with four goal orientations: (a) learning-approach goal orientation, focused on the development of competences and mastering something new; (b) learning-avoidance goal orientation, focused on avoiding not mastering something and not developing competences; (c) performance-approach goal orientation, focused on demonstrating competences to others and gaining positive judgments; and (d) performance-avoidance goal orientation, focused on avoiding demonstration of incompetence to others and avoiding
negative judgments (Elliot & McGregor, 2001; Pintrich, 2000b; VandeWalle, 1997). Meta-analytic reviews of experimental as well as correlational research have demonstrated that learning-approach (LGO), performance-approach (PPGO), and performance-avoidance (APGO) goal orientation are differentially related to intrinsic motivation (Rawsthorne & Elliot, 1999) and performance (Payne et al., 2007; Utman, 1997). These reviews suggest that APGO is negatively related to motivational processes and outcomes (in the few studies investigating learning-avoidance goal orientation similar relations were found, e.g., Elliot & McGregor, 2001; Van Yperen, 2003). LGO is generally associated with adaptive motivational processes and outcomes, whereas PPGO shows a more inconsistent outcome pattern. In part, the complex outcome pattern of PPGO can be explained by task characteristics. PPGO seems functional for routine tasks but dysfunctional when tasks are ambiguous (Winters & Latham, 1996) or when tasks are novel and have different stages (Earley, Connolly, & Ekegren, 1989). In contrast, LGO has been shown to be especially effective in early stages of skill acquisition (Kanfer & Ackerman, 1989) and for complex tasks (Seijts, Latham, Tasa, & Latham, 2004; Utman, 1997). Job search is a stressful, complex, and for most people new task with multiple stages during which obstacles, failure, and rejection are common. Therefore, of the four goal orientations, LGO likely is the most beneficial in job search. Thus, we propose that job seekers will benefit from a training program aimed at strengthening their LGO.

This line of reasoning is supported by a recent correlational study showing a positive relationship between trait LGO and job-search intensity (Creed et al., 2009). However, in their review on goal orientation, DeShon and Gillespie (2005) argue that the stable aspects of goal orientation are more relevant to the goal-choice system, whereas the malleable aspects of goal orientation are more relevant to the goal-striving system. Given our current focus on the goal-striving aspect of job search and following DeShon and Gillespie’s line of reasoning, we theorize that job search is not only influenced by trait goal orientation but also by situational goal orientation. Dweck (2006) showed that people respond to training programs that seek to modify situational goal orientation. We therefore developed a training based on the approach dimension of learning-goal orientation with the aim of strengthening job seekers’ situational LGO that is their LGO towards job search, and as such to improve their self-regulation in job search and enhance reemployment success.

Figure 1 (Model A) displays our research model, outlining the proposed effects of the learning-approach goal-orientation training (i.e., LGO-training) on job-search goal orientation, cognitive self-regulation, and reemployment.
Figure 1: Conceptual Models of Relationships Between LGO-Training and Employment Status.

Note. Rectangles indicate observed variables and ovals latent variables. LGO = learning goal orientation; PPGO = performance approach goal orientation; APGO = performance avoidance goal orientation.
Hypothesized Effects of LGO, Training

Elliot and Trash (2002) argued that goal orientation influences the nature, focus, and quality of self-regulation. For example, when facing failure, individuals with learning goals tend to analyze their own actions, change their strategies, and view effort as an effective way to develop their competences and accomplish their goals (Dweck, 1986; Nicholls, 1984). This reasoning is supported by research showing positive relations between LGO and metacognitive strategies such as planning and monitoring (Ford, Smith, Weissbein, Gully, & Salas, 1998; Pintrich, 2000b; Turban, Stevens, & Lee, 2009), a mastery-oriented approach towards errors (Van Dyck, Van Hooft, De Gilder, & Liesveld, 2010), and the use of different strategies (Fisher & Ford, 1998; Roedel, Schraw, & Plake, 1994; Winters & Latham, 1996). Thus, theory and research suggest that LGO is associated with adaptive reactions to complex tasks, exerting effort, persisting in the face of failure, using effective strategies, and learning from failure, resulting in increased performance and goal achievement.

Individuals searching for a job face many difficulties, rejections, and negative feedback. Negative feedback might be interpreted as personal failure and lack of competence, resulting in demotivation, lower self-efficacy, and giving up. LGO training likely buffers against such adverse effects by broadening cognitions and making the job search experience less threatening. For example, LGO training likely helps job seekers realize that failures are not negative but represent an opportunity to learn, makes them aware that there are alternative strategies they can use, and enhances their self-efficacy. In that way, LGO training increases job seekers’ motivation as indicated by intentions to invest effort in the job-search process, resulting in increased reemployment probabilities. Correspondingly, we expect that LGO training positively influences unemployed job seekers’ reemployment status by positively affecting their self-regulation in terms of learning from failure, strategy awareness, self-efficacy, and job-search intentions through its effects on peoples’ goal orientation towards job search.

Reemployment Status

Achieving the goal of reemployment is a complex endeavor that results from cognitive as well as behavioral processes of self-monitoring, self-evaluation, and self-reactions during job search. An individual’s goal orientation might serve as a “cognitive mediator” between the task and goal achievement, resulting in different patterns of motivation, behavior, and performance (Dweck & Leggett, 1988). Previous studies have demonstrated that LGO is positively related to performance (Payne et al.,
2007), and manipulating or training LGO in general has been found to result in higher performance, especially on complex tasks (Utman, 1997). As job search is a complex task, we expect that job seekers who receive LGO training will have higher reemployment probabilities, compared to job seekers who receive a standard choice-making training, which is not directed at setting learning goals and reframing job seeking as a learning experience.

Hypothesis 1: Unemployed job seekers who participated in the LGO training are more likely to be reemployed after training than those in the choice-making training.

Job-Search Goal Orientation

The type of goal orientation an individual adopts in an achievement situation can be influenced by situational cues (Button et al., 1996). Researchers have used a variety of interventions to induce situational goal orientation, such as goal content (i.e., assigning or adopting learning goals, Barron & Harackiewicz, 2001; Seijts et al., 2004; Van Yperen, 2003), goal framing (i.e., creating an LGO climate, Mangos & Steele-Johnson, 2001; Martocchio, 1994; Nicholls, 1984; Steele-Johson, Heintz, & Miller, 2008; Stevens & Gist, 1997), or a combination of goal content and goal framing (Kozlowski & Bell, 2006). Previous training studies found differential effects for situational goal orientation manipulations independent of individuals’ trait goal orientation (e.g., Kozlowski et al., 2001; Van Hooft & Noordzij, 2009), thus demonstrating that goal orientation can be considered a changeable situational characteristic (Button et al., 1996; DeShon & Gillespie, 2005). These studies implicitly assume that a goal content and/or goal framing manipulation affects people’s goal orientation. However, to our knowledge, no previous goal-orientation intervention study directly measured the effects of training on people’s goal orientation in a given situation. Therefore, it remains unclear whether results are actually caused by changes in people’s goal orientation or by other factors. In this study, we explicitly assess the effects of LGO training on participants’ job-search LGO. In addition, we examine the effect of LGO training on job-search PPGO and job-search APGO because the effects of LGO training may not only occur through changes in job-search LGO but also through changes in job-search PPGO and job-search APGO.

To make predictions about the changes in job-search goal orientation (LGO, PPGO, and APGO) caused by LGO training, we rely on goal-orientation theory (e.g., Dweck & Leggett, 1988), the approach-avoidance distinction in motivation (Elliot & Convington, 2001), and the content of the training. First, early goal-orientation research suggests that climate perceptions are precursors of situational goal orientation (Dweck
& Leggett, 1988). As LGO training emphasizes a climate of developing competences, approaching challenges, learning something new, and mastering job search, we expect that LGO training strengthens job-search LGO. Second, we expect that the LGO training negatively affects people’s job-search APGO, which is the goal orientation that is diametrically opposite to learning approach in the 2 × 2 framework. That is, by encouraging trainees to approach job search as a challenge and allow them to learn and develop, the LGO training reduces their preoccupation with avoiding failure and rejections. Approach and avoidance motivation differ as a function of valence (Elliot & Convington, 2001): Behavior is directed by a desirable event (i.e., approach) or by an undesirable event (i.e., avoidance). There is evidence that people process most stimuli in terms of valence and that they do so unconsciously (Bargh & Chartrand, 1999; Chen & Bargh, 1999). Following this line of reasoning, we thus propose that LGO training not only increases peoples’ job-search LGO but also weakens their avoidance motivation in job search (i.e., APGO). Third, the effects of the LGO training on job-search PPGO are supposedly mixed. On the one hand, the LGO training emphasizes an approach motivation climate and as such stimulates peoples’ approach goal orientation. On the other hand, the LGO training focuses on learning and developing competences rather than demonstrating competences. By directing peoples’ attention towards setting goals on learning and improving their job-search techniques, they will be less likely to focus on demonstrating competence, decreasing their PGO. Combining these opposing rationales, the LGO training likely does not systematically alter peoples’ job-search PPGO.

The choice-making training emphasizes a climate of making choices. However, the training is not directed to learning and developing job-search competence, achieving goals, or approach and avoidance motivation. We therefore expect that LGO training aimed at developing competences and mastering job search strengthens job-search LGO and weakens job-search APGO as compared to the choice-making training.

**Hypothesis 2:** Compared to the choice-making training, LGO training (a) positively affects unemployed peoples’ job-search LGO and (b) negatively affects their job-search APGO.

*Self-Regulation in Job Search*

*Learning from failure.* According to Barber, Daly, Giannantonio, and Phillips (1994), job seekers need to learn from their search experiences and their failures in order to be effective in their job search. An important cognition in this context is the extent to which people perceive failures and rejections as negative indicators of performance (i.e., failing is bad) or as feedback that can be used to learn from. Extending error-management
theory (Frese, 1991; Rybowiak, Garst, Frese, & Batinic, 1999) to failure and rejections in job search, we suggest that job seekers benefit from a positive view on failure, errors, and setbacks. That is, whereas a negative view on failure likely results in discouragement during job search because failures are abundant, a positive view likely relates to persistence in the planning of job-search activities. Goal-orientation theory suggests that individuals high on PGO attribute failure and poor performance to personal inadequacy, and therefore, failures are viewed as evaluative information about the self (Dweck, 1986; Dweck & Leggett, 1988). In contrast, individuals high on LGO view failure and poor performance as reflecting their ability, and therefore, failures are viewed as useful feedback that provides learning opportunities. In response to setbacks, people with a high LGO more likely will learn and change their job-search strategies and increase effort, and people with a high PGO, especially those with a strong APGO, more likely withdraw from their job search. In a study on the relation between goal orientation and feedback, VandeWalle, Cron, and Slocum (2001) indeed demonstrated that performance feedback on a first event resulted in a positive relation between LGO and performance a few weeks later. Combining error-management theory and goal-orientation theory, we expect that job-search LGO will relate positively and job-search APGO will relate negatively to job seekers’ cognitions facilitating learning from failure during the job-search process.

**Strategy awareness.** Job seeking requires a multiplicity of strategies (Barber et al., 1994; Saks, 2006; Saks & Ashforth, 2000). Because job seekers have a wide array of channels at their disposal to acquire information about job opportunities, they need to develop a strategy to accomplish their goals and analyze their goal progress to be able to adjust their strategy when necessary. However, many job seekers stick to their habits once they have chosen a certain strategy. For example, job seekers often use only formal channels, such as recruitment advertisements, even though informal channels such as personal contacts are known to increase one’s chances to find employment (Wanberg, Kanfer, & Banas, 2000). Therefore, being aware of alternative strategies provides job seekers with the opportunity to select and apply the best strategy to the situation at hand, which likely results in the continued formation of job-search intentions in the face of difficulties, resulting in an increased likelihood of finding a job. Although some studies demonstrate that LGO is positively related to the number of strategies people use (Ames & Archer, 1988; Winters & Latham, 1996), we are not aware of any previous research on the cognitive component of strategies: strategy awareness. Goal-orientation theory suggests that LGO increases and PGO decreases the likelihood that individuals change their strategies after failure (Dweck & Leggett, 1988; Nicholls, 1984). Extending this argument, we theorize that individuals with a strong LGO are
likely more aware of the different strategies that one can use to accomplish one’s goals. In contrast, individuals with a strong APGO more likely direct their attention to strategies with which they are familiar because familiar strategies offer safer ground for avoiding incompetence. We therefore expect that job-search LGO will relate positively and job-search APGO will relate negatively to job seekers’ awareness of the strategies they can use to accomplish their reemployment goal.

**Self-efficacy.** Social cognitive theory (Bandura, 1986) states that self-efficacy has a positive effect on performance because individuals with high levels of self-efficacy are motivated to intensify their effort and persistence and plan more activities. Sitzmann and Ely’s (2011) meta-analysis grants further support to this idea, demonstrating that self-efficacy is one of the core constructs of self-regulated learning. These findings also apply to job-search self-efficacy, referring to job seekers’ belief in their ability to successfully perform job-search behavior, as meta-analytic findings identified job-search self-efficacy as an important predictor of job-search behavior (Kanfer et al., 2001; see also Saks, 2006). Dweck (1989) argued that individuals with a strong LGO view effort as an effective way to accomplish their goals and that these beliefs are facilitated by self-efficacy, suggesting a positive relation between LGO and self-efficacy. Indeed, in their meta-analysis, Payne et al. (2007) demonstrated that trait LGO positively and trait APGO negatively related to self-efficacy. Experimental studies showed that training or manipulating LGO improved self-efficacy (Kozlowski et al., 2001; Martocchio, 1994; Seijts et al., 2004). Based on these studies, we expect that job-search LGO will relate positively to job seekers’ self-efficacy and job-search APGO will relate negatively to self-efficacy.

**Job search intentions.** Intentions refer to the activities that people are planning to perform and to how much effort they are planning to exert (Ajzen, 1991). Intentions are the fundamental determinants of behavior as they capture the motivational factors that drive behavior. As such, intentions are important self-regulatory mechanisms. According to Ajzen, the concept of intention captures peoples’ motivation: The stronger the intention, the more likely the behavior will be performed and the more likely the goal will be achieved. This relationship between intentions and behavior is firmly supported for a wide range of behaviors, as is demonstrated in Sheeran’s (2002) meta-analysis of 10 meta-analyses showing a strong relationship between intentions and behavior ($r = .53$). In addition, the job-search literature highlighted the importance of intentions. Barber et al. (1994) argued that job seekers need to develop a search plan and form intentions about the different sources they will use. Job-search intentions comprise the motivation to engage in job seeking and have been shown to relate positively to job-search behavior and intensity,
number of interviews, and number of job offers (e.g., Song, Wanberg, Niu, & Xie, 2006; Van Hooft, Born, Taris, & Van der Flier, 2004; Van Hooft, Born, Taris, Van der Flier, & Blonk, 2004; Wanberg, Glomb, Song, & Sorensen, 2005). As such, forming intentions is an important cognitive self-regulatory mechanism increasing the likelihood of achieving the reemployment goal.

Goal-orientation theory suggests that individuals high on LGO increase effort after failure because it makes people perceive effort as a means toward the accomplishment of their goals and to use more strategies and make more plans to achieve their goals (Dweck & Leggett, 1988; Elliott & Dweck, 1988). For people high on PGO, exertion of effort is viewed negatively because it is perceived as indicative of low ability. Therefore, people high on PGO likely make fewer plans, use fewer strategies, and set lower goals. Related to these theoretical principles, Payne et al. (2007) demonstrated that trait LGO was positively related to self-set goals. However, the negative relation between PGO and self-set goals was only found for trait APGO and not for trait PPGO. Furthermore, using an experimental design, Stevens and Gist (1997) found that LGO trainees planned to exert more effort into the trained task compared to PGO trainees. Extending this rationale to job-search goal orientation (cf. Van Hooft & Noordzij, 2009), a high LGO likely causes individuals to intend to invest more effort and to plan to use a larger set of job-search activities, resulting in more job-search intentions. Therefore, based on goal-orientation theory and previous studies, stating that a high LGO increases and a high APGO decreases individuals effort expenditure, we expect that job-search LGO will relate positively and job-search APGO negatively to job-search intentions. In addition, based on goal-orientation theory and the theory of planned behavior (Ajzen, 1985; Dweck & Leggett, 1988), we expect that job-search goal orientation is indirectly related to intentions through learning from failure, strategy awareness, and self-efficacy.

**Hypothesis 3:** Job-search goal orientation affects cognitive self-regulation such that (a) LGO is positively related to learning from failure, strategy awareness, self-efficacy, and job-search intentions; and (b) APGO is negatively related to learning from failure, strategy awareness, self-efficacy, and job-search intentions.

Finally, as hypothesized, LGO trainees are more likely to be employed after training than choice-making trainees. Because of the effects of goal orientation on self-regulation and the importance of self-regulation during job search, we expect that the effects of the LGO training are explained by job-search goal orientation (LGO and APGO), learning from failure, strategy awareness, self-efficacy, and job-search intentions.
**Hypothesis 4:** The effects of LGO training on reemployment status are mediated by job-search goal orientation and self-regulation mechanisms, such that LGO training affects job-search goal orientation, which subsequently results in increased learning from failure, strategy awareness, and self-efficacy, which in turn enhances job-search intentions, finally resulting in higher reemployment status (see Fig. 1: Model A).

**Method**

**Participants and Procedure**

Participants were 245 unemployed job seekers registered at 1 of 12 different offices of a large reemployment-counseling agency in the Netherlands. Participants were assigned to the LGO training \((n = 161; 65.7\%)\) or the choice-making training \((n = 84; 34.3\%)\), based on their ranking on the office list of unemployed job seekers (i.e., the first person on the list was assigned to the LGO training, the second person on the list was assigned to the choice-making training, and so on). The unequal distribution of participants between the two training conditions was due to logistic reasons. All 12 offices of the reemployment agency started with an LGO training, followed by a choice-making training, and again an LGO training. The idea was that they would end with another choice-making training. However, at that moment there was a lack of new job seekers to train, and therefore, the agency decided to cancel this training.

Both training programs consisted of two sessions with a week in between and took place between April and October 2008, in groups of five to seven participants. Three participants were excluded from the analyses because they gave an incorrect answer to the manipulation check question “Did you follow a training on setting learning goals or a training on how to make choices?” and 19 other participants were excluded because their employment status was not available. This resulted in a final sample of 223 participants: 51.1% were female, mean age was 48.30 years \((SD = 8.69)\), and mean job-search time was 20 months \((SD = 19\) months). Twenty-two participants \((9.9\%)\) reported the equivalent of having less than 11 years of education, 94 participants \((42.2\%)\) reported 11 to 12 years, 22 participants \((9.9\%)\) reported 13 to 14 years, 59 participants \((26.5\%)\) reported 15 to 16 years, and 22 participants \((9.9\%)\) reported more than 16 years of education.

Data were collected at three points in time: before the first training session (T0), immediately after the second training session (T1), and 12 months after the training (T2). At T1, 174 participants completed the T1 questionnaire (response rate 78%). Twelve months after training (T2),
participants’ employment status was retrieved via the computer system of the reemployment-counseling agency.

To check for selective attrition, we compared T1 respondents with nonrespondents on the T0 variables and training condition, using logistic regression analysis (Goodman & Blum, 1996). The logistic regression analysis provides a model chi-square for the null hypothesis that all coefficients for the terms in the model are 0. The result demonstrated no signs of nonrandom attrition, $\chi^2 (11, N = 165) = 12.53, p = .33$, suggesting that nonresponse was evenly distributed across training conditions and that nonrespondents at T1 did not differ from T1 respondents with regard to sex, age, years of education, condition, and the T0 variables LGO, PPGO, APGO, learning from failure, strategy awareness, self-efficacy, and intentions.

Training Programs

The LGO training was based on goal-orientation theory (Dweck & Leggett, 1988) and previous goal-orientation training studies (Kozlowski et al., 2001; Stevens & Gist, 1997; Van Hooft & Noordzij, 2009). The choice-making training was based on the Balance Sheet Procedure of Janis and Mann (1977). A Balance Sheet is a scheme in which people can make a list of the positive and negative consequences of a choice they have to make. The choice-making training was chosen because it is commonly used in employment counseling but conceptually very different from the LGO training. Based on the content of the choice-making training, we did not expect any influence of the choice-making training on goal orientation and hardly any influence on self-regulation.

Both the LGO training and the choice-making training consisted of two sessions of approximately 3 hours with a week in between and were given by professionally trained counselors from the reemployment-counseling agency. Although the two training programs differed in content, they had the exact same structure and organization. The structure of the first training session was as follows: (1) a general motto, (2) an introductory round in which trainees introduced themselves, (3) an explanation of theory and examples of learning goals or balance sheets, (4) practice in setting learning goals or filling out balance sheets, (5) feedback, and (6) a take-home exercise. The structure of the second session was as follows: (1) an evaluation of the past week concerning learning or making choices, (2) an explanation of theory and examples of learning goals or balance sheets, (3) a discussion of the take-home exercise, (4) setting new or improved learning goals or filling out new or improved balance sheets, (5) sharing the set goals or sharing the possible choices for the next weeks within the group, and (6) an evaluation of the training.
Consistent with previous studies on goal orientation (Kozlowski et al., 2001; Linnenbrink, 2005; Stevens & Gist, 1997; Van Hooft & Noordzij, 2009), we used goal content (setting learning goals) as well as goal framing (creating an LGO climate, conducive to learning and development) to induce situational LGO towards job seeking during the LGO training. For instance, an LGO climate was created by means of the motto of the training: “Goals will help you improve your job-search abilities” (cf. Stevens & Gist, 1997), and by means of a question for the introductory round: “What have you learned so far, either positive or negative, about job seeking?” After that, participants spent a lot of time on practicing setting learning goals. They developed learning goals such as: “I want to learn how to look for job openings that are suitable for me.” As part of the LGO climate, the trainer and the other participants provided positive as well as negative feedback on the learning goals that were set, and possible obstacles were identified and discussed (cf. Stevens & Gist, 1997).

In the choice-making training, cues were used to create an atmosphere conducive to making choices (Janis & Mann, 1977). For instance, the general motto was: “Making choices will help you in job search,” and the introductory round was based on the question: “Which choices have you made in your job search so far.” After that, participants spent a lot of time filling out and discussing balance sheets in order to make the right choices. An example of a balance sheet was a list of pros and cons of making a choice between working part-time or full-time.

Measures

Table 1 presents the coefficient alphas for all questionnaire measures. Unless stated otherwise, items were completed by using 5-point Likert scales ranging from 1 = strongly disagree to 5 = strongly agree. The items were administered in Dutch.

Situational goal orientation. Job-search goal orientation was assessed at T0 and T1. We developed our measures based on the questionnaires developed by Breland and Donovan (2005) and VandeWalle (1997). These items were suitable in the domain of job search as they reflect the operationalization of LGO as “challenge” and of PGO as “appearance” (Hulleman, Schrager, Bodmann, & Harackiewicz, 2010). Four items were based on Breland and Donovan’s (2005) situational LGO scale. The measures for situational PPGO and APGO were based on VandeWalle’s (1997) goal-orientation scale because Breland and Donovan did not differentiate between PPGO and APGO. All items were adapted to the job-search domain and were formulated as time and situation specific (see Appendix for the exact items).
### TABLE 1
**Alphas, Means, Standard Deviations, and Correlations of Measured Variables**

<table>
<thead>
<tr>
<th>Variables</th>
<th>α</th>
<th>Time 0:</th>
<th>Control training</th>
<th>Control training M (SD)</th>
<th>Time 1:</th>
<th>Control training M (SD)</th>
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<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td>.47(5)</td>
<td>.53(5)</td>
<td>.06</td>
<td>.30</td>
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<tr>
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<td>.53(5)</td>
<td>.06</td>
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<td>.53(5)</td>
<td>.06</td>
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<td>.28</td>
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<td>.53(5)</td>
<td>.06</td>
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<tr>
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<td>.47(5)</td>
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<tr>
<td>Learning from failure</td>
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<td>.47(5)</td>
<td>.53(5)</td>
<td>.06</td>
<td>.30</td>
<td>.28</td>
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<tr>
<td>Strategy awareness</td>
<td>.69</td>
<td>.47(5)</td>
<td>.53(5)</td>
<td>.06</td>
<td>.30</td>
<td>.28</td>
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<tr>
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<td>.53(5)</td>
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<tr>
<td>Intentions</td>
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<td>.47(5)</td>
<td>.53(5)</td>
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<td>.30</td>
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<tr>
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<tr>
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<tr>
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<td>Learning from failure</td>
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<tr>
<td>Strategy awareness</td>
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<tr>
<td>Self-efficacy</td>
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<td>.47(5)</td>
<td>.53(5)</td>
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<tr>
<td>Intentions</td>
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<td>.47(5)</td>
<td>.53(5)</td>
<td>.06</td>
<td>.30</td>
<td>.28</td>
</tr>
</tbody>
</table>

**Note.** Scores for variables 5 to 10 and 12 to 17 vary between 1 and 5. Scores for variables 11 and 18 vary between 1 and 6. For Time 0 variables N varies between 204 and 223. For Time 1 variables N varies between 153 and 174. For Time 2 employment status N = 223. LGO = learning goal orientation; PPGO = performance goal orientation; APGO = performance avoidance goal orientation.  
*p < .05. **p < .01.
Learning from failure. Learning from failure was assessed at T0 and T1 using three items adapted from the Error Orientation Questionnaire (Rybowiak et al., 1999). We selected these items based on their relevance to the job-search context and adapted them to the context of failures and rejections during job seeking. The items were: “When something does not work out in my job search, I will do it differently next time,” “Rejections on my applications make me improve my job search,” and “When my applications are rejected, I think of how I can do it differently next time.”

Strategy awareness. Strategy awareness was assessed at T0 and T1 using three items that we developed for this study. The items were: “I think there are more ways to find a job than I have tried till now,” “I am constantly thinking of other ways to find a job,” and “I am open to other ways to find a job.”

Self-efficacy. Self-efficacy was assessed at T0 and T1 using six items from Van Hooft et al.’s (2004) job-search self-efficacy measure. A sample item is: “I have confidence in my abilities to make a good impression during job interviews.”

Job search intentions. Intentions were assessed at T0 and T1 by an eight-item index of job-search activities (Van Hooft et al., 2004) based on Blau’s (1994) job-search behavior scale. Participants were asked to indicate how much time they intended to spend on each activity (e.g., looking for job openings, preparing a resumé, and networking) in the next 6 weeks. For instance: “In the next 6 weeks how much time do you intend to spend on looking for job openings in the newspapers and magazines per week?” Response options ranged from 0 = no time, to 6 = more than 2 hours a week.

A confirmatory factor analysis with the individual items serving as indicators of the seven latent variables (i.e., the three job-search goal orientations, learning from failure, strategy awareness, self-efficacy, and intentions) exhibited relatively poor fit indices, \( \chi^2 (443, N = 223) = 1034.68, p < .01, CFI = .85, \text{RMSEA} = .08, \text{SRMR} = .08. \) We therefore removed three items because they displayed high cross loadings. Specifically, we removed one PPGO item (i.e., “In the next 6 weeks when I am searching for a job I want to make a good impression in job search and applying for jobs”) as there was a high cross-loading with self-efficacy, one item measuring intentions (i.e., “In the next 6 weeks how much time do you intend to spend on looking for job openings on the computer per week?”) as there were high cross-loadings with APGO and learning from failure, and one item measuring self-efficacy (“I have confidence in my ability to complete a good application letter”) as there was a high cross-loading with APGO. The respecified measurement model could be considered as acceptable to good, \( \chi^2 (351, N = 223) = 654.93, p < .01, CFI = .92, \text{RMSEA} = .06, \text{SRMR} = .06, \) with all items exhibiting significant
(p < .01) loadings on their intended latent variable. The respecified model fit the data better than any of the alternative measurement models that we specified. Alternative measurement Model 1 constrained the indicators of all variables to load on the same factor, to test if there is a single latent variable underlying the model, $\chi^2 (370, N = 223) = 819.96, p < .01$, CFI = .87, RMSEA = .07, SRMR = .09, and $\Delta \chi^2 (19) = 165.03, p < .01$. Alternative measurement Model 2 constrained the indicators of self-efficacy, strategy awareness, learning from failure, and intentions to load on the same factor, to test if there is a single latent variable underlying the cognitive self-regulatory factors, $\chi^2 (367, N = 223) = 794.70, p < .01$, CFI = .88; RMSEA = .07; SRMR = .08, and $\Delta \chi^2 (16) = 60.23, p < .01$.

Reemployment status. Reemployment is usually measured as employment status at a given point (Saks, 2005). The data on employment status were collected from the reemployment counseling agency computer system, a year after the training. “Reemployed” was defined as: “working for a minimum of 20 hours a week in a paid job for at least 3 months.” “Reemployed” was coded as 1 and “not reemployed” was coded as 0.

Training evaluation. At T1, immediately after the second training session, the training was evaluated with six items asking participants how satisfied they were with: (a) the trainer, (b) the content of the training, (c) the materials, (d) the organization, (e) their own contribution (e.g., involvement), and (f) the usefulness of the training in finding employment. In addition, participants were asked to rate the training in general: “How would you rate the total training program, on a scale from 1 (very bad) to 10 (very good)?”

Results

Before testing the hypotheses, we examined the effectiveness of the randomization of participants between the two training conditions using logistic regression analysis, which provide a model chi-square for the null hypothesis that all coefficients for the terms in the model are 0. “Condition” was regressed on all T0-variables (i.e., sex, age, years of education, LGO, PPGO, APGO, learning from failure, strategy awareness, self-efficacy, and intentions) showing no significant differences between the conditions, $\chi^2 (10, N = 163) = 5.44, p = .86$. In addition, we also examined possible differences in the evaluation of the training at T1. “Condition” was regressed on the six evaluation variables, showing a significant effect, $\chi^2 (6, N = 165) = 13.78, p < .05$. Inspection of the results showed a significant difference for the evaluation of the training materials (exp. B = .39, p < .05) and for the organization (exp. B = 2.55, p < .05), indicating that participants in the choice-making training were more satisfied with the training materials whereas, participants in the
LGO training were more satisfied with the organization of the training. There were no significant differences in evaluation of the trainer, the content, the contribution of the participants, and the perceived usefulness of the training. Furthermore, there was no significant difference in the overall rating of the training, $t(167) = .55, p = .59$. It therefore seems that participants did not consistently favor one training over the other.

Training Effects on Reemployment and Job-Search Goal Orientation

Table 1 presents the descriptive statistics and correlations between the measured variables. At T2, 28% of the participants who had attended the LGO training were reemployed and 15% of the participants who had attended the choice-making training. This difference was significant, $\chi^2(223) = 4.73, p < .05$, supporting Hypothesis 1.

A MANCOVA of the effects of training condition on job-search LGO, APGO, and PPGO, controlling for pretraining scores on these variables, shows a significant overall effect, $F(3, 146) = 7.15, p < .01$. Subsequent repeated measures ANOVAs on pretraining and posttraining scores revealed an increase in job-search LGO, $F(1,159) = 5.00, p < .05$, and a decrease in job-search APGO, $F(1,153) = 5.67, p < .05$, for the participants of the LGO training as compared to those of the choice-making training (Hypothesis 2 supported). There was no difference between the LGO training and choice-making training in job-search PPGO, $F(1,156) = .05, p = .88$.

Model Testing

We tested our hypothesized model (Model A) and two alternative models (Model B and C; see Fig. 1) with structural equation modeling (AMOS 16.0, Arbuckle, 2007). The alternative models were developed to test the mediation as proposed by Hypothesis 4. Specifically, alternative Model B was constructed in order to test whether the effects of training condition on cognitive self-regulation were caused by its effects on job-search goal orientation as expected or whether training condition also directly impacts cognitive self-regulation (i.e., not fully mediated), as previous experimental studies found direct effects of LGO training on different outcome variables (e.g., Kozlowski et al., 2001). Alternative Model C was constructed to test whether the role of job-search goal orientation in predicting employment status is mediated by cognitive self-regulation, as expected, or whether job-search goal orientation has direct effects on employment status (i.e., not fully mediated), indicating that there might be other variables explaining the effects (e.g., emotions, Pekrun, Elliot, & Maier, 2006).
We used cutoff values for fit indices as prescribed by Hu and Bentler (1999) and Mathieu and Taylor (2006): models with CFI values < .90, RMSEA values > .08, and SRMR values > .10 will be considered as having poor fit, those with CFI ≥ .90 to < .95, RMSEA > .06 to ≤ .08, and SRMR > .08 to ≤ .10 as having acceptable fit, and models with CFI ≥ .95, RMSEA ≤ .06, and SRMR ≤ .08 as having good fit. In addition, the fit of the alternative models will be compared with the fit of the hypothesized model by statistically testing the difference in χ².

In all structural models, the individual items served as observed indicators for the latent constructs. However, for the sake of clarity we did not show the items in the figures. For the items, all standardized path coefficients were greater than .50 (p < .01). As shown in Table 2, which provides overall fit statistics, the hypothesized model (Model A) exhibited acceptable fit indices, χ² (336, N = 223) = 684.44, p < .01, CFI = .89, RMSEA = .07, SRMSR = .07. Figure 2 depicts the standardized path coefficients. In support of Hypothesis 3a, the path coefficients between job-search LGO and the cognitive self-regulation variables were positive and significant (with the exception of the path coefficient between job-search LGO and self-efficacy which was marginally significant). Limited support was found for Hypothesis 3b, as job-search APGO was only significantly negatively related to intentions but not to the other self-regulation variables.

In Model B we tested for possible direct effects of LGO training on learning from failure, strategy awareness, self-efficacy, job-search intentions, and employment status, in addition to mediated effects through job-search LGO and job-search APGO. This alternative model did not result in improved fit, Δχ² (5) = 3.64, p > .10, and none of the path coefficients of the added direct paths was significant. In Model C we tested for possible direct effects of job-search LGO and job-search APGO on employment status. This alternative model did not result in improved fit, Δχ² (2) = 1.33, p > .10, and none of the path coefficients of the added direct paths were significant.

To further test the indirect mediated effects of LGO training on cognitive self-regulation and employment status, we performed bootstrapping procedures. In that way we are able to examine the specific indirect effects of LGO training through job-search LGO and APGO for each of the individual self-regulation variables and employment status. Bootstrapping procedures have been recommended to assess indirect effects with small to moderate samples (Preacher & Hayes, 2004; Shrout & Bolger, 2002). By extracting 2000 bootstrapped samples from the data set based on random sampling with replacement we could test the strength of the relationships at once by calculating standardized indirect effects (estimate, i.e., the mean of the indirect effects computed over the 2,000 samples), standard errors
<table>
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<tr>
<th>Model</th>
<th>( \chi^2 )</th>
<th>df</th>
<th>( \chi^2/df ) ratio</th>
<th>CFI</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>Model comparison</th>
<th>( \Delta \chi^2 ) in df</th>
<th>Prob.</th>
</tr>
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<td>Null model</td>
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<td>9.40</td>
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</tr>
<tr>
<td>Model A: Hypothesized model</td>
<td>684.44</td>
<td>336</td>
<td>2.04</td>
<td>.89</td>
<td>.07</td>
<td>.07</td>
<td>Null model–Model A</td>
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<tr>
<td>Model B</td>
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<td>.89</td>
<td>.07</td>
<td>.07</td>
<td>Model A–Model B</td>
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<td>5</td>
</tr>
<tr>
<td>Model C: Hypothesized model plus direct effects of training on self-regulatory variables and employment status</td>
<td>683.11</td>
<td>334</td>
<td>2.05</td>
<td>.89</td>
<td>.07</td>
<td>.08</td>
<td>Model A–Model C</td>
<td>1.33</td>
<td>2</td>
</tr>
</tbody>
</table>

Note. \( N = 223 \). CFI = comparative fit index; RMSEA = root mean squared error of approximation; SRMR = standardized root mean squared residual.
Figure 2: Final Model.

Note. $N = 223$. All statistics are standardized path coefficients. Dashed lines are nonsignificant paths. Rectangles indicate observed variables and ovals latent variables (for all items constructing the latent variable, standardized path coefficients were above $.50, p < .01$). LGO = learning goal orientation; APGO = performance avoidance goal orientation. $^\dagger p < .10. ^* p < .05. ^{**} p < .01.$

(SE, i.e., the standard deviation of the 2,000 indirect effects), and the 90% confidence intervals of the distribution of the 2,000 means (CI). All indirect effects of LGO training on the measured variables were significant except for self-efficacy. Learning from failure ($estimate = .10, SE = .04, lower CI = .03, higher CI = .18, p < .05$), strategy awareness ($estimate = .18, SE = .06, lower CI = .08, higher CI = .28, p < .01$), job-search intentions ($estimate = .12, SE = .04, lower CI = .06, higher CI = .18, p < .01$), and employment status ($estimate = .03, SE = .01, lower CI = .01, higher CI = .06, p < .01$) were all significant.

Furthermore, we examined the indirect effects of job-search LGO and APGO on employment status, showing significant indirect effects of job-search LGO ($estimate = .09, SE = .04, lower CI = .04, higher CI = .16, p < .01$) and job-search APGO ($estimate = -.04, SE = .03, lower CI = -.09, higher CI = -.01, p < .05$) on employment status.

Thus, combining the results of the model testing with the indirect effects tests, we can conclude that Hypothesis 4 is partially supported. Specifically, the effects of LGO training on employment status are fully mediated by job-search goal orientation (i.e., LGO and APGO) and the cognitive self-regulation variables learning from failure, strategy awareness, and job-search intentions, but not by self-efficacy. In summary, results indicated that an LGO training in job search strengthens unemployed individuals’ job-search LGO and weakens their job-search APGO, resulting in more learning from failure, increased strategy awareness, leading to more job-search intentions, and higher reemployment probabilities.
Discussion

This study investigated the proximal and distal consequences of training LGO and setting learning goals (i.e., LGO training) in job search. We tested a model examining how an LGO training for unemployed job seekers influenced subsequent self-regulation and employment status, through goal orientation in job search, by comparing the effects of the LGO training with those of a choice-making training.

Major Findings and Theoretical Implications

We found support for many of the relationships outlined in our model. LGO training positively affected cognitive self-regulatory variables (i.e., learning from failure, strategy awareness, and job-search intentions) and employment status through situational LGO and APGO. Thus, a LGO training in which unemployed job seekers set learning goals for their job-search process was found to increase their job-search LGO but also decrease their job-search APGO. It seems that the LGO training influences job seekers’ cognitive framing of the job-search process, perceiving it more as a learning situation instead of a results-oriented situation. Moreover, LGO training was found to help job seekers deal with negative experiences by viewing failure no longer as a problem but instead as something from which one can learn. LGO training was also found to change the awareness of job seekers about all the different strategies they can use. After the LGO training, job seekers were more aware that they can go beyond their known, safe strategies, thinking of other more challenging strategies. Job seekers, who think they can learn from failure and who are more aware of different strategies, were found to be more likely to plan job-search activities, resulting in higher probabilities to find a job.

The beneficial effects of LGO training on self-regulation and reemployment in this study are in line with previous correlational (e.g., Button et al., 1996; Elliot, McGregor, & Gable, 1999; VandeWalle et al., 2001) and experimental studies (e.g., Kozlowski et al., 2001; Stevens & Gist, 1997; Van Hooft & Noordzij, 2009), demonstrating positive effects of LGO on academic and job performance (Payne et al., 2007; Utman, 1997). This study extends previous research by examining the underlying mechanisms explaining the positive effects of LGO training on performance. Specifically, we extend previous findings by addressing the effects of LGO training on cognitive self-regulation variables and by explaining these effects by situational goal orientation.

First, this study introduces the cognitive self-regulation variables learning from failure and strategy awareness to the job-search literature,
highlighting the importance of incorporating these variables in self-regulatory models of the job-search process. Previous theory has described job search as a self-regulatory process requiring self-monitoring, self-evaluation, and self-reactions, referring to self-regulation as a pattern of thinking, affect, and behavior (Kanfer & Ackerman, 1989; Kanfer et al., 2001). Research has found empirical evidence for the importance of cognitive self-regulatory variables in the job-search process. For instance, intentions have been found to be an important predictor of job-search behavior, number of interviews, and number of job offers (Song et al., 2006; Turban et al., 2009; Van Hooft et al., 2004). Replicating previous research, we also found evidence for the positive relation between job-search intentions and employment status. Extending previous findings and theorizing on job search, we found that learning from failure and the awareness of strategies are important factors in the job-search process, positively relating to job-search intentions. Moreover, these self-regulatory behaviors were found to be changeable by providing a training on LGO.

Second, we theorized that, based on the idea that goal orientation can be influenced by situational cues (Button et al., 1996), the effects of LGO training on self-regulation occurred through a change in people’s goal orientation towards job search. The positive effects of LGO training on job-search LGO and the negative effects of LGO training on job-search APGO provide support for this idea. Furthermore, job-search LGO and APGO fully mediated the effects of LGO training on learning from failure, strategy awareness, job-search intentions, and employment status. We provide empirical evidence supporting the implicit assumption in previous studies (Elliot & Harackiewicz, 1996; Kozlowski et al., 2001; Steele-Johnson et al., 2008; Van Yperen, 2003) that the different outcomes of manipulating or training goal orientation are caused by changes in situational goal orientation. Thus, training LGO and setting learning goals strengthens situational LGO and weakens situational APGO. Furthermore, we expected no effect of LGO training on job-search PPGO. Indeed, the LGO training was not found to influence job seekers’ beliefs about demonstrating competences in job search and gaining positive judgments. So, although job seekers are more learning oriented and less performance-avoidance oriented after LGO training, their ideas about proving to others how good they are in job-search activities did not change. These results show that LGO and PPGO are not opposite but rather unrelated constructs. However, in line with classic achievement motivation theories (e.g., McClelland et al., 1953) and the 2 × 2 framework of goal orientation (Elliot & McGregor, 2001), LGO and APGO seem more opposite constructs as the LGO training was found to simultaneously strengthen LGO and weaken APGO.
In addition to addressing the effects of LGO training on goal orientation and self-regulation cognitions, this study extends previous experimental research on goal orientation (e.g., Steele-Johson et al., 2008; Stevens & Gist, 1997; Van Yperen, 2003) by demonstrating that training can result in positive outcomes in the long term. That is, finding effects of the LGO training on both proximal outcomes such as self-regulation cognitions immediately after training and distal outcomes such as employment status a year later suggests that our training might cause changes in people’s cognitions and behaviors towards job search and finding employment that lasted not only for the course of the training but remained active during a longer period.

An unexpected finding was that LGO training did not affect self-efficacy directly or indirectly. This finding seems inconsistent with previous research reporting positive relationships between LGO and self-efficacy (Payne et al., 2007), and research demonstrating that LGO training raises self-efficacy after performing a task (Kozlowski et al., 2001). One explanation might be that the expected increase in self-efficacy occurred as much in the LGO training as in the choice-making training. The choice-making training was based on the Balance Sheet of Janis and Mann (1977), and Janis and Mann provided evidence for the positive effects of filling out the Balance Sheet on making choices. Furthermore, this training is viewed as a useful tool in employment counseling, perhaps because of its effects on self-efficacy. Some support for this argument is indicated by a post-hoc repeated measure ANOVA on pretraining and posttraining self-efficacy, showing that self-efficacy levels were higher after the second session of the training as compared to before the first session for both training conditions, $F(1, 158) = 8.29, p < .01$. There was no significant effect for condition, $F(1, 158) = .29, p = .59$. However, there was an interaction effect between time and training, $F(1, 158) = 4.84, p = .03$, showing a stronger increase in self-efficacy in the choice-making training compared to the LGO training. Another explanation might be that participants in the LGO training did not learn job search during the training because they only set learning goals, whereas the participants in the choice-making training actually made choices about their job search during the training. As such, it might be that the expected increase in self-efficacy for the LGO training only occurs after a few weeks of actually engaging in learning job search. Therefore, future research should measure the development of self-efficacy over time.

Limitations and Suggestions for Future Research

Although our results are in line with goal-orientation theory and previous studies on goal orientation, an alternative explanation for the results
could lie in what would seem to be the positive approach of the LGO training. Participants may have viewed the LGO training as more sensible and useful compared to the choice-making training, and trainers might have been more enthusiastic when delivering the LGO training. As presented in the Results section, there were some differences between the two training conditions for the evaluation of training materials and the organization of the training. Participants in the choice-making training were more satisfied with the training materials, and participants in the LGO training were more satisfied with the organization. However, given that there was no difference in the evaluation of the trainer, the content and usefulness of the training, the contribution of participants, and the overall satisfaction with the training, this alternative explanation seems unlikely. Another related explanation might be that the LGO training elicits different emotions compared to the choice-making training, as LGO is positively related to positive emotions and negatively to negative emotions (Pekrun et al., 2006; Pintrich, 2000a). However, because there was no difference between the LGO training and choice-making training concerning satisfaction with the training, it seems unlikely that a possible difference in the elicitation of emotions during training can explain our findings. Nevertheless, it is a limitation to our study that we did not measure the elicitation of emotions. Therefore, in future research it would be interesting to investigate the effects of training goal orientations on affect-related outcomes, such as positive and negative emotions, distress, and well-being.

Further limitations concern the study design. First, although we made an effort to randomize participants as much as possible, in a field experiment like this it is almost impossible to assign participants completely at random. Therefore, some caution is warranted in interpreting the causal effects of the training. However, comparison of the participants of the two training conditions revealed no systematic differences in demographics and pretraining cognitions, suggesting that selection effects are unlikely to threaten the validity of our conclusions. Second, in our study we used a longitudinal design, as it allowed conclusions about proximal (i.e., self-regulation) and distal (i.e., reemployment) outcome variables. Despite our efforts to retain all participants, some attrition occurred. Immediately after training, 174 participants completed the T1 questionnaire, yielding a response rate of 78%. However, because no signs of nonrandom attrition were found, it may be assumed that attrition did not pose a threat to the validity of our conclusions.

Another limitation might be that we did not measure trait goal orientation. One’s trait goal orientation may influence a situational goal orientation, as there is a positive correlation between corresponding trait and situational goal orientations (Payne et al., 2007). It should be noted that we used an experimental design with random assignment of participants.
to training conditions. As such, it can be assumed that participants in both conditions are on average comparable regarding their trait goal orientation. Furthermore, in previous goal-orientation training studies (Kozlowski et al., 2001; Van Hooft & Noordzij, 2009), training effects seemed to be independent of people’s trait goal orientation. For instance, in the study by Van Hooft and Noordzij, no support was found for interaction effects between trait goal orientation and training effects. Furthermore, measuring situational goal orientation and trait goal orientation at the same time can be prone to common method bias caused by the fact that “measures of different constructs measured at the same point in time may produce artifactual covariance independent of the content of the construct themselves” (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003, p. 882). Therefore, in our study we only measured job-search goal orientation.

Finally, the literature on goal orientation described four distinctive goal orientations: (a) PLGO (i.e., learning-approach), (b) ALGO (i.e., learning-avoidance), (c) PPGO, and (d) APGO (Elliot & McGregor, 2001; Pintrich, 2000b). In our study we decided on ethical grounds to train only the learning-approach dimension of goal orientation because we did not want to provide unemployed job seekers with training with detrimental effects to their job-search process. The avoidance dimensions of goal orientation are negatively related to motivation and performance (Payne et al., 2007; Rawsthorne & Elliot, 1999; Van Yperen, 2003), and although studies have identified positive effects resulting from PPGO (Elliot & Trash, 2002), PPGO is more suited to simple tasks rather than a complex task like job seeking (as supported by VanHooft & Noordzij, 2009). Therefore, in this study we compared LGO training with a training standard in employment counseling practice and viewed as effective in the job-search process. As such, our findings can be interpreted as conservative estimates of the effectiveness of the LGO training. By choosing a useful training as the choice-making training, we were not investigating the effectiveness of the LGO training itself but rather the added value of the LGO training over the choice-making training, which is a standard tool in reemployment counseling.

Nevertheless, to further develop goal-orientation theory, future research on the 2 × 2 framework should be done (e.g., in a controlled lab setting with students) to investigate the effects of training PLGO, ALGO, PPGO, and APGO on situational goal orientation, self-regulation variables, emotions, and performance.

Implications for Practice and Conclusion

In reemployment counseling, training job seekers is common practice. However, most of these trainings have not been investigated empirically
Therefore, our findings have important implications for job seekers and employment counselors. Knowing that self-regulation can be developed through LGO training provides employment-counseling agencies with a powerful tool in their aim to bring people back to work. As job seeking is a highly difficult task with a lot of pressure to perform well, it is important for employment counselors to help unemployed people view their job search as a learning situation that requires improving their competences in job search rather than viewing it as a results-oriented situation, which is the common practice at this moment in employment counseling (Ministry of Social Affairs and Employment, 2012). A LGO towards job seeking can be induced by counseling a job seeker to set learning goals (rather than performance goals), and framing the job-search process as a learning situation. This can be done either in group training setting as we did, or individual counseling sessions.

In conclusion, this study has shown that goal orientation is an important concept in the context of job search and reemployment. Furthermore, integration of self-regulation and goal-orientation theory appears to be a promising avenue for future research on job search. This study adds to the job-search literature by demonstrating that reemployment status can be predicted by more cognitive factors related to self-regulation, in addition to behavioral factors such as job-search intensity. Importantly, these cognitive factors (e.g., learning from failure, strategy awareness, and the forming of job-search intentions) can be increased by training job seekers to adopt a LGO frame towards job seeking and to set learning goals in their job search.

REFERENCES


**APPENDIX**

*Items of the Job Search Goal Orientation Questionnaire (Based on Breland & Donovan, 2005, and Vandewalle, 1997)*

In the next week when I am searching for a job . . . .

(Job-search learning goal orientation)

1 . . . I want to learn as much as possible about searching and applying for jobs.

2 . . . I want to try to understand all procedures and activities in searching and applying for jobs.

3 . . . I want to try to make myself familiar with difficult aspects of searching and applying for jobs.

4 . . . I want to keep trying until I understand the things I do not yet understand about searching and applying for jobs.

(Job-search performance-approach goal orientation)

5 . . . I want to prove to others how good I am in applying for jobs and other job search activities.

6 . . . I want to demonstrate to others how much I know about applying for jobs and other job search activities.

7* . . . I want to make a good impression in job search and applying for jobs.

8 . . . I want to do better than others in job search and applying for jobs.

(Job-search performance-avoidance goal orientation)

9 . . . I want to refrain from learning new things when there is a chance that I look incompetent to others.

10 . . . I prefer avoiding failures in job seeking rather than learn something new.

11 . . . I want to avoid job search activities in which I may I come across as incompetent to others.

12 . . . I want to avoid job search activities on which I might perform poorly.

*Item removed after confirmatory factor analysis.