

PRE-PRINT

Watermann, H., Fasbender, U., & Klehe, U.-C. (2021). Predicting the self-regulated job search of mature-aged job seekers: The use of elective selection, loss-based selection, optimization, and compensation strategies. *Journal of Vocational Behavior*, 128, Article 103591. <https://doi.org/10.1016/j.jvb.2021.103591>.

Predicting the Self-Regulated Job Search of Mature-Aged Job Seekers: The Use of Elective Selection, Loss-Based Selection, Optimization, and Compensation Strategies

Henriette Watermann

Justus-Liebig-University Giessen

Ulrike Fasbender

Justus-Liebig-University Giessen

Ute-Christine Klehe

Justus-Liebig-University Giessen

This research was funded by a grant from the German Research Foundation (ORA-plus project KL 2366/2-1). Corresponding author at: Justus-Liebig-University Giessen, Otto-Behaghel-Strasse 10F, 35439 Giessen, Germany. E-mail address: Henriette.s.schoenhage@psychol.uni-giessen.de (H. Watermann).

Abstract

Job search is a demanding and often demotivating process, challenging job-seekers' self-regulation. Particularly, mature-aged job seekers face lower reemployment chances – and may benefit from strategies known from the lifespan literature. The current study examined whether and when the use of aging strategies (elective selection, loss-based selection, optimization, and compensation; SOC strategies) can support mature-aged job seekers in their self-regulated job search process (goal establishment and goal pursuit). We collected data from 659 mature-aged job seekers in three countries (Germany, United Kingdom, and United States) at four different times over two months. Results of multi-level modeling showed no support for gain-oriented strategies, namely elective selection (prioritizing one instead of multiple goals) and optimization (investing every effort to reach one's goal). In contrast, loss-oriented strategies, namely loss-based selection (prioritizing or selecting a new goal after a setback) and compensation (using new or previously unused means in the face of obstacles), supported mature-aged job seekers' goal establishment and goal pursuit. Moreover, with increasing age, mature-aged job seekers reported lower reemployment efficacy (the confidence to find a new job), which moderated the relation between compensation with goal pursuit. Thus, compensation was particularly helpful for mature-aged job seekers' goal pursuit in weeks in which they reported lower (vs. higher) reemployment efficacy. These findings highlight the importance of loss-oriented aging strategies as beneficial coping strategies. With regard to practice, the present study speaks to the benefits of SOC strategies and points to the development of interventions targeted toward mature-aged job seekers.

Keywords: aging; job search; mature-aged job seekers; reemployment efficacy; self-regulation; SOC strategies

Predicting the Self-Regulated Job Search of Mature-Aged Job Seekers: The Use of Elective Selection, Loss-Based Selection, Optimization, and Compensation Strategies

Job search and unemployment pose serious challenges not only to people's financial security (Ranzijn et al., 2006), identity (Kira & Klehe, 2016), health, and well-being (Griep et al., 2015) but also to their self-regulation (Klehe & van Hooft, 2018). The search for reemployment is a highly demanding and often demotivating process filled with setbacks and negative feedback (van Hooft & Noordzij, 2009; Wanberg et al., 2010). Mature-aged job seekers in particular face stereotypes and discrimination (Posthuma & Campion, 2009), receive fewer job offers (Wanberg et al., 2016), and need longer to find reemployment (Kanfer et al., 2001). These difficulties can impair job seekers' reemployment efficacy (Dahling et al., 2013; Westaby & Braithwaite, 2003), namely their confidence to find a new job (Wanberg et al., 2010), which makes the search for reemployment even harder. Given these challenges and the relevance of mature-aged job seekers in the face of global workforce aging (OECD, 2006), it is important to understand how mature-aged job seekers' ongoing job search can be supported.

Job search calls for continuous high self-regulation because of its unpleasant process and setbacks (van Hooft et al., 2013). For mature-aged job-seekers, the two self-regulatory phases proposed as central are goal establishment and goal pursuit (Fasbender & Klehe, 2019): goal establishment involves setting job-search-related goals, whereas goal pursuit involves specific behavioral activities to reach these goals. Thereby, goal establishment informs goal pursuit, meaning that the clearer one's goals are, the better these goals can be pursued (Côté et al., 2006). When facing the harsh challenges and low prospects that job search entails for mature-aged job seekers, these job seekers' goal establishment and goal pursuit may benefit from four strategies identified in the aging literature to help aging workers to continuously utilize their capabilities in the best possible way, namely elective selection,

loss-based selection, optimization, and compensation (SOC strategies; Freund & Baltes, 2002; Moghimi et al., 2017).

We consider the dynamic nature of the job search process (Wanberg et al., 2005; Wanberg et al., 2010) by applying a within-person approach and study how and when the SOC strategies can facilitate mature-aged job seekers' weekly goal establishment and goal pursuit. Specifically, we argue that mature-aged job seekers' goal establishment is stronger in weeks in which they focus on one instead of multiple job search goals (i.e., elective selection) and re-prioritize or select new goals in response to setbacks (i.e., loss-based selection; Freund & Baltes, 2002). Also, we theorize that mature-aged job seekers' goal pursuit is stronger in weeks in which they invest themselves in their job search (i.e., optimization) and respond to setbacks and challenges by using new or previously unused means (i.e., compensation; Freund & Baltes, 2002). Moreover, we focus on the moderating role of age and reemployment efficacy. We expect that with increasing age, mature-aged job seekers' reemployment efficacy will decrease and that reemployment efficacy moderates the SOC strategies' relations with goal establishment and goal pursuit. We assume that mature-aged job seekers benefit more strongly from using SOC strategies in weeks in which their reemployment efficacy is lower (vs. higher) because self-regulation is more important when one's confidence about finding a new job has plummeted (Kanfer & Bufton, 2018). Figure 1 shows our conceptual model.

With this, we aim to make three contributions to the literature. First, we contribute to the emerging research on the self-regulated job search by focusing on two central phases of the job search process among mature-aged job seekers, namely goal establishment and goal pursuit (Fasbender & Klehe, 2019). As the self-regulated job search is dynamic and can vary from week to week (Wanberg et al., 2005; Wanberg et al., 2010), we apply a within-person design. With this, we shift the attention toward the changes job seekers experience over time and away from the well-studied between-person approach because findings on one level do not necessarily generalize to the other level (Dalal et al., 2014).

Second, we introduce the SOC strategies stemming from the aging literature as adaptive coping strategies to the job search context. Specifically, we study how SOC strategies can facilitate goal establishment and goal pursuit. Thus, we test part of the conceptual model of job search and (re)employment from a lifespan development perspective (Fasbender & Klehe, 2019). While previous research mainly studied whether job seekers have self-regulatory resources or not (Kanfer et al., 2001; Liu, Wang et al., 2014), little is known about how job seekers actually manage their goals and means during the job search process. Relatedly, we also contribute to the research on SOC strategies. Past research has either focused on the four SOC strategies' aggregated effect (Breevaart & Zacher, 2019; Venz et al., 2018) or isolated strategies (Abele & Wiese, 2008). We add to a more fine-grained understanding of the SOC strategies' usefulness by disentangling the four SOC strategies and examining their distinct effects on goal establishment and goal pursuit.

Third, we deepen our understanding of the job search among mature-aged job seekers by exploring the moderating role of age and reemployment efficacy on the links between SOC strategies with goal pursuit and goal establishment. So far, we know little about why mature-aged job seekers engage in different job search behaviors (Wanberg et al., 2016), as only a few studies addressed the mechanisms explaining the moderating role of age (Zacher, 2013; Zacher & Bock, 2014). We expect that age diminishes mature-aged job seekers' confidence in finding reemployment and, thus, explain why SOC strategies become more important with increasing age. Hence, by explicitly taking age and reemployment efficacy into account, we shed light on mature-aged job seekers' psychological conditions when searching for reemployment and highlight how particularly mature-aged job seekers, who often have little confidence to find a new job, can benefit from the use of the SOC strategies.

Theoretical Background and Hypotheses Development

Self-Regulated Job Search

Job search is a self-regulated process in which cognition and behavior are devoted to identifying and pursuing job opportunities (van Hooft et al., 2020). Furthermore, it is highly dynamic with considerable variability within job seekers (da Motta Veiga & Turban, 2018; Kreemers et al., 2018; Wanberg et al., 2005), as job seekers' search intensity can change (i.e., decrease, remain stable, or increase over time; Wanberg et al., 2005) from week to week.

When addressing the job search process among mature-aged job seekers, Fasbender and Klehe (2019) identified two self-regulatory phases as particularly important: goal establishment and goal pursuit. *Goal establishment* involves setting job-search-related goals. Conscious and clear goals are important to initiate targeted job search behavior (van Hooft et al., 2013). Having clear job search goals likely helps to commit to these goals and implement them in an organized hierarchical system (Fasbender & Klehe, 2019; van Hooft et al., 2013). Previous research found clear job search goals to positively predict relevant job search outcomes, such as employment quality (van Hooft et al., 2020), job improvement, career growth, and organizational identification (Zikic & Klehe, 2006). Moreover, interventions including a goal-setting component are more effective for obtaining reemployment than interventions without (Liu, Huang et al., 2014). *Goal pursuit* describes the effort that job seekers put into specific behavioral actions to reach the established job search goal (e.g., looking for jobs on the internet, revising the resume, or sending out application letters). Goal pursuit predicts key job search outcomes, such as the number of received job offers and the duration of unemployment (Kanfer et al., 2001; van Hooft et al., 2020; Wanberg et al., 2016).

Conceptually, goal establishment and goal pursuit are related, meaning that goal establishment should inform goal pursuit (van Hooft et al., 2013). Thus, we assume that in weeks in which job seekers set clearer goals for themselves, it is easier for them to pursue these goals. In contrast, in weeks in which job seekers formulate no or only vague goals, their

goal pursuit is lower because it is hard to pursue specific activities out of non-existing or unclear goals. In line with this assumption, previous research on the between-person level found that job seekers who only set vague goals for themselves showed lower goal pursuit (Côté et al., 2006). We state:

Hypothesis 1: Job seekers' within-person goal establishment is positively related to within-person goal pursuit.

Elective Selection, Loss-Based Selection, Optimization, and Compensation

The SOC model has its origin in the lifespan development literature to address strategies that help people coping with aging-related changes over the lifespan (Baltes et al., 1999), as people experience more losses and fewer gains over the lifespan (Heckhausen et al., 1989), and need to rebalance these experiences. Based on action-theoretical framework, the SOC model describes four aging strategies that are categorized along two dimensions. They can (1) be categorized as goal focused (i.e., elective and loss-based selection) and means-focused (i.e., optimization and compensation), or (2) as gain-oriented (i.e., elective selection and optimization) and loss-oriented (i.e., loss-based selection and compensation). People may use them to rebalance their gains and losses by improving (i.e., gain-oriented strategies) or restoring (i.e., loss-oriented strategies) effective functioning (Moghimi et al., 2017).

The SOC model first addresses the goals that people pursue and differentiates two selection strategies: elective selection and loss-based selection. *Elective selection* is defined as the prioritization of one's primary goals rather than pursuing multiple goals simultaneously in order to reach a desired state (Freund & Baltes, 2002). Applied to the job search context, this might imply, for example, that a job seeker first focuses on finding a job that fits their working experience before looking for a job that also pays well. *Loss-based selection* is defined as the reconstruction of one's goal system to maintain a given level of functioning within that goal domain, despite setbacks and shortcomings. It implies that people disengage from unattainable goals and adjust or select new goals when they experience losses (Freund &

Baltes, 2002; Moghimi et al., 2017). Specifically, this strategy is necessary when they cannot compensate for the lack of one capacity by acquiring another (Moghimi et al., 2017). Within job search, this could entail that a job seeker who failed to “find a job within walking distance” redefines their job search goal (e.g., “find a job accessible with public transport”).

Second, the SOC model addresses optimization and compensation, which are both means-focused (Fasbender & Klehe, 2019; Freund & Baltes, 2002), as they address the approach that people use to pursue their goals. *Optimization* is defined as the use of available means, and it aims to acquire, apply, and improve the use of appropriate means (e.g., effort, knowledge, and time) to reach goals (Freund & Baltes, 1998). Transferred to the job search context, optimization might manifest, for instance, by using a time of the day that one is most motivated to look for a job. *Compensation* is defined as the search for and use of new or previously unused internal (e.g., personal time) or external (e.g., job information from friends) means. It enables people to find alternative ways to reach a goal (Freund & Baltes, 1998) and thus helps to restore functioning in the absence or loss of goal-relevant means (Moghimi et al., 2017). Applied to job search, compensation may entail that a mature-aged job seeker without a computer of their own borrows a computer from a friend or goes to an internet café to pursue their job search goals.

As already mentioned, the SOC strategies can be further categorized into gain-oriented (i.e., elective selection and optimization) and loss-oriented (i.e., loss-based selection and compensation) strategies. Gain-oriented strategies focus on reaching a desired state. In this regard, elective selection involves the focus on a few goals and a specific goal domain, whereas optimization involves the investment of goal-relevant means to reach these goals. Loss-oriented strategies focus on how to react to a loss. Specifically, loss-based selection is about changing the goal itself, whereas compensation is about the use of alternative means to reach the same goal (Freund & Baltes, 2002).

Elective and Loss-Based Selection on Goal Establishment

We expect that elective and loss-based selection support mature-aged job seekers' goal establishment because both strategies concern the appropriate selection of goals. To decide which goals to focus on, one needs to have an idea about which goals are most important, urgent, or desired (Moghimi et al., 2017). A focus on the most important goals likely results in clearer goals that one can better commit to. During job search, elective selection may help to focus on the goal to find a job and to delay goals related to other life domains, such as family (e.g., babysitting the (grand)children) or hobbies (e.g., training for a marathon). However, when mature-aged job seekers face obstacles that are hard to overcome (e.g., a craftsperson seeking work after suffering a back injury), loss-based selection may help them to reposition themselves and adjust or find new goals (e.g., teaching students in their field of expertise) instead of giving up. Therefore, both strategies likely facilitate goal establishment. Since both the use of SOC strategies and the job search process vary within people (Moghimi et al., 2017), we assume that mature-aged job seekers show more goal establishment in weeks they use elective and loss-based selection strategies compared to weeks in which they do not use these strategies. Following this argumentation, we state:

Hypothesis 2: Job seekers' within-person (a) elective and (b) loss-based selection are positively related to within-person goal establishment.

Optimization and Compensation on Goal Pursuit

Optimization and compensation are means-focused. Rather than targeting people's goals per se, they address the means by which people strive toward these goals and thus, are likely to improve job seekers' goal pursuit. Specifically, optimization strategies imply a focus of one's available means to the task at hand. Thus, they may help mature-aged job seekers to allocate their personal time and energy to their job search activities (Venz et al., 2018). Mature-aged job seekers may focus their attention on the benefits of finding a new job (e.g., socio-emotional meaning at work) and withstand temptations like invitations or calls for help

by friends. Hence, the use of optimization strategies should ensure that mature-aged job seekers realize their planned job search activities. Compensation may help them to figure out alternative routes toward reemployment instead of giving up after setbacks and losses, and thus foster goal pursuit. Furthermore, compensation likely ensures goal pursuit by utilizing social contacts (i.e., external means) when a job seeker otherwise could not carry out the task. For example, a mature-aged job seeker might contact previous colleagues for advice or possible job openings. Following this argumentation, we assume that mature-aged job seekers show more goal pursuit in weeks when they use more optimization and compensation strategies compared to weeks when they use less of these strategies. Thus, we state:

Hypothesis 3: Job seekers' within-person (a) optimization and (b) compensation are positively related to within-person goal pursuit.

The Moderating Effect of Age and Reemployment Efficacy on Job Search

Job search differs within the group of mature-aged job seekers (Wanberg et al., 2016). Therefore, we study how age moderates the relations between elective selection and loss based selection with goal establishment, and optimization and compensation with goal pursuit. However, as age is just a number, we need to study the psychological mechanism that can explain the moderating role of age, such as reemployment efficacy. *Reemployment efficacy* can be defined as the believed ability to obtain job offers or find an acceptable job (da Motta Veiga & Turban, 2018; Wanberg et al., 2010). We assume that job seekers' age via reemployment efficacy moderates the relations between SOC strategies with goal establishment and goal pursuit. Thus, we want to clarify for whom these strategies are most effective. We expect that these strategies are most effective when mature-aged job seekers' reemployment efficacy is lower, which is more likely the case, the older a job seeker is.

First, we argue that age reduces reemployment efficacy because negative job search experiences add to a heightened experience of losses for mature-aged job seekers. With increasing age, job seekers face more challenges and reduced reemployment prospects.

Recruiters tend to have negative attitudes toward mature-aged applicants (Fasbender & Wang, 2017), leading to fewer job offers (Wanberg et al., 2016) and longer time to reemployment (Kanfer et al., 2001). Previous research reported a negative correlation between age and reemployment efficacy (Liu, Wang et al., 2014; Wanberg et al., 2010). Thus, we state:

Hypothesis 4: Age is negatively related to reemployment efficacy.

Second, reemployment efficacy should moderate the relations between SOC strategies with job search behavior. While we argued how increasing age can weaken reemployment efficacy on the between-person level, job seekers' reemployment efficacy can vary during the job search process (Liu, Wang et al., 2014). Declines within a job seekers' reemployment efficacy can impair their job search process and therewith, increase the need to use coping strategies (Kanfer & Bufton, 2018). SOC strategies were originally devised to identify how people can successfully cope with the increasing challenges of aging as a context of harsh challenges and declining prospects (Heckhausen et al., 1989). Transferring these insights to the job search context, SOC strategies may be particularly useful in weeks in which mature-aged job seekers doubt to find reemployment. We, therefore, study reemployment efficacy as a moderator to the links between SOC strategies with goal establishment and goal pursuit.

Reemployment Efficacy and Goal Establishment

Specifically, reemployment efficacy will likely moderate the within-person relations of elective and loss-based selection with goal establishment such that job seekers should benefit more from elective and loss-based selection in weeks in which their reemployment efficacy is lower compared to weeks in which it is higher, as in the latter case, job seekers tend to set higher goals (Bandura & Locke, 2003). Thus, no particular strategies may be needed to ensure a successful goal establishment and job seekers will likely be less dependent on elective and loss-based selection. Yet, in weeks in which job seekers' reemployment efficacy is lower, the successful establishment of their goals is endangered, and they may benefit from elective selection and loss-based selection to ensure a successful goal

establishment. For example, the use of elective and loss-based selection enables job seekers to set more autonomous goals (Bajor & Baltes, 2003) and to adjust these goals with a lot of flexibility (Freund & Baltes, 2002). This should keep job seekers' goal establishment high, despite lower reemployment efficacy. However, if mature-aged job seekers fail to electively select their goals or to adapt them while they perceive their reemployment efficacy as lower, they will less likely devise clear goals but rather find themselves discouraged. We state:

Hypothesis 5: Job seekers' within-person reemployment efficacy moderates the relations between within-person (a) elective selection and b) loss-based selection with goal establishment in a way that the positive relation will be stronger when reemployment efficacy is lower (vs. higher).

Reemployment Efficacy and Goal Pursuit

Similarly, reemployment efficacy will likely moderate the within-person relations between optimization and compensation with goal pursuit. In weeks in which job seekers perceive their reemployment efficacy as higher, they less likely need to manage themselves via optimization and compensation and should maintain a relatively high goal pursuit, as higher reemployment efficacy goes along with persisting in the face of setbacks (Bandura & Locke, 2003). Yet, in weeks in which job seekers perceive their reemployment efficacy as lower, their goal pursuit might be endangered, and they likely benefit more from optimization and compensation, as a higher use of these strategies implies a higher investment of energy into goal achievement (Freund & Baltes, 1998). However, if they fail to optimize their goal pursuit or compensate for experiencing losses in the face of lower reemployment efficacy, they will less likely be able to pursue their goal. We state:

Hypothesis 6: Job seekers' within-person reemployment efficacy moderates the relation between within-person (a) optimization and (b) compensation with goal pursuit in a way that positive relations will be stronger when reemployment efficacy is lower (vs. higher).

Method

Sample and Procedure

We surveyed mature-aged job seekers via four online questionnaires spread across two months. The surveys were administered bi-weekly, thus participants were invited to complete a survey every second week. We allowed participants up to four days to complete each survey. We chose a time lag between questionnaires of two weeks because the job search process is highly dynamic and may change from week to week (Kreemers et al., 2018; Wanberg et al., 2005). The data for this study was collected as part of a bigger data collection. The first survey covered participants' demographics (i.e., age, gender, educational level, unemployment duration, country), and all four surveys covered all study variables (i.e., goal establishment, goal pursuit, SOC strategies, reemployment efficacy).

Participants received financial compensation for each questionnaire they completed (up to €17 in total)¹. They were recruited via a professional data collection company, which creates data with similar psychometric properties and criterion validities compared to conventional data collection methods (Walter et al., 2019). We recruited participants from three different countries (i.e., Germany, the United Kingdom, and the United States) and thus considered participants from different cultural, unemployment, and retirement systems (Wanberg et al., 2020). Participants were invited if they were 40 years² or older, currently unemployed and actively looking for a job (cf. Zacher, 2013; Zacher & Bock, 2014). Overall, 659 participants took part at Time 1. To ensure data quality and that participants paid attention to the questions' content, we checked for straightliners (i.e., identical answers in a set of questions so that positive and negative recoded items of a construct were rated the

¹ Participants received €5 for the first and longest questionnaire. For the second, third and fourth questionnaire they received €3, €4, and €5 respectively, as an increase of compensation with each questionnaire can foster participants motivation not to drop-out (Wang et al. , 2017).

² Although there is no standardized definition of who is considered a mature-aged worker, we chose 40 years as a cut-off value, which is consistent with the United States Age Discrimination in Employment Act (United States Equal Employment Opportunity Commission , 2013) and previous studies on mature-aged job seekers (Zacher, 2013; Zacher & Bock; 2014).

same) at all four time points (Zhang & Conrad, 2014). We excluded 36 participants because they failed the check for straightliners more than once during a questionnaire. Of the resulting 623 participants, 224 also took part at Time 2, 191 took part at Time 3, and 147 took part at Time 4, resulting in 1185 available data points. Following recommendations by Goodman and Blum (1996), we tested if the final sample differed from “leavers” (i.e., participants who were excluded, stopped responding, and/or found a job during the study) on control (i.e., gender, unemployment duration, country, and educational level) and study variables (i.e., SOC strategies, reemployment efficacy, goal establishment, goal pursuit, and age). We found no significant differences for gender and unemployment duration. However, the educational level was slightly lower among “leavers” ($t(657) = 2.31, p = .013$). In the “leavers”-group were significantly more German job seekers than American job seekers compared to the final sample ($t(657) = -2.19, p = .030$). There was no difference between British and American job seekers in the two groups. Regarding our study variables, we found no difference for elective selection, optimization, compensation, reemployment efficacy, and goal establishment. However, loss-based selection ($t(657) = -2.81, p = .005$) and goal pursuit ($t(657) = -2.74, p = .006$) were both slightly higher among “leavers”.

Of the total sample ($N = 623$), 432 (69.34%) were female and 188 (30.18%) held a university degree. About half of the sample ($n = 325, 52.17%$) lived in the United States and the others in the United Kingdom ($n = 158, 25.36%$) or Germany ($n = 140, 22.47%$). On average, participants were 51.13 years old ($SD = 7.56$; ranging from 40 to 80) and on average unemployed for 5.40 months ($SD = 3.47$; longest unemployment duration was 14 months).

Measures

Items were administered in the respective language of the participants, namely in English and German, for which they had previously been translated using the back-translation process (Brislin, 1970). We introduced all job search-related items with: “In the past week, how have you approached your job search?”, followed by the constructs and their items.

Goal Establishment

Goal establishment was measured by the three items from Gould (1979) that address the existence and clarity of career goals. The items were answered on a 7-point Likert scale ranging from 1 (*Strongly disagree*) to 7 (*Strongly agree*). An example (reverse coded) item was: “My career objectives are not clear” (Cronbach’s $\alpha = .88$).

Goal Pursuit

We measured goal pursuit with van Hooft et al.’s (2004) 11-item version of Blau’s (1994) classic job search scale. The items were answered on a 5-point Likert scale ranging from 1 (*No time at all*) to 5 (*A great deal of time*). The items were introduced with “In the past week, how much time did you spend on each of the following job search activities?”; an example was “Looked for jobs on the internet” (Cronbach’s $\alpha = .91$).

SOC Strategies

We measured the use of the SOC strategies with the 12-item scale by Baltes et al. (1999). Items were answered on a 7-point Likert scale ranging from 1 (*Does not apply at all*) to 7 (*Applies completely*). We contextualized the scale by adding “during my job search” to each item. Example items were: “I concentrate all my energy on few things during my job search” (elective selection; Cronbach’s $\alpha = .89$), “When I can’t do something important the way I did before, I look for a new goal during my job search” (loss-based selection; Cronbach’s $\alpha = .91$), “If something matters to me during my job search, I devote myself fully and completely to it” (optimization; Cronbach’s $\alpha = .91$), and “When things don’t go as well as they used to during my job search, I keep trying other ways until I can achieve the same result I used to” (compensation; Cronbach’s $\alpha = .88$).

Age

We rescaled the chronological age of the participants by a factor of 10 to facilitate the interpretation of the coefficient in our statistical analyses and results (Fasbender et al., 2020).

Reemployment Efficacy

Reemployment efficacy was measured with the 4-item scale by Wanberg et al. (2010). The items were answered on a 7-point Likert scale ranging from 1 (*Strongly disagree*) to 7 (*Strongly agree*). The items were introduced with “How confident are you about the following”, an example item was “Finding a job that I like” (Cronbach’s $\alpha = .81$).

Control Variables

We included gender (1 = *female*, 2 = *male*) and educational level (1 = *no university degree*, 2 = *university degree*) as potential control variables as male and higher educated job seeker showed more job search intensity (Kanfer et al., 2001). We also included country (two dummy-coded variables for the United Kingdom and Germany with the United States as the reference country) as a potential control-variable, as countries differed in respondents’ job search intensity (Wanberg et al., 2020). Finally, we controlled for unemployment duration (in months), as job search intensity decreased across the time unemployed (Kulik, 2001).

Results

Preliminary Analyses

Table 1 presents correlations, means, standard deviations, and Cronbach’s alphas of all study variables. As country, educational level, and unemployment duration correlated significantly with goal establishment or pursuit, we included them as control variables in the analysis (Becker et al., 2016). The intraclass correlations of all within-variables ranged between .53-.71, whereas 67% of the total variance of goal establishment was within-person; 24% of goal pursuit, between 69 and 93% of the SOC strategies and 29% of reemployment efficacy. These results show sufficient within-person fluctuation, calling for a multilevel approach (Singer et al., 2003). Weeks (Level 1) were nested in job seekers (Level 2) and hierarchical linear modeling was applied to meet the requirements of this multilevel structure (Raudenbush & Bryk, 2002). The data was analyzed using MPlus 8.3 (Muthén & Muthén, 2018).

Construct Validity

We conducted multilevel confirmatory factor analyses to test the construct validity of the measures used in our model. For goal pursuit we created three parcels using the item-to-construct balance method to improve the parameter to respondents ratio, which otherwise could lead to instability of the factor solution (Little et al., 2002). This is acceptable as our focus lies on the structural relation (Sterba & Rights, 2017; Wanberg et al., 2020). Our 7-factor solution (i.e., goal establishment, goal pursuit, reemployment efficacy, elective selection, loss-based selection, optimization, and compensation) reached an acceptable fit, and was superior to alternative 6-, 5-, 4-, and 1-factor solutions (Table 2). These results support the discriminant validity of the measures used in our study.

Measurement Invariance

Next, we tested measurement invariance across the three countries using multigroup confirmatory factor analyses to ensure that the scales were similarly understood by participants from the three different countries (Davidov et al., 2014; Wanberg et al., 2020). First, we tested our model for configural invariance (i.e., same factor structure) which resulted in a reasonable fit ($\chi^2(587) = 878.321, p < .001, CFI = .906, RMSEA = .035$). We then applied several constraints to test for metric invariance (i.e., same factor loadings), scalar invariance (i.e., same intercepts) and full invariance (i.e., same residuals). We compared the CFI values of the subsequent models and used the recommended cut-off value of 0.01 (Cheung & Rensvold, 2002). The difference between the configural and metric invariance model, and the metric and the scalar invariance model was smaller than the cut-off-value of 0.01. However, the difference between the scalar and full invariance model was bigger than 0.01. The results suggest scalar invariance across the three countries and therefore we can pool the data together into one sample (Table 3).

Hypotheses Testing

Results of the hierarchical linear modeling employed to test Hypotheses 1 to 7 are presented in Table 4. On the within-person level, we found a positive and significant effect for goal establishment on goal pursuit ($\gamma = 0.06, p = .010$); Hypothesis 1 was therefore supported. Additionally, on the between-person level, we found a similar effect ($\gamma = 0.06, p = .010$).

On the within-person level, results revealed no significant effect for elective selection on goal establishment ($\gamma = 0.03, p = .569$); Hypothesis 2a was therefore not supported. However, we found a positive and significant effect for loss-based selection ($\gamma = 0.12, p = .043$), supporting Hypothesis 2b. Similar results emerged on the between-person level for both elective selection ($\gamma = 0.07, p = .306$) and loss-based selection ($\gamma = 0.13, p = .066$).

On the within-person level, results revealed no significant effect for optimization on goal pursuit ($\gamma = 0.05, p = .108$); Hypothesis 3a was therefore not supported. However, we found a positive and significant effect for compensation ($\gamma = 0.12, p = .012$), supporting Hypothesis 3b. Additionally, on the between-person level, we found positive and significant effects for both optimization ($\gamma = 0.09, p = .005$) and compensation ($\gamma = 0.21, p < .001$).

On the between-person level, we found a significant and negative effect of age on reemployment efficacy ($\gamma = -0.21, p = .003$), supporting Hypothesis 4.

On the within-person level, the results revealed no significant interaction effect between reemployment efficacy and elective selection ($\gamma = -0.02, p = .886$), nor between reemployment efficacy and loss-based selection on goal establishment ($\gamma = -0.05, p = .649$). Thus, Hypotheses 5a and 5b were not supported. On the between-person level, the results were similar for the interaction effect between reemployment efficacy and elective ($\gamma = -0.03, p = .637$) and loss-based selection ($\gamma = 0.09, p = .077$).

On the within-person level, we found no significant effect for the interaction between reemployment efficacy and optimization ($\gamma = 0.02, p = .736$), thus, Hypothesis 6a was not supported. However, we found a significant interaction effect between reemployment efficacy

and compensation on goal pursuit ($\gamma = -0.14, p = .024$). We plotted the interaction effect one standard deviation (*SD*) above and below the mean of reemployment efficacy (Figure 2).

Furthermore, a simple slope difference test revealed that the positive relation between compensation and goal pursuit was stronger when reemployment efficacy was lower ($-1 SD$, simple slope = 0.26, $p = .004$) as compared to job seekers with average reemployment efficacy (simple slope = 0.12, $p = .009$, slope difference = $-0.14, p = .020$), and no longer significant when reemployment efficacy was higher ($+1 SD$, simple slope = $-0.02, p = .729$, slope difference = $-0.14, p = .020$). Together, these findings support Hypothesis 6b.

Although not explicitly hypothesized, we tested the indirect moderation effect of age via reemployment efficacy on the relation between compensation and goal pursuit. This effect was positive and significant ($\gamma = 0.03, 95\% CI [.0033, .0641]$). Specifically, we found that the effect of compensation on goal pursuit was 0.14 (95% CI [$-0.0539, -0.0001$]) when job seekers' age (via reemployment efficacy) was higher ($+1 SD$) versus 0.09 (95% CI [$-0.0359, .0001$]) when job seekers' age was lower ($-1 SD$). Relatedly, the difference between the two effects was significant (difference = $-0.04, 95\% CI [-0.0218, -0.0001]$).

On the between-person level we further found significant interaction effects for reemployment efficacy and both optimization ($\gamma = -0.07, p = .001$) and compensation ($\gamma = 0.05, p = .006$, Table 4). Yet, both between-person level moderation effects became non-significant when tested in separate models and thus were not further considered.

Post-Hoc Multigroup Analysis

Following the procedure of Wanberg et al. (2020), we further analyzed the robustness of our results across the three countries. In particular, we specified the three countries as groups and ran a multigroup multilevel analysis. First, we estimated a free model as a baseline model for our outcome variables where all paths could vary freely across the three countries. Next, we set all the hypotheses' relevant effects (i.e., SOC strategies, interaction terms and goal establishment on the within-level and age on the between-level) invariant across the three

countries to create a substantive study variables model. The results showed no significant deterioration of the model fit compared to the baseline model ($\Delta\chi^2(20) = 22.207, p = .329$). Furthermore, we applied additional equality constraints by setting the rest of the variables (i.e. SOC strategies, interaction terms and goal establishment on the between-level as well as the control variables and reemployment efficacy) invariant across the three countries. The results showed no significant deterioration of the model fit compared to the substantive study variables model ($\Delta\chi^2(38) = 47.518, p = .139$). These results suggest that the effects we found for our substantive study variables as well as for our control variables are similarly supported in all three countries (Cheung & Rensvold, 2002; Wanberg et al., 2020).

Discussion

This study aimed to investigate whether the use of the SOC strategies can support mature-aged job seekers in the course of their job search process and to understand the moderating role of age and reemployment efficacy. With this, we contributed to the literature on self-regulation during job search and tested the potential benefits of aging strategies not in the aging but in another context full of challenges and setbacks (i.e., job search context).

The findings from our multilevel analysis indicate that goal establishment informed goal pursuit on the within- and the between-person level. Thus, in weeks in which job seekers established clearer employment goals for their future, they also pursued these goals more intensely, and job seekers who generally set clear goals showed a higher goal pursuit.

Moreover, we found on the within-person level that mature-aged job seekers' goal establishment improved whenever they used loss-based selection and their goal pursuit improved whenever they used compensation strategies. In contrast, elective selection was unrelated to participants' goal establishment, nor did their use of optimization strategies lead to an increase in their goal pursuit. On the between-person level, our results were similar, with the exception of loss-based selection, which was only marginally significant and optimization, as job seekers who generally used it more showed a higher goal pursuit. Taken together, these

results highlight the benefits of loss-oriented aging strategies (i.e., loss-based selection and compensation) in supporting mature-aged job seekers in their self-regulatory job search process. As we consistently found these effects both on the within- and between-person level, loss-oriented strategies generally appear beneficial, both for an individual going through the job search process across time and between persons. Job seekers who apply these strategies more were also more engaged in goal establishment and goal pursuit. In contrast, in the case of the gain-oriented aging strategies, we only found an effect for optimization, and this effect only occurred on the between-person-level. These findings are in line with earlier research that noted how losses are more salient to people than gains (Schmitt et al., 2012; see also Hobfoll, 1989) and showed that SOC strategies lead to higher work-related outcomes, such as an increased job performance and work engagement (Moghimi et al., 2017; Venz et al., 2018).

Regarding the moderating role of reemployment efficacy, we found that compensation strategies were primarily effective in supporting goal pursuit in weeks in which mature-aged job seekers faced a lower reemployment efficacy. In contrast, in weeks when reemployment efficacy was higher, job seekers' goal pursuit remained comparably high, regardless of their use of compensation strategies. Especially since reemployment efficacy neither moderated the relations between elective or loss-based selection with goal establishment nor between optimization with goal pursuit, we see an increased need for compensation to keep on going as soon as a job seeker is in doubt of their job search success. These results fit previous research showing SOC strategies to be particularly effective in difficult (employment) situations (Müller et al., 2016). Additionally, the difficulties accompanied by lower reemployment efficacy seem to be only relevant when job seekers pursue their job search goals but does not seem to influence the goals they set themselves.

Furthermore, we found that with increasing age, mature-aged job seekers reported lower levels of reemployment efficacy. Thus, the relation between compensation and goal pursuit was indirectly moderated by age via reemployment efficacy: Older mature-aged job

seekers with lower reemployment efficacy benefited more from compensation to improve their goal pursuit than younger mature-aged job seekers with lower reemployment efficacy.

Theoretical Implications

This study offers three theoretical implications for the scholarly literature. First, in line with conceptual work on the job search process (van Hooft et al., 2013), we found goal establishment to inform goal pursuit. Therefore, we expand our understanding of job search as a dynamic process by applying a within-person design and showing intra-individual variability in the job search process over time (Schmitt et al., 2012; Venz et al., 2018). By simultaneously considering within-person and between-person effects, we provide a complete picture of the self-regulated job search. Furthermore, we underline the importance of such combined approaches, as our results were not always generalizable from one level to another.

Second, our findings extend the job search literature by introducing the SOC strategies and expand our knowledge on the job search among mature-aged job seekers by supporting parts of the conceptual model of job search and reemployment by Fasbender and Klehe (2019). Prior research has addressed the benefits of different resources that aid job seekers' job search (Kanfer et al., 2001; Liu, Wang et al., 2014). This study does not focus on job seekers' resources but on their aging strategies in terms of selecting and pursuing their employment goals. Specifically, we showed that loss-oriented strategies play a crucial role in mature-aged job seekers' job search process. No support was found for the benefits of gain-oriented strategies. Thus, protecting oneself from negative aspects and finding a way around obstacles of the job search process seems to offer a greater benefit for mature-aged job seekers' self-regulated job search than prioritizing a small number of goals and optimizing one's available means and behavior, which might be because of the rather heightened amount of negative job search experiences (Klehe & van Hooft, 2018). Considering research on SOC strategies (Breevaart & Zacher, 2019; Venz et al., 2018), our findings show distinct effects of

different SOC strategies, rather than combining these strategies in a conglomerate (cf. Moghimi et al., 2017), our results thus encourage a differentiated consideration.

Third, we deepen our understanding of job search particularly among mature-aged people, by highlighting the moderating role of age and reemployment efficacy concerning the relation between the SOC strategies and goal establishment and goal pursuit. We uncovered a mechanism (i.e., reemployment efficacy) that explains why mature-aged job seekers with increasing age engage differently in their job search behavior (Wanberg et al., 2016). Specifically, we found that those with higher (vs. lower) age benefit more from using compensation strategies to improve their goal pursuit due to their lower (vs. higher) reemployment self-efficacy. The difference within the group of mature-aged job seekers illustrates the importance of age-heterogeneity when studying specific age groups (cf. Nagy et al., 2019).

Practical Implications

With regard to practice, the present study first points to the variability of job search within people. For practitioners advising job seekers during the job search process, this may imply that rather than offering one-time advice, job seekers may benefit from repeated counseling to clarify and adjust their goals and maintain a high goal pursuit.

Second, the results suggest that the use of loss-oriented SOC strategies should be encouraged within mature-aged job seekers to manage the increased losses and setbacks they encounter when searching for a job. Specifically, they should focus on learning about loss-based selection to foster their goal establishment and about compensation to foster their goal pursuit. For example, instead of giving up on a goal (e.g., finding a job in the same industrial sector), a job seeker should look for other attainable goals (e.g., finding a job in another industrial sector; i.e., loss-based selection), or they could involve friends and family members to help with their job search (e.g., proof-reading the motivation letter; i.e., compensation).

Furthermore, our findings point to the development of interventions targeting job seekers' SOC strategies use. For example, earlier research demonstrated notable effects of face-to-face interventions focusing on the training of SOC strategies among nurses who faced difficult employment situations (e.g., low job control; Müller et al., 2016). In the context of job search, career counselors and unemployment agencies could implement such interventions, for instance, by training mature-aged job seekers to select relevant job search goals and to allocate their time and effort effectively, especially in the face of job-search-related losses. Furthermore, they could be made aware of the dynamic nature of the job search and its possible pitfalls. Our findings highlight that job seekers can profit from interventions targeting SOC strategies particularly in times in which their reemployment efficacy is lower.

Moreover, also mature-aged job seekers' reemployment efficacy should be fostered, since interventions that target both motivational aspects (e.g., reemployment efficacy) and skill enhancements (e.g., goal setting, SOC strategies) are more effective in contrast to interventions that focus on only one of these aspects (Liu, Huang et al., 2014). It is reasonable to assume that other job seekers who are challenged by unfavorable conditions during the job search could also benefit from such interventions. For example, younger unemployed job seekers suffer from higher levels of stress and more unclear job search goals and thus interventions have proven to be particularly effective for them (Liu, Huang et al., 2014).

Limitations and Directions for Future Research

In our study, attrition due to participants finding employment, dropping out or responding carelessly reduced our overall sample size. We do not think that these drop-outs have a major effect on our results, as they do not seem to come from particular demographic groups. In addition, we corrected the data by applying full information maximum likelihood estimation and therewith estimating missing values (cf. Wang et al., 2017).

We used scales for goal establishment and goal pursuit that are well known and often used in current job search research (Kanfer et al., 2001; Liu, Huang et al., 2014; Zikic &

Klehe, 2006). However, following the definition of these constructs by self-regulation theories in job search, the scales we used rather focus on single facets (e.g., we focused on specific behavior activities when measuring goal pursuit). As there are no existing measures of goal establishment and goal pursuit that capture them holistically (i.e., considering each facet of their definitions), future research can optimize these measures by developing new scales that eliminate these concerns, for example by capturing all facets (e.g., further facets of goal pursuit are goal shielding, self-control, and self-monitoring³; van Hooft et al., 2013) or by focusing on another facet or a different measure to capture goal establishment or pursuit.

Further, while our sample comprises three countries (Germany, United Kingdom, and United States), and while we found no differences between those countries, even though they differ in respect to unemployment and retirement systems (Wanberg et al., 2020) these are all individualistic and no collectivistic (e.g., Asian) countries. In more individualistic cultures, job seekers tend to be more motivated by their personal attitudes and less by social pressure (van Hooft & Jong, 2009). We, therefore, recommend future research to study whether our findings are also applicable to collectivistic countries.

In addition, this study is based on self-reported data. However, we reduced concerns of common method variance as we used (1) a multivariate design with multiple points of measurement enabling us to consider and test within- and between-person level effects and (2) different scale points and anchors (Podsakoff et al., 2012). Nevertheless, future research could gather other-reported data (e.g., from career counselors or family members) or objective data (e.g., number of applications sent out), as well as measures of eventual job-search success. This would enable a more holistic and thus reliable understanding of the involved processes.

³ As goal monitoring can be seen as an “after” phase of the self-regulation process (see Klehe et al., 2021 for a framing of career-related action phases), we ran additional analyses looking at the effects of the SOC strategies on goal monitoring. Compensation had a positive effect on goal monitoring, whereas elective selection, loss-based selection, and optimization had no significant effects. Results are available on request to the first author.

Moreover, future research may capture the daily dynamics of the job search process. As we tested the effect of goal establishment on goal pursuit without a time lag, more research is needed to test if goal pursuit also informs goal establishment and in which time horizon this effect may be strongest (i.e., daily or weekly). Furthermore, for unemployed job seekers, the job search process itself usually qualifies as a rather negative experience, as it is filled with setbacks and negative feedback (van Hooft & Noordzij, 2009; Wanberg et al., 2010). Our findings suggest loss-oriented strategies to cope with the potential negative experiences. Since negative aspects, such as experienced losses, are more present than positive aspects (Schmitt et al., 2012), future research could investigate whether job seekers can change their perceptions by focusing on positive job search experiences on a daily basis and study whether the importance of gain-oriented SOC strategies for the job search process could be increased.

Understanding the SOC strategies as loss- and gain-oriented discloses new ways into understanding the mechanisms of these strategies. Future research could explore potential antecedents of mature-aged job seekers' use of SOC strategies. Aging experiences seem to be promising as a potential antecedent because they can also be divided in positive and negative changes and these changes presumably would lead to the use of the respective strategy. Specifically, future research should test if negative aging experiences guide job seekers to use loss-oriented SOC strategies, whereas positive aging experiences guide them to use gain-oriented SOC strategies (cf. Fasbender & Klehe, 2019).

Conclusion

Overall, this study shed light on the two central phases of mature-aged job seekers' job search process, specifically we found that goal establishment informed goal pursuit. Moreover, our findings showed that both could be improved using SOC strategies and suggested loss-based selection and compensation as beneficial coping strategies. Regarding age and reemployment efficacy, we unravel their moderating role on these relations and highlight their importance for the link between compensation strategies and goal pursuit.

References

- Abele, A. E., & Wiese, B. S. (2008). The nomological network of self-management strategies and career success. *Journal of Occupational and Organizational Psychology, 81*, 733–749. <https://doi.org/10.1348/096317907X256726>
- Bajor, J. K., & Baltes, B. B. (2003). The relationship between selection optimization with compensation, conscientiousness, motivation, and performance. *Journal of Vocational Behavior, 63*, 347–367. [https://doi.org/10.1016/S0001-8791\(02\)00035-0](https://doi.org/10.1016/S0001-8791(02)00035-0)
- Baltes, P. B., Baltes, M. M., Freund, A. M., & Lang, F. R. (1999). *The measurement of selection, optimization, and compensation (SOC) by self report: Technical report 1999*. Max-Planck-Institut für Bildungsforschung.
- Bandura, A., & Locke, E. A. (2003). Negative self-efficacy and goal effects revisited. *Journal of Applied Psychology, 88*, 87. <https://doi.org/10.1037/0021-9010.88.1.87>
- Becker, T. E., Atinc, G., Breugh, J. A., Carlson, K. D. Edwards, J. R., & Specter, P. E. (2016). Statistical control in correlational studies: 10 essential recommendations for organizational researchers. *Journal of Organizational Behavior, 37*, 157–167. <https://doi.org/10.1002/job.2053>
- Blau, G. (1994). Testing a two-dimensional measure of job search behavior. *Organizational Behavior and Human Decision Processes, 59*, 288–312. <https://doi.org/10.1006/obhd.1994.1061>
- Breevaart, K., & Zacher, H. (2019). Daily SOC strategy use and innovative performance: The role of job autonomy and time pressure. *Journal of Personnel Psychology*.
- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology, 1*, 185–216. <https://doi.org/10.1177/135910457000100301>

- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling, 9*, 233–255.
https://doi.org/10.1207/S15328007SEM0902_5
- Côté, S., Saks, A. M., & Zikic, J. (2006). Trait affect and job search outcomes. *Journal of Vocational Behavior, 68*, 233–252. <https://doi.org/10.1016/j.jvb.2005.08.001>
- da Motta Veiga, S., & Turban, D. B. (2018). Insight into job search self-regulation: Effects of employment self-efficacy and perceived progress on job search intensity. *Journal of Vocational Behavior, 108*, 57–66. <https://doi.org/10.1016/j.jvb.2018.06.010>
- Dahling, J. J., Melloy, R., & Thompson, M. N. (2013). Financial strain and regional unemployment as barriers to job search self-efficacy: A test of social cognitive career theory. *Journal of Counseling Psychology, 60*, 210–218. <https://doi.org/10.1037/a0031492>
- Dalal, R. S., Bhawe, D. P., & Fiset, J. (2014). Within-person variability in job performance: A theoretical review and research agenda. *Journal of Management, 40*, 1396–1436.
<https://doi.org/10.1177/0149206314532691>
- Davidov, E., Meuleman, B., Cieciuch, J., Schmidt, P., & Billiet, J. (2014). Measurement equivalence in cross-national research. *Annual Review of Sociology, 40*, 55–75.
<https://doi.org/10.1146/annurev-soc-071913-043137>
- Fasbender, U., Burmeister, A., & Wang, M. (2020). Motivated to be socially mindful: Explaining age differences in the effect of employees' contact quality with coworkers on their coworker support. *Personnel Psychology, 73*, 407–430.
<https://doi.org/10.1111/peps.12359>
- Fasbender, U., & Klehe, U.-C. (2019). Job search and (re) employment from a lifespan development perspective. *Work, Aging and Retirement, 5*, 73–90.
<https://doi.org/10.1093/workar/way009>

- Fasbender, U., & Wang, M. (2017). Negative attitudes toward older workers and hiring decisions: Testing the moderating role of decision makers' core self-evaluations. *Frontiers in Psychology, 7*, 1–10. <https://doi.org/10.3389/fpsyg.2016.02057>
- Freund, A. M., & Baltes, P. B. (1998). Selection, optimization, and compensation as strategies of life management: correlations with subjective indicators of successful aging. *Psychology and Aging, 13*, 531–543. <https://doi.org/10.1037/0882-7974.13.4.531>
- Freund, A. M., & Baltes, P. B. (2002). Life-management strategies of selection, optimization and compensation: Measurement by self-report and construct validity. *Journal of Personality and Social Psychology, 82*, 642–662. <https://doi.org/10.1037/0022-3514.82.4.642>
- Goodman, J. S., & Blum, T. C. (1996). Assessing the non-random sampling effects of subject attrition in longitudinal research. *Journal of Management, 22*, 627–652. <https://doi.org/10.1177/014920639602200405>
- Gould, S. (1979). Characteristics of career planners in upwardly mobile occupations. *Academy of Management Journal, 22*, 539–550. <https://doi.org/10.5465/255743>
- Griep, Y., Hyde, M., Vantilborgh, T., Bidee, J., Witte, H. de, & Pepermans, R. (2015). Voluntary work and the relationship with unemployment, health, and well-being: A two-year follow-up study contrasting a materialistic and psychosocial pathway perspective. *Journal of Occupational Health Psychology, 20*, 190–204. <https://doi.org/10.1037/a0038342>
- Heckhausen, J., Dixon, R. A., & Baltes, P. B. (1989). Gains and losses in development throughout adulthood as perceived by different adult age groups. *Developmental Psychology, 25*, 109. <https://doi.org/10.1037/0012-1649.25.1.109>
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist, 44*, 513–524. <https://doi.org/10.1037/0003-066X.44.3.513>

- Kanfer, R., & Bufton, G. M. (2018). Job loss and job search: A social-cognitive and self-regulation perspective. U.-C., Klehe, EAJ Van Hooft, (Eds.), *the Oxford Handbook of Job Loss and Job Search*, 143–158.
- Kanfer, R., Wanberg, C. R., & Kantrowitz, T. M. (2001). Job search and employment: A personality-motivational analysis and meta-analytic review. *Journal of Applied Psychology*, 86, 837–855. <https://doi.org/10.1037/0021-9010.86.5.837>
- Kira, M., & Klehe, U.-C. (2016). Self-definition threats and potential for growth among mature-aged job-loss victims. *Human Resource Management Review*, 26, 242–259. <https://doi.org/10.1016/j.hrmr.2016.03.001>
- Klehe, U.-C., & van Hooft, E. A. J. (2018). *The Oxford handbook of job loss and job search*. Oxford University Press.
- Klehe, U.-C., Fasbender, U., & van der Horst, A. (2021). Going full circle: Integrating research on career adaptation and proactivity. *Journal of Vocational Behavior*, 126, 103526. <https://doi.org/10.1016/j.jvb.2020.103526>
- Kreemers, L. M., van Hooft, E. A. J., & van Vianen, A. E. M. (2018). Dealing with negative job search experiences: The beneficial role of self-compassion for job seekers' affective responses. *Journal of Vocational Behavior*, 106, 165–179. <https://doi.org/10.1016/j.jvb.2018.02.001>
- Kulik, L. (2001). Impact of length of unemployment and age on jobless men and women: A comparative analysis. *Journal of Employment Counseling*, 38, 15–27. <https://doi.org/10.1002/j.2161-1920.2001.tb00489.x>
- Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling*, 9, 151–173. https://doi.org/10.1207/S15328007SEM0902_1

- Liu, S., Huang, J. L., & Wang, M. (2014). Effectiveness of job search interventions: A meta-analytic review. *Psychological Bulletin, 140*, 1009–1041. <https://doi.org/10.1037/a0035923>
- 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. <https://doi.org/10.1037/a0036692>
- Moghimi, D., Zacher, H., Scheibe, S., & van Yperen, N. W. (2017). The selection, optimization, and compensation model in the work context: A systematic review and meta-analysis of two decades of research. *Journal of Organizational Behavior, 38*, 247–275. <https://doi.org/10.1002/job.2108>
- Müller, A., Heiden, B., Herbig, B., Poppe, F., & Angerer, P. (2016). Improving well-being at work: A randomized controlled intervention based on selection, optimization, and compensation. *Journal of Occupational Health Psychology, 21*, 169–181. <https://doi.org/10.1037/a0039676>
- Muthén, L. K., & Muthén, B. O. (2018). Mplus user's guide (Version 8).
- Nagy, N., Fasbender, U., & North, M. S. (2019). Youthfuls, matures, and veterans: Subtyping subjective age in late-career employees. *Work, Aging and Retirement, 5*, 307–322. <https://doi.org/10.1093/workar/waz015>
- Organisation for Economic Co-operation & Development. (2006). *Live longer, work longer*. OECD Publishing.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology, 63*, 539–569. <https://doi.org/10.1146/annurev-psych-120710-100452>
- Posthuma, R. A., & Campion, M. A. (2009). Age stereotypes in the workplace: Common stereotypes, moderators, and future research directions. *Journal of Management, 35*, 158–188. <https://doi.org/10.1177/0149206308318617>

- Ranzijn, R., Carson, E., Winefield, A. H., & Price, D. (2006). On the scrap-heap at 45: The human impact of mature-aged unemployment. *Journal of Occupational and Organizational Psychology*, *79*, 467–479. <https://doi.org/10.1348/096317905X66828>
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods* (Vol. 1). Sage.
- Schmitt, A., Zacher, H., & Frese, M. (2012). The buffering effect of selection, optimization, and compensation strategy use on the relationship between problem solving demands and occupational well-being: A daily diary study. *Journal of Occupational Health Psychology*, *17*, 139. <https://doi.org/10.1037/a0027054>
- Singer, J. D., Willett, J. B., & others. (2003). *Applied longitudinal data analysis: Modeling change and event occurrence*. Oxford University Press.
- Sterba, S. K., & Rights, J. D. (2017). Effects of parceling on model selection: Parcel-allocation variability in model ranking. *Psychological Methods*, *22*, 47. <https://doi.org/10.1037/met0000067>
- United States Equal Employment Opportunity Commission. (2013). *The Age Discrimination in Employment Act of 1967*. www.eeoc.gov/laws/statutes/adea.cfm
- van Hooft, E. A. J., Born, M., Taris, T. W., & van der Flier, H. (2004). Job search and the theory of planned behavior: Minority-majority group differences in The Netherlands. *Journal of Vocational Behavior*, *65*, 366–390. <https://doi.org/10.1016/j.jvb.2003.09.001>
- van Hooft, E. A. J., & Jong, M. de (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. <https://doi.org/10.1348/096317908X325322>

- van Hooft, E. A. J., & Noordzij, G. (2009). The effects of goal orientation on job search and reemployment: A field experiment among unemployed job seekers. *Journal of Applied Psychology, 94*, 1581–1590. <https://doi.org/10.1037/a0017592>
- van Hooft, E. A. J., Wanberg, C. R., Kammeyer-Mueller, J. D., Kanfer, R., & Basbug, G. (2020). Job search and employment success: A quantitative review and future research agenda. *Journal of Applied Psychology*. Advance online publication. <https://doi.org/10.1037/apl0000675>
- van Hooft, E. A. J., Wanberg, C. R., & van Hoyer, G. (2013). Moving beyond job search quantity: Towards a conceptualization and self-regulatory framework of job search quality. *Organizational Psychology Review, 3*, 3–40. <https://doi.org/10.1177/2041386612456033>
- Venz, L., Pundt, A., & Sonnentag, S. (2018). What matters for work engagement? A diary study on resources and the benefits of selective optimization with compensation for state work engagement. *Journal of Organizational Behavior, 39*, 26–38. <https://doi.org/10.1002/job.2207>
- Walter, S. L., Seibert, S. E., Goering, D., & O’Boyle, E. H. (2019). A tale of two sample sources: Do results from online panel data and conventional data converge? *Journal of Business and Psychology, 34*, 425–452. <https://doi.org/10.1007/s10869-018-9552-y>
- 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*, 411–429. <https://doi.org/10.1037/0021-9010.90.3.411>
- 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. <https://doi.org/10.1037/bul0000019>
- Wanberg, C. R., van Hooft, E. A. J., Dossinger, K., van Vianen, Annelies E. M., & Klehe, U.-C. (2020). How strong is my safety net? Perceived unemployment insurance generosity

- and implications for job search, mental health, and reemployment. *Journal of Applied Psychology*. Advance online publication. <https://doi.org/10.1037/apl0000435>
- Wanberg, C. R., Zhu, J., & van Hooft, E. A. J. (2010). The job search grind: Perceived progress, self-reactions, and self-regulation of search effort. *Academy of Management Journal*, *53*, 788–807. <https://doi.org/10.5465/AMJ.2010.52814599>
- Wang, M., Beal, D. J., Chan, D., Newman, D. A., Vancouver, J. B., & Vandenberg, R. J. (2017). Longitudinal research: A panel discussion on conceptual issues, research design, and statistical techniques. *Work, Aging and Retirement*, *3*, 1–24. <https://doi.org/10.1093/workar/waw033>
- Westaby, J. D., & Braithwaite, K. N. (2003). Specific factors underlying reemployment self-efficacy: Comparing control belief and motivational reason methods for the recently unemployed. *The Journal of Applied Behavioral Science*, *39*, 415–437. <https://doi.org/10.1177/0021886303261234>
- Zacher, H. (2013). Older job seekers' job search intensity: The interplay of proactive personality, age and occupational future time perspective. *Ageing & Society*, *33*, 1139–1166. <https://doi.org/10.1017/S0144686X12000451>
- Zacher, H., & Bock, A. (2014). Mature age job seekers: The role of proactivity. *Journal of Managerial Psychology*, *29*, 1082–1097. <https://doi.org/10.1108/JMP-05-2012-0158>
- Zhang, C., & Conrad, F. (2014). Speeding in web surveys: The tendency to answer very fast and its association with straightlining. In *Survey Research Methods*.
- Zikic, J., & Klehe, U.-C. (2006). Job loss as a blessing in disguise: The role of career exploration and career planning in predicting reemployment quality. *Journal of Vocational Behavior*, *69*, 391–409. <https://doi.org/10.1016/j.jvb.2006.05.007>

Table 1

Means, Standard Deviations, Cronbach's Alphas, and Correlations of Study Variables

	<i>M</i>	<i>SD</i>	<i>ICC</i>	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1. Age	51.13	7.56		-	.08*	.14**	.02	-.06**	.01	-.08*	-.09*	-.05	-.13**	-.12**	.10**	-.14**
2. Gender ^a	1.31	0.46			-	.02	.07**	.07**	.04	-.03	-.04	-.04	-.05	-.08	-.01	-.05
3. Educational Level ^b	1.30	0.46				-	-.17**	-.12**	.00	-.08*	-.09*	-.08	-.13**	-.07	-.08	-.13**
4. Germany ^c	0.22	0.42					-	-.31**	.01	.15**	.23**	.10**	.28**	-.04	.11**	-.01
5. United Kingdom ^c	0.25	0.44						-		-.12**	-.21**	-.15**	-.24**	-.10**	-.17**	-.02
6. Unemployment Duration ^d	5.40	3.47							-	-.12**	-.14**	-.15**	-.12**	-.20**	-.01	-.13**
7. Elective Selection (SOC)	3.65	1.22	.53							-	.73**	.64**	.61**	.24**	.20**	.46**
8. Loss-Based Selection (SOC)	3.65	1.31	.54								-.56**	-.74**	.75**	.30**	.25**	.46**
9. Optimization (SOC)	4.06	1.29	.55								.49**	.57**	-	.77**	.36**	.49**
10. Compensation (SOC)	3.91	1.38	.67								.36**	.45**	.56**	-	.35**	.27**
11. Reemployment Efficacy	4.57	1.36	.71								.20**	.21**	.22**	.21**	-	.21**
12. Goal Establishment	4.25	1.31	.65								.07*	.09**	.11**	.08**	.05	-
13. Goal Pursuit	2.78	0.77	.64								.14**	.12**	.14**	.14**	.30**	.13**

Note. Correlations above the diagonal depict person-level correlations ($N = 623$). Person-level correlations of day-level variables are based on the person mean. Correlations below the diagonal depict day-level correlations ($N = 1185$). Reported Cronbach's alphas of day-level variables depict the mean over the four time points.

^a 1 = female, 2 = male.

^b 1 = no university degree, 2 = university degree.

^c = For the country dummy variables, the United States was selected as the reference group.

^d = in months.

* $p < .05$. ** $p < .01$.

Table 2*Confirmatory Factor Analysis Fit Indices for Measurement Model*

	χ^2	df	CFI	Δ CFI	RMSEA	SRMR
7-factor solution	339.771	188	.945	-	.026	.037
6-factor solution ^a	428.962	194	.916	.029	.032	.050
5-factor solution ^b	416.060	199	.922	.023	.030	.041
5-factor solution ^c	525.807	199	.883	.062	.037	.047
4-factor solution ^d	541.850	203	.878	.067	.038	.048
1-factor solution	1,408.441	209	.569	.376	.070	.096

^a Goal establishment and goal pursuit loading on one factor.

^b Selection-strategies (i.e., elective and loss-based selection) loading on one common factor and optimization and compensation loading on one common factor

^c Gain-oriented (i.e., elective selection and optimization) and loss-oriented (i.e., loss-based selection and compensation) SOC strategies loading on one common factor

^d All SOC strategies loading on one common factor

Table 3*Results Measurement Invariance Analyses*

	χ^2	df	CFI	Δ CFI	RMSEA	SRMR
1) Configural invariance (equal factor structure)	878.321	587	.906	-	.035	0.029
2) Metric invariance (equal factor loading)	940.223	629	.900	.006	.035	0.030
3) Scalar invariance (equal intercepts)	942.574	360	.899	.001	.035	0.030
4) Full invariance (equal residuals)	1,055.853	674	.877	.022	.038	0.031

Table 4

Results of Multivariate Analysis Including Control Variables

	Goal Establishment			Goal Pursuit			Reemployment Efficacy		
	γ	<i>SE</i>	<i>p</i>	γ	<i>SE</i>	<i>p</i>	γ	<i>SE</i>	<i>p</i>
Intercept	4.24**	0.05	< .001	2.77**	0.03	< .001			
Control Variables									
Germany ^a	0.16	0.13	.084	-0.21**	0.07	< .001			
United Kingdom ^a	-0.27*	0.12	.075	0.10	0.06	.240			
Educational Level ^b	0.28	0.11	.015	0.27	0.11	.081			
Unemployment Duration	0.02	0.01	.144	-0.01	0.01	.106			
Day-Level RE	0.07	0.07	.340	0.10*	0.04	.013			
Person-Level RE	0.17**	0.05	< .001	0.04*	0.02	.041			
Level 1 Variables (Within-Person)									
Goal Establishment				0.06*	0.02	.010			
Elective Selection	0.03	0.06	.569						
Loss-Based Selection	0.12*	0.06	.043						
Elective Selection × RE	-0.02	0.05	.886						
Loss-Based Selection × RE	-0.05	0.05	.649						
Optimization				0.05	0.03	.108			
Compensation				0.12**	0.05	.012			
Optimization × RE				0.02	0.06	.736			
Compensation × RE				-0.14*	0.06	.024			
Level 2 Variables (Between-Person)									
Age ^c	0.02**	0.01	.001	-0.01*	0.00	.074	-0.21**	.07	.003
Goal Establishment				0.06*	0.02	.010			
Elective Selection	0.07	0.06	.306						
Loss-Based Selection	0.13	0.07	.066						
Elective Selection × RE	-0.03	0.08	.637						
Loss-Based Selection × RE	0.09	0.08	.077						
Optimization				0.09*	0.03	.005			
Compensation				0.21**	0.03	< .001			
Optimization × RE ^d				-0.06**	0.02	.001			
Compensation × RE ^d				0.06**	0.02	.006			
-2*log likelihood		5913.09							
Level 1 Variance (<i>SE</i>)		0.22 (0.02)							
Level 2 Variance (<i>SE</i>)		0.25 (0.02)							

Note. Level-2 *N* = 623. Level-1 *N* = 1185. *SE* = standard error. Coeff = Coefficient. RE = Reemployment Efficacy.

^a For the country dummy variables, the United States was selected as the reference group.

^b 1 = no university degree, 2 = university degree.

^c Age was rescaled by a factor of 10.

^d Both moderation effects were not further considered as they became non-significant when tested in separate models, whereas within-moderation and main effects remained stable.

* *p* < .05. ** *p* < .01.

Figure 1

Conceptual Study Model Including Hypotheses

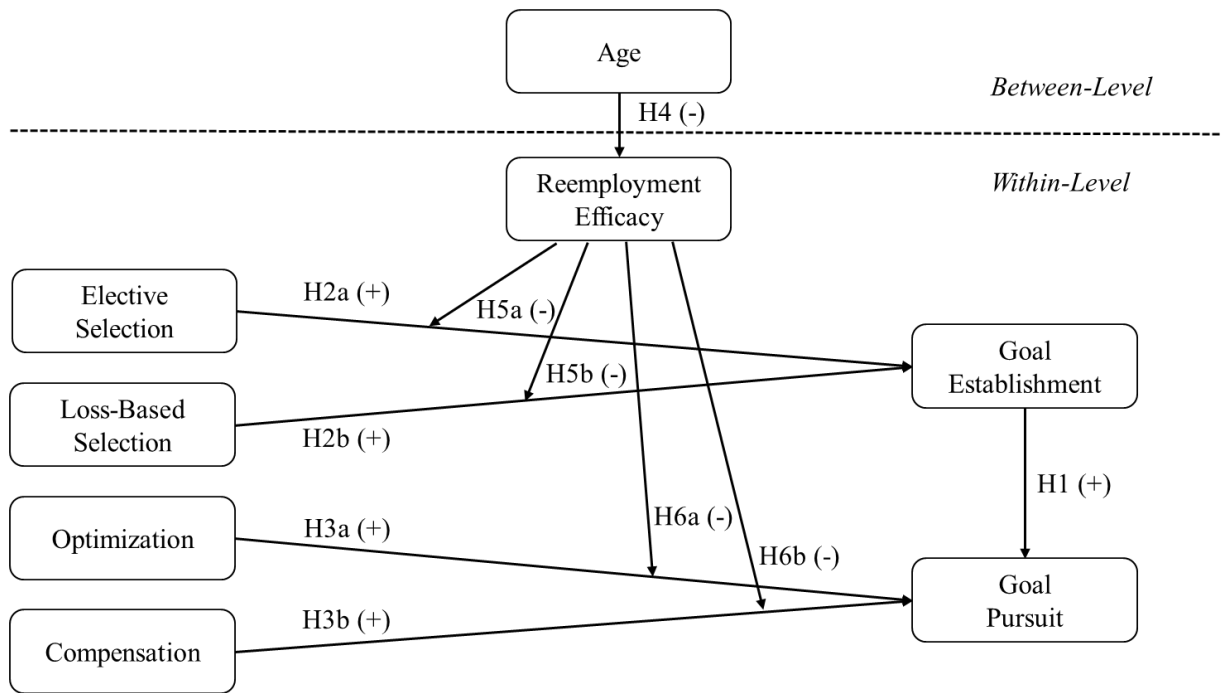


Figure 2

Within Person Two-Way Interaction Between Reemployment Efficacy and Compensation on Goal Pursuit

