

PRE-PRINT

Job Search and (Re)employment from a Lifespan Development Perspective

Ulrike Fasbender and Ute-Christine Klehe

Justus-Liebig-University Giessen

Authors' Note

Ulrike Fasbender, Justus-Liebig-University Giessen, Work and Organizational Psychology, 35394 Giessen, Germany, Email: Ulrike.Fasbender@psychol.uni-giessen.de;

Ute-Christine Klehe, Justus-Liebig-University Giessen, Work and Organizational Psychology, 35394 Giessen, Germany, Email: Ute-Christine.Klehe@psychol.uni-giessen.de

Correspondence concerning this manuscript should be addressed to the first author, Ulrike Fasbender, Justus-Liebig-University Giessen, Work and Organizational Psychology, 35394 Giessen, Germany, Email: Ulrike.Fasbender@psychol.uni-giessen.de

Please cite as

Fasbender, U. & Klehe, U.-C. (2019). Job search and (re)employment from a lifespan development perspective. *Work, Aging and Retirement*, 5, 73-90. doi:10.1093/workar/way009

Abstract

Even though empirical research and unemployment statistics reveal that older workers face longer unemployment periods compared to younger or middle-aged workers, the job search process among older workers is not well understood. In addressing this knowledge gap, the present paper presents a conceptual model of job search and (re)employment from a lifespan development perspective. The conceptual model emphasizes the importance of aging as an overarching process that influences older workers in searching for a new job. Using socio-emotional selectivity and selection, optimization, and compensation theories, we integrate the lifespan development perspective with the literature on job search. In particular, we introduce job seekers' aging experiences, their occupational future time perspective, and their use of selection, optimization, and compensation as adaptive coping strategies to aging, as influences to their job search process. In addition, we highlight how a limited occupational future time perspective may even enhance the relevance of job-seekers' own self-regulatory resources (self-efficacy, self-control, and proactivity) as relevant predictors of the self-regulatory process of their job search. Further, we inspect the context in which job search among older workers takes place. Finally, we discuss potential research designs and methodological issues that may guide future research directions. As a result, the paper contributes to a better understanding of how the job search process changes when getting older.

Keywords: job search; self-regulation; socio-emotional selectivity theory; selection, optimization, and compensation

Job Search and (Re)employment from a Lifespan Development Perspective

Integrating older people into the workforce is necessary for dealing with the economic challenges arising from global population aging (European Commission, 2014; Fasbender, Wang, Voltmer, & Deller, 2016; Organisation for Economic Co-operation and Development [OECD], 2006). Yet, recent meta-analytic findings on age and (re)employment success after job loss (Wanberg, Kanfer, Hamann, & Zhang, 2016) revealed that older people receive fewer job offers ($\rho = -.11$), are less likely to obtain (re)employment after job loss ($\rho = -.15$) and take longer to find (re)employment (reemployment speed: $\rho = -.17$). In particular, people over the age of 55 face longer unemployment periods. Among the member states of the European Union in 2015, older people (aged 55 years and older: 24.7 months) were on average unemployed for much longer than middle-aged people (aged 25 to 54: 17.2 months) and younger people (aged 20 to 24: 8.9 months; OECD, 2017). A similar pattern occurs for North America, although people are overall shorter unemployed (55+: 8.9 months; 25-54: 6.9 months; 20-24: 5.0 months; OECD, 2017). Long unemployment and the search for (re)employment are among the worst stressors that older people have to deal with (Klehe, Koen, de Pater, & Kira, 2018). At the same time, organizations may suffer from difficulties in integrating older workers with longer unemployment durations into the workplace (Heisig & Radl, 2017).

Although age is frequently included as a control variable in economic studies of unemployment, its impact on the job search process, employment status and quality is not well understood. As Wanberg et al. (2016, p. 414) highlight “at this point, we know very little about whether (and if so why) older job seekers engage in different job search strategies or how they may differ from younger job seekers in the clarity of their job search goals.” Though, chronological age is not a direct cause of anything and has therefore been pointed out as an insufficient operationalization of what age means in a work setting (Zacher, 2015).

Rather, it is how people experience getting older that informs their action regulation and personal development (Freund & Baltes, 2002; Heckhausen, Dixon, & Baltes, 1989). Based on the socio-emotional selectivity theory (Carstensen, 1992) and the selection, optimization, and compensation theory (Baltes & Baltes, 1990), we present a conceptual model of job search and (re)employment from a lifespan development perspective. We argue that the two processes of aging and job search are at a first sight independent from each other; yet, they overlap under certain circumstances. While aging is a continuous process that starts with birth and becomes more apparent with advancing age, job search is relevant in specific life situations, such as job loss or career transitions of all kind. The process of aging is therefore an overarching process that at some points in life co-occurs with the process of job search.

We therefore theorize the impact of older job seekers' aging experiences, their occupational future time perspective and the use of selection, optimization, and compensation strategies on their job search process. In addition, we explain how job seekers' occupational future time perspective can moderate the impact of certain self-regulatory resources (i.e., self-efficacy, self-control, and proactivity) on the self-regulatory job search process. Furthermore, we inspect the context in which job search among older workers takes place. By focusing on the process of successful job search among older workers, the current paper is likely to contribute to the literature on job search and aging in different ways. In particular, the paper takes a lifespan development perspective on the job search process. Thus, the paper sheds light on the role of job seekers' individual aging experiences, their occupational future time perspective and their use of selection, optimization, and compensation as adaptive coping strategies to aging, which will advance our understanding of how the job search process may change with advancing age. As a result, we present a conceptual model of job search and (re)employment from a lifespan development perspective, which is shown in Figure 1.

Moreover, we provide recommendations for research as a roadmap for empirically testing the conceptual model.

Aging and Job Search

Job search requires high persistence over a long time. For many job seekers, the search for a new job is a highly frustrating process, and this may be even more true for older job seekers who often face additional stereotypes and discrimination in the labor market as compared to younger job seekers. The resulting uncertainties, rejections or pure lack of feedback from potential employers, together with the possible loophole of early retirement, may move them toward capitulating after relatively short times of searching. Additionally, tasks related to job search are often boring, difficult, and unpleasant, offering little intrinsic reward, yet they are important in order to attain a distal goal, namely finding a suitable job (Van Hooft, Wanberg, & van Hooft, 2013). This combination of distal goals and low levels of intrinsic motivation in the face of adverse circumstances call for high self-regulation. Self-regulation is a form of self-control that guides our attention, thoughts and emotions along goal-directed activities across time and changing circumstances (Karoly, 1993), and helps actors to consciously align their resources during the process. Thus, job search as a self-regulatory process involves job seekers to set goals, plan ahead and also to constantly evaluate their state of progress with regard to their desired employment goals (Kanfer, Wanberg, & Kantrowitz, 2001; Liu, Wang, Liao, & Shi, 2014). The self-regulatory job search process contains two central phases: goal establishment and goal pursuit. Goal establishment involves goal setting, goal clarity, goal commitment, and embeddedness in an organized goal hierarchy (Kanfer et al., 2001; Saks, 2005; Van Hooft et al., 2013), whereas goal pursuit involves specific behavioral steps to reach the established goal, such as momentary self-control, goal shielding and maintenance, self-monitoring and active feedback seeking related to the job search activities (Kanfer, 2012; Van Hooft et al., 2013). The two phases are in a

reciprocal relationship with each other, which means that goal establishment informs goal pursuit and vice versa (Van Hooft et al., 2013).

Besides contextual changes related to age, an application of the lifespan development perspective to the case of job search implies that job search is likely to change throughout the life course because of age-related physical, cognitive, and affective changes that occur over the lifespan (Kanfer & Bufton, 2015). Some scholars (e.g., Heckhausen, Wrosch, & Schulz, 2010) argue that employment becomes less important for older workers as they usually have already spent several decades in work, during which they may have satisfied many career and life goals related to mastery and achievement motives (Kanfer, Beier, & Ackerman, 2013; Kanfer & Bufton, 2015). With advancing age, “new challenges arise related to maintaining good health, developing avocational skills, and satisfying family-based generativity motives” (Kanfer & Bufton, 2015, p.5). This may suggest that searching for a new job is less attractive for older workers. In fact, meta-analytical findings reveal that older job seekers’ show lower levels of job search intensity and are also less likely to obtain employment (Wanberg et al., 2016). Yet, these findings also suggest that older job seekers’ likelihood to find employment is only to a small extent determined by their job search intensity, which suggests that there is a lot more that we do not understand when it comes to job search and (re)employment among older workers. As job search intensity alone cannot explain successful job search, it is important to elaborate why and how job seekers of different ages determine their job search behavior in possibly different ways.

Age versus Aging Experiences

Age in terms of *chronological age* refers to the number of years to be calculated from the date of birth. Based on this conceptualization, people aged 50 or 55 and above are commonly considered to be older workers (Fasbender & Wang, 2017a, 2017b; Henry, Zacher, & Desmette, 2015). With regard to the job search context, people have been referred

to as old or mature-aged job seekers around the age of 40 or 45 and older (Kira & Klehe, 2016; Ranzijn, Carson, Winefield, & Price, 2006; Zacher, 2013; Zacher & Bock, 2014).¹ However, chronological age itself is just a number, which adds only little to the understanding of what aging actually means to people (Baltes, Reese, & Lipsitt, 1980; Zacher, 2015). In the following, we therefore take a closer look at the *individual experience(s) of aging* as a potential predictor for successful job search.

Aging is a life-long process that consists of the psychological experience of both continuous and discontinuous changes (Baltes, 1987; Baltes et al., 1980; Heckhausen et al., 1989). With increasing age, people experience physical, cognitive, and affective changes. These changes can be both positive and negative in nature (Fasbender, Deller, Wang, & Wiernik, 2014; Rudolph, 2016), and thus, the intraindividual plasticity in human development can be best described by gains and losses (Heckhausen et al., 1989). Gains refer to the experience of positive changes over the lifespan; examples are *personal growth*, including learning new skills, improving capabilities, and increasing levels of self-worth or *self-knowledge*, describing the acceptance of present abilities and disabilities (Fasbender et al., 2014; Wurm, Tesch-Römer, & Tomasik, 2007). Losses refer to the experience of negative changes over the lifespan; examples are *physical loss*, including lower levels of fitness and energy, decreasing physical abilities, or *social loss*, describing the decline of social contacts and feelings of loneliness (Fasbender et al., 2014; Steverink, Westerhof, Bode, & Dittmann-Kohli, 2001). Aging related gains and losses can occur at the same time, whereby losses are expected to generally outweigh gains throughout the life course (Heckhausen et al., 1989).

¹ This 10-year difference in conceptualization of old age may be explained by a) the double jeopardy of severe age-related stereotypes and job loss related stereotypes during the job search process and/or b) pragmatic reasons of scholars having limited access to older job seekers as participants during data collection.

Aging Experiences and Occupational Future Time Perspective during the Job Search Process

The way people experience their own aging process influences how they perceive their occupational future time. Based on socio-emotional selectivity theory (Carstensen, 1992, 2006; Carstensen, Isaacowitz, & Charles, 1999), the concept of future time perspective addresses the extent to which one's remaining future time is perceived as limited (rather than open-ended). Zacher and Frese (2009) have adapted the idea of future time perspective to the work context, focusing on people's perceived remaining time at work. Yet, even though age is inherently related to one's remaining life- and working-time (at least in countries with a mandatory retirement age), it is arguably not only one's chronological age but rather the experience of aging that determines whether people perceive their occupational future time as limited or expansive. The experience of negative changes over the lifespan (i.e. losses) is likely to shrink one's occupational future time, whereas the experience of positive changes (i.e., gains) is likely to expand one's occupational future time. For example, when people experience physical losses that impair their ability to do certain work-related tasks, they likely start questioning their continuous ability to perform their respective jobs and likely start to perceive their future time at work to be limited. The more obvious their aging related losses are to themselves, the more aware they become about the fact that their time at work will come to an end. In contrast, when people experience aging related gains in form of personal growth, such as being able to learn new things and experiencing that capabilities are increasing, they are less likely to foresee the end of their time at work. Their occupational future time thus becomes more distant and expansive. As people are likely to experience both gains and losses, their occupational future time will be on a continuum between limited and open-ended. Even though researchers have implicitly assumed that people's aging experiences are related to their occupational future time perspective (e.g., Henry, Zacher, &

Desmette, 2017; Zacher, 2013; Zacher & Frese, 2009), it has not been explicitly stated nor empirically tested. To sum up, we therefore propose:

Proposition 1: Job seekers' individual aging experiences inform their occupational future time perspective in a way that experienced positive changes over the lifespan expand, whereas experienced negative changes shrink their occupational future time.

Job seekers' *occupational future time perspective* is relevant, as it influences the goals that people set for themselves. Socio-emotional selectivity theory (Carstensen, 1992, 2006; Carstensen et al., 1999) argues that the extent to which one's remaining future time is perceived as limited (rather than open-ended) influences people's cognitive-motivational priority for socio-emotional goals (i.e., emotional meaning and pleasure in the here and now) over growth goals (i.e., personal growth and success in the future). In fact, Carstensen (2006, p.1913) argues that: "Goals, preferences, and even cognitive processes, such as attention and memory, change systematically as time horizons shrink." For the job search process, this bears relevant consequences during job seekers' goal establishment.

Consciously identifying and selecting a goal is an important step in the self-regulated job search process (Kanfer et al., 2001; Saks, 2005). In line with their content, goals differ in terms of clarity (i.e., specificity of a goal), commitment (i.e., importance of a goal), and embeddedness in a hierarchically organized goal system (Locke & Latham, 1990). During job search, a more abstract goal may be to find a job, whereas a more specific goal may be to find a certain type of job (Wanberg, Hough, & Song, 2002) or a job that is more interesting, less demanding, or closer to one's home (Van Hooft et al., 2013).

In line with socio-emotional selectivity theory (Carstensen, 1992, 2006; Carstensen et al., 1999), we propose that job seekers are more likely to focus on socio-emotional goals rather than on (socio-emotional and) growth goals, when they perceive their occupational

future time as limited. For example, if job seekers believe they have only a few more years to work before retirement, they are likely to look for a job that is enjoyable and emotionally meaningful (e.g., by providing an opportunity to help others) and that allows them to be around people they like (e.g., working with friends or in a pleasant organizational climate; i.e., socio-emotional goals). In contrast, if job seekers believe that they have many years ahead before retirement or if they are even likely to continue working in retirement (i.e., planning their post-retirement employment; Wöhrmann, Fasbender, & Deller, 2016, 2017), they likely look for a job that also allows them to continue learning new things and to develop themselves (i.e., growth goals). A limited occupational future time likely makes job seekers be clearer and more specific about their goals due to the narrower specification of goals. Therefore, we propose:

Proposition 2: Job seekers' occupational future time perspective informs their goal establishment phase in a way that goals become more specific as socio-emotional goals are prioritized over growth goals when job seekers perceive their occupational future time as limited (vs. open-ended).

Job seekers' occupational future time perspective is likely also linked to goal commitment as well as embeddedness in a goal hierarchy, yet differently. Being committed to a selected goal means that the goal is personally important, also that one is keen about reaching it and willing to overcome obstacles and setbacks (Locke & Latham, 1990). Further, goals may be embedded in a hierarchically organized goal system with goals being either superordinate and distal or subordinate and proximal. Incorporating proximal goals, such as preparing an application or networking with relevant people, with a more distal goal, such as finding a job, is likely to increase job seekers' persistence during the self-regulated job search process.

Notwithstanding that job seekers with a limited occupational future time perspective are likely more specific and clear about their job search goals, their goal commitment and embeddedness in a goal hierarchy will likely be lower because work itself becomes less important in life (Heckhausen et al., 2010; Kanfer et al., 2013; Kanfer & Bufton, 2015). In their conceptual model about goals and motivation in later adulthood, Kanfer et al. (2013) distinguish between different work-related goals, namely 'to-work goals' and 'at-work goals'. Job search goals (as described above) represent at-work goals, describing the "motivation in the context of performing one's work role" (Kanfer et al., 2013, p. 257). Yet, for the job search process, also to-work goals matter, that is the "motivation to enter into formal or informal work arrangements". Furthermore, with diminishing occupational future time, the psychological detachment from work begins (Bal et al., 2015; Fasbender et al., 2014), leading to a lower importance of job search goals. Basically, socio-emotional meaning can be achieved by finding a job that fulfills these motives, yet can also be achieved in other ways. Empirical research shows that people who perceive their future time as limited tend to have smaller personal networks and prefer contact to relatives and family members, whereas people who perceive their future time as open-ended prefer knowledgeable partners (e.g., a book author) over other social partners (Lang & Carstensen, 2002). For example, if job seekers believe they have only a few more years to work before retirement, they may engage in leisure activities or tend to their close family networks. These activities can provide them with momentary pleasure and socio-emotional meaning, but, at the same time, keep them away from establishing their job search goals.

In line with lower goal commitment, we also assume that job seekers with a limited future time perspective will be less detailed about their goal hierarchy, simply because goal commitment and embeddedness are closely related to each other. In other words, the more job seekers are committed to their job search goals, the more thought they will put into

developing proximal sub goals to achieve their superordinate job search goals (Van Hooft et al., 2013). Thus, we propose:

Proposition 3: Job seekers' occupational future time perspective informs their (a) goal commitment and (b) embeddedness in a goal hierarchy during the goal establishment phase. Specifically, when job seekers perceive their occupational future time as limited (vs. open-ended) they will be less committed to their job search goals and develop a less detailed goal hierarchy.

Aging Experiences and Aging Strategies during the Job Search Process

Besides the impact on job seekers' occupational future time perspective, job seekers' aging experiences will likely also have a second consequence, namely the use of different aging strategies, which in turn can advance our understanding of job search and (re)employment among older job seekers. Aging strategies (sometimes referred to as life-management strategies) are adaptive coping strategies to re-balance the experienced gains and losses over the lifespan (Baltes & Baltes, 1990; Freund & Baltes, 2002; Rudolph, 2016).

Job seekers' aging experiences likely play a crucial role when searching for a job because they can serve as personal resources that support job seekers during their dynamic and recursive job search process. People compare their new experiences to the past, which in turn informs their future decisions and behavior. Based on these individual experiences of aging, Baltes and Baltes developed the selection, optimization, and compensation (SOC) model as part of a meta-theoretical framework of action regulation and development across different domains over the lifespan (SOC model; Baltes & Baltes, 1990; Freund & Baltes, 2002). The SOC model encompasses four aging strategies of which two (i.e., elective selection and optimization) are rather gains-oriented and the other two (i.e., loss-based selection and compensation) are rather loss-oriented. Although Baltes and Baltes (1990) have

already discussed gains and losses as antecedents of aging strategies, there is currently no empirical support for this assumption (Moghimi, Zacher, Scheibe, & Van Yperen, 2017). In fact, in their meta-analysis on aging strategies, Moghimi et al. (2017) call for further research on the antecedents of these strategies.

With regard to the job search context, we argue that the more intense job seekers experience positive and negative changes when getting older, the more likely they will use different aging strategies to cope with the new situation. Specifically, the experience of positive changes will foster their use of gains-oriented aging strategies (i.e., elective selection and optimization), whereas the experience of negative changes will lead them to apply rather loss-oriented aging strategies (i.e., loss-based selection and compensation). For example, an older programmer, who is able to handle the old computer languages that still make up the IT-backbone of many organizations (e.g., cobol), but who also worked their way into understanding more modern languages, may focus their job search particularly on those types of jobs in which a knowledge of both types of languages is of particular benefit (elective selection). Equally, they may invest time and money to gain official credentials of skills that they may previously have learned on the job in order to enhance their credibility and to facilitate their job search (optimization). In contrast, when people experience social losses that could limit their networking activities during the job search process, they may focus on their one most important goal at a given time (loss-based selection), and also ask independent career counselors, coaches, or potential employers for advice or help to enhance their job search process (compensation). Thus, we propose:

Proposition 4: Job seekers' individual aging experiences (i.e., positive and negative changes over the lifespan) inform their use of aging strategies during the job search process. Specifically, experienced positive changes over the lifespan guide them to use gains-oriented aging strategies (i.e., elective selection and optimization), whereas

experienced negative changes guide them to use loss-oriented aging strategies (i.e., loss-based selection and compensation).

At its heart, the SOC model proposes that in situations characterized by high demands and limited recourses, such as the job search process, individuals can use certain action regulation aging strategies that help them invest their resources in a most optimal way (Moghimi et al., 2017; Rudolph, 2016). Meta-analytical findings (Moghimi et al., 2017) underline several work-related outcomes of using aging strategies, such as higher levels of job performance ($\rho = .21$), job satisfaction ($\rho = .25$), and job engagement ($\rho = .38$). We therefore argue that the different aging strategies can also strengthen older workers' job search and (re)employment. Based on the action-theoretical framework of Freund and Baltes (2002), we next explain how elective and loss-based selection support job seekers' goal establishment, while optimization and compensation support job seekers' goal pursuit.

Selection is primarily related to goal setting. It involves the prioritization of some goals over others, be it in relation to a desired state (*elective selection*), or in response to the experience of losing resources needed for the achievement of desired goals (*loss-based selection*). Specifically, elective selection is characterized by prioritizing a small number of desirable goals rather than pursuing multiple goals all at once (Freund & Baltes, 2002). During the job search process, elective selection can, for example, help older job seekers to focus on their career goals until their job search is successful instead of being sidetracked by hobbies or voluntary commitments. Further, loss-based selection refers to setting goals and reconstructing one's goals system in order to protect "a given level of functioning in a specific goal domain" (Freund & Baltes, 2002, p. 643). With regard to the job search context, loss-based selection can, for example, help older job seekers with declining physical abilities (be it the craftsman whose strength is waning or the surgeon whose eyesight is starting to

diminish) to aspire a new job that does not require these abilities. We expect elective and loss-based selection strategies to be particular useful for job seekers' goal establishment, as both strategies help job seekers to be more specific about their goals, and consequently to be more committed, and likely to develop a more detailed goal hierarchy. We thus propose:

Proposition 5: Elective and loss-based selection strategies facilitate job seekers' goal establishment during their job search process in a way that they will be (a) more specific about their goals, (b) more committed, and (c) develop a more detailed goal hierarchy.

Optimization refers to the acquisition, improvement, and the application of resources in order to achieve the selected goals. It is characterized by the right resource allocation (e.g., effort and time), using the right moment, practicing skills and modeling successful others (Freund & Baltes, 2002). *Compensation* is characterized by counteracting the absence or loss of goal-relevant means (e.g., acquiring new or using previously unused resources as a form of resource substitution). In fact, both optimization and compensation strategies are means-focused; optimization involves the use of available means, whereas compensation involves the use of alternative means in order to maintain functioning when other goal-relevant means are inaccessible or unavailable (Rudolph, 2016). As such, we expect both, optimization and compensation strategies to be particular useful for job seekers' goal pursuit.

Goal pursuit describes the behavioral steps required to reach the established goal, most prominently job seekers' self-control, goal shielding and maintenance, self-monitoring and feedback seeking. Self-control helps to ensure the initiation of and continued effort in planned job search activities over time, also in the face of difficulties, heavy emotions, and environmental distractions (Kanfer, 2012; Van Hooft et al., 2013). It encompasses the control of attention (e.g., filter co-occurring processes to keep up one's concentration), thoughts (e.g.,

not allowing distractive thoughts), emotions (e.g., shift arising worries or anxieties during the job search process), motivation (e.g., keep up the motivational basis), and behaviors (e.g., avoid procrastination and keep up effort and persistence; Van Hooft et al., 2013; Wanberg & Kammeyer-Mueller, 2008; Wanberg, Zhu, Kanfer, & Zhang, 2012; Zimmerman, 2000). In other words, it implies a conscious control of one's emotional, cognitive, and motivational resources. Thus, it should benefit from job seekers' use of optimization strategy, which focusses particularly on the best resource allocation for reaching a set goal.

Goal maintenance and goal shielding are two specific self-control mechanisms that allow job seekers to focus and protect their employment goal from co-occurring, competing goals (Lord, Diefendorff, Schmidt, & Hall, 2010). An example of goal maintenance is reminding oneself about the gratification once the goal has been accomplished. Here, optimization strategies likely help job seekers to focus their attention on the benefits of finding a new job, such as higher job satisfaction or gaining socio-emotional meaning at work. Also, compensation will become relevant as soon as job seekers experience losses or encounter hurdles during their job search. Rather than feeling discouraged, older job seekers' can compensate for their experienced losses or find alternative routes toward (re)employment by using different means. For example, job seekers, who experience physical losses such as a bad eyesight, may invest in the technical learning about how to use automatic language recognition for typing their applications.

Goal shielding strategies include automatic if-then statements to protect job seekers from distraction or obstacles during the job search process. For example, *if* one receives a message from friends during the day, *then* one would tell friends that one gets back to them in the evening. Optimization strategies can again help older job seekers to allocate their resources right. As such, they may be more likely to shield their goal by doing everything they can to realize their plans, even if it takes putting someone off.

Further, the goal pursuit benefits from self-monitoring and active feedback seeking. Van Hooft et al. (2013) suggest that job seekers best track their job search behaviors in line with their set employment goals in order to continuously improve their job search behavior. Collecting detailed information about their job search activities allows job seekers to detect and adjust deviations of their search process from the set employment goal. In addition, feedback from others can support this cycle of continuous improvement toward goal attainment as it adds diagnostic information. Using optimization and compensation strategies can help older job seekers to gain help from others. Indeed, seeking help in the face of obstacles is a classic compensation strategy. Thus, compensating job seekers may ‘warm up’ their existing contacts or seek feedback from knowledgeable professionals, such as career counselors or recruiters. At the same time, this may be useful means to identify potential job opportunities and promote themselves accordingly. Taken together, optimization and compensation strategies are expected to be particular useful for job seekers’ goal pursuit. In particular, we assume that job seekers who use optimization and compensation strategies are more keen to engage in goal maintaining and shielding as well as in self-monitoring and active feedback seeking. We thus propose:

Proposition 6: Optimization and compensation strategies facilitate job seekers’ goal pursuit during their job search process in a way that they will be support them (a) to maintain and shield their established goals, and (b) to engage in self-monitoring and active feedback seeking.

Self-regulatory Resources as Predictors of Successful Job Search

As job search is a self-regulatory process, it also benefits from several self-regulatory resources (Kanfer et al., 2001; Liu, Huang, & Wang, 2014; Liu, Wang, et al., 2014) such as job seekers’ self-efficacy, trait-level self-control, and proactivity. In the following, we

introduce these resources and take a lifespan development perspective to explain how job seekers' occupational future time perspective may interfere these relationships.

Job Search Self-efficacy

Job seekers' self-efficacy beliefs are an important predictor for a successful job search process (e.g., Brown, Cober, Kane, Levy, & Shalhoop, 2006; Liu, Huang, et al., 2014; Wanberg, Kanfer, & Rotundo, 1999). Generally, self-efficacy describes individuals' beliefs about their ability to accomplish behavior; in fact, it has been acknowledged as the most proximal regulator of affective, cognitive, decisional, and motivational processes of human behavior (Bandura, 1991). *Job search self-efficacy* describes individuals' confidence in their ability to successfully perform different job search activities. It arguably supports job search via its influence on goal-setting, self-monitoring, goal-performance discrepancies, and causal attributions during the job search process (Liu, Wang, et al., 2014; Van Hooft et al., 2013; Wanberg et al., 2016).

Trait Self-control

“The human capacity to exert self-control is arguably one of the most powerful and beneficial adaptations of the human psyche” (Tangney, Baumeister, & Boone, 2004, p. 272). *Trait self-control* is the relatively stable ability to alter or override one's emotions, thoughts, response tendencies, and actions in line with a long-term goal, such as obtaining employment (De Ridder, Lensvelt-Mulders, Finkenauer, Stok, & Baumeister, 2012; Tangney et al., 2004). Meta-analytical findings show that higher levels of trait self-control promote positive (e.g., academic achievement, happiness, love and interpersonal success) and avoid negative outcomes (e.g., alcohol abuse, binge eating or lifetime delinquency; De Ridder et al., 2012). Also with regard to job search, self-control benefits job search behavior independent of job seekers' motivation to obtain employment (Baay, de Ridder, Eccles, van der Lippe, & van Aken, 2014; De Ridder, De Boer, Lugtig, Bakker, & van Hooft, 2011).

Proactivity

Proactivity describes the tendency to initiate and maintain goal-directed behavior and to enact or change one's environment (Bateman & Crant, 1993). Per definition, proactive individuals seek out opportunities, show personal initiative, and persist about meaningful change; whereas less proactive individuals tend to be more passive and reactive toward their environment (Fuller & Marler, 2009). Meta-analytical findings have shown that proactivity is related to a range of positive career outcomes (e.g., career satisfaction, salary, promotions). With regard to job search, proactivity helps both, younger (Brown et al., 2006; Claes & De Witte, 2002) and older job seekers (Zacher, 2013; Zacher & Bock, 2014) during their search.

Occupational Future Time Perspective as a Moderator

Besides directly influencing the nature of the goals that job seekers pursue, occupational future time perspective likely also influences the positive relationships between the above self-regulatory resources and older job seekers' goal establishment and goal pursuit. More specifically, we argue that the positive impact of self-regulatory resources on goal establishment and goal pursuit will be stronger for job seekers who perceive their occupational future time to be limited as compared to job seekers who perceive their occupational future time to be open-ended. In other words, self-regulatory resources become more important for job search when the perception of occupational future time shrinks (Zacher, 2013).

As the new job is a rather distant – and thereby a future-oriented growth – goal, momentary amenities could be a distractor that job seekers with a limited future time perspective are relatively more concerned with, which, in turn, is likely to undermine their job search process. For example, job seekers with a limited occupational future time perspective may see relatively little benefit in the eventual results of their job search (i.e., some relatively temporary reemployment), compared to the benefits provided by leisure

activities or the engagement with their family. These activities provide them with momentary pleasure, but, at the same time, keep them away from establishing and pursuing their future-oriented job search goals. Job seekers with a limited occupational future time perspective thus depend even more on self-regulatory resources that support them during their job search that requires high persistence over a considerably long time. In contrast, job seekers with an open-ended occupational future time perspective both have more at stake in finding future employment and also dedicate more attention to future-oriented behaviors, such as making new social contacts or gather information about potential future jobs (Zacher, 2013).

Therefore, their self-regulatory resources are less important for establishing and pursuing their future-oriented job search goals. In other words, self-regulatory resources are particularly important among job seekers with a limited occupational future time perspective. In line with this argument, previous research showed that the perceived remaining time left in the occupational context moderated the relationship between proactivity and job search intensity among mature-aged job seekers (Zacher, 2013). Hence, it plausible to assume that occupational future time perspective shapes the relationships between job search self-efficacy, self-control, and proactivity with job seekers' goal establishment and goal pursuit.

To sum up, we propose:

Proposition 7: Occupational future time perspective moderates the positive relationships between job search self-efficacy, self-control, and proactivity with (a) goal establishment and (b) pursuit during the job search process in a way that the relationships will be stronger if job seekers perceive their occupational future time as limited (vs. open-ended).

Outcomes of Successful Job Search

The eventual goal of job search is to find (re)employment, and therefore most job search research has focused on quantitative job search outcomes such as the probability of finding (re)employment by a certain date (i.e., employment status; Crossley & Stanton, 2005; De Battisti et al., 2016; Saks, 2006; Saks & Ashforth, 2000) or the time needed to find this employment. Relatively little is known about employment quality as an outcome of job search (De Battisti et al., 2016; Koen, Klehe, Van Vianen, Zikic, & Nauta, 2010; Wanberg, 2012), even though it is this employment quality that will likely decide on how sustainable the new job is over time.

(Re)employment quality can be distinguished along job, organization and career-related indicators (Zikic & Klehe, 2006). Job-related indicators of (re)employment quality often address the person's own attitudes toward the job (e.g., job satisfaction) or more specifically comparisons of the new job with the job held before the transition on different job characteristics, such as salary, job security or distance to home (Wanberg et al., 1999). Yet, they can also reflect the perceived fit between one's profile and the demands of the position as well as between one's needs and desires and the benefits that the position offers (Cable & DeRue, 2002). This fit perspective may be particularly important for older job seekers, as different aging experiences may have changed both their profile of abilities and their own needs and desires. Regarding job seekers' profile, aging related losses (e.g., of certain physical and perceptual abilities) may limit their suitability for jobs that fit them well in the past. Yet, they may also have experienced aging related gains (e.g., of self-knowledge and reaching a greater emotional balance) that enable them for new tasks that they previously would never have considered, such as mentoring and training. Related to this is the above-proposed shift in needs and desires toward socio-emotional goals, rather than growth goals. In short, while the perspective of 'fit' may be suitable for older as well as younger job seekers

in general, the content and meaning of ‘fit’ may greatly change in the course of an individual job seekers’ career.

The same may well be true for organization-related indicators of (re)employment quality, which often capture the perceived fit in values between oneself and the organization (Cable & DeRue, 2002), but also workers’ attitudes toward the organization such as their affective organizational commitment (Meyer & Allen, 1991) and organizational identification (i.e., identifying as a member of the organization based on feelings of connection, belongingness and oneness with that organization; Mael & Ashforth, 1992).

Similarly, changing employment goals may also change the meaning of career-related indicators of employment quality such as career growth, i.e., the expected utility of the new job for attaining one’s superordinate career goals (Zikic & Klehe, 2006). Finally, turnover intentions (i.e., exit reactions linked to job, organization, or career-related dissatisfaction resulting from the new job) are commonly used as an indicator for (re)employment quality (e.g., Koen et al., 2010; Saks & Ashforth, 2002; Zikic & Klehe, 2006).

Proposition 8: Older job seekers’ criteria for evaluating the quality of any given job will change in line with this job’s fit to their personal (a) gains and losses in terms of aging experiences and (b) changes in goals in terms of possibly becoming more socio-emotional and less growth-related in content.

In principle, both goal establishment and goal pursuit should increase job seekers’ chances of getting a new job of decent quality in a reasonable time. Having a clear picture of what their goals are and how to pursue them will support job seekers in finding new employment quickly. Also, well established goals and their pursuit can guide job seekers into jobs that fulfill their preselected criteria (i.e., socio-emotional or growth goals). Thus, some older job seekers may define quality employment as employment that still challenges them

and that possibly serves as a stepping stone to a higher order goal (e.g., to get a job as executive assistant before becoming an executive officer), whereas for others, and particularly those with a shorter occupational time perspective, it may be simply to find a job that they enjoy. In line with the previous literature on job search (e.g., Koen et al., 2010; Van Hooft et al., 2013; Wanberg et al., 2016), we thus propose:

Proposition 9: Job seekers' (a) goal establishment and (b) goal pursuit increase the probability of (re)employment (i.e., employment status and speed).

Proposition 10: Job seekers' (a) goal establishment and (b) goal pursuit facilitate a high employment quality (i.e., job, organization, and career-related indicators) both in general and in comparison to their own aging related employment goals.

Context of Job Search among Older Workers

All this process takes place in a certain context. In this section, we will discuss this context as it relates to job search among older workers and its facilitating and constraining impact. In particular, we will focus on (a) the roles of stereotypes that older job seekers encounter during their job search, followed by (b) a discussion of wider regulatory and labor market conditions that influence their search process, and (c) a discussion of the impact of their imminent surrounding in terms of family and friends.

Age and Unemployment Related Stereotypes

Stereotypes and their respective consequences are likely the most prominent contextual factor discussed in the literature on job search among older workers (Klehe et al., 2018). More specifically, both age and – when applicable – unemployment co-vary with a number of stigmatizing stereotypes that question job seekers' basic employability.

Age related stereotypes. Older workers in general and older job seekers in particular often face stigmatizing stereotypes related to age that tend to question their employability.

Besides arguing that older workers will remain in the organization for only a limited time before retirement, stereotypes most notably address older workers' human capital, claiming them to be less motivated and poorer at performing their jobs, and their personal adaptability, claiming them to be harder to train and less adaptable to changes or to receive knowledge at work (Burmeister, Fasbender, & Deller, 2018; Posthuma & Campion, 2009). While reducing older job seekers' chances on the labor market in general, these stereotypes may become particularly troublesome for older job seekers who indeed do intend to continue working for a long period of time (i.e., who still regard their occupational future time perspective as open-ended) and who still aim to pursue growth goals. For them, age related stereotypes directly counteract their own ideas of quality employment.

That said, while the content of age related stereotypes seems relatively global, the strength of these stereotypes is not. Rather, countries and cultures greatly differ in their attitudes toward older adults, with respondents in countries characterized by high collectivism and a steep increase in the population's age generally showing more negative attitudes toward older workers than respondents in more individualistic countries and countries whose population ages less speedily (North & Fiske, 2015).

Unemployment related stereotypes. The issue of stigmatizing stereotypes pertains equally, if not more, to unemployed as compared to employed job seekers. Indeed, unemployed job seekers often face insult to injury by being blamed themselves for their previous job loss and current unemployment (McFadyen, 1998): Recruiters often question these job seekers' motivation to work and/or their performance on the job (Karren & Sherman, 2012). This effect grows even stronger in the face of an *unfavorable employment history* such as prolonged unemployment or repeated spells of unemployment with short periods of work in-between.

As with age, unemployment related stereotypes, too, are culturally dependent, as different cultures tend to hold different assumptions about the cause and responsibility of unemployment. Particularly societies characterized by a traditionally high level of Protestantism (i.e., the Anglo-Saxon and many Scandinavian and some central European countries, but also certain African countries; Norris & Inglehart, 2004) tend to embrace a protestant work ethic. Originally, a protestant work ethic implies that one sees one's work and economic activity as a calling, i.e., a God-given duty – fostering an intense devotion to this work in order to assure oneself that one was predestined for salvation (Van Hoorn & Maseland, 2013). Being out of work thus implies not only a personal tragedy and cause of unhappiness particularly in these countries (Van Hoorn & Maseland, 2013), but may even be interpreted as a self-inflicted sin, strengthening the stigma attached to unemployment.

Impact on the job search process. When pondering about how the stereotypes outlined above influence the job-search process, a first perspective is to focus on what these stereotypes imply for the individual. For one, as older job seekers become aware of such stereotypes during their job search, growing negative meta-stereotypes, older job seekers may run the risk of falling prey to stereotype threat (Finkelstein, King, & Voyles, 2014), underperforming during their job search and self-presentation to possible employers. Relatedly, these stigmatizing stereotypes threaten older job seekers' own identities, i.e., the content, value, meaning, and enactment of existing self-definitions (Petriglieri, 2011), for example as dedicated and competent members and contributors to their respective organizations and families, while additionally imposing new and unwanted identities upon job seekers, for example as 'old', 'lazy', and 'incompetent' (Kira & Klehe, 2016).

In response to such an identity threat, jobseekers tend to either protect their work-related identities, sometimes at the expense of becoming more cynical toward employers (e.g., Fraher & Gabriel, 2014; Mendenhall, Kalil, Spindel, & Hart, 2008), or to downgrade

(McFadyen, 1995; J. Zikic & Richardson, 2007), and even to exit their work-related identities and to define themselves as (semi) retired (Berger, 2006). While such an exit can bring about a significant increase in life satisfaction (Hetschko, Knabe, & Schöb, 2014), it clearly implies a drop of employment-related goals and of job-search activity, thus undermining the sustained job-search related self-regulation.

Regulatory and Labor Market Conditions

Not fully unrelated to the above are the conditions that older job seekers' objectively face on the labor market, which is the second aspect that we aim to discuss, focusing on the issues of discrimination, the demand on the labor market in general, and the policies and regulations that unemployed job seekers are subject to during their search.

Discrimination. A final consequence of the stigmatizing stereotypes outlined above is the outright discrimination of older job seekers, particularly when unemployed, on the labor market. Indeed, while employed job seekers are often actively sought out by recruiters, unemployed job seekers are not (Finlay & Coverdill, 2002), and older and unemployed job seekers indeed face lower chances of finding (re)employment (Fasbender & Wang, 2017b; Wanberg et al., 2016). To overcome this hurdle, these job seekers may need all the more thought, planning, and persistence in their job search. Yet, past findings suggest that job seekers will at some point cease to make this investment. Indeed, stigmatized groups facing discrimination, including older workers, are consistently overrepresented among discouraged workers (e.g., Finegan, 1987; Maestas & Li, 2006; see also Berger, 2006, Ranzijn et al., 2006, Gabriel, Gray, & Goregaokar, 2013).

Labor market demand. On a more macro level, but likely addressing the same mechanism, is the general labor market demand that job seekers face. Van Hooft et al. (2013) proposed that a positive labor market demand would both undermine the need for an intensive and high-quality job search, i.e., a job search that carefully cycles through the self-

regulatory phases outlined above, as well as the link between job search and (re)employment success. In other words, given ample job opportunities, there will be less need for job seekers to carefully choose their goals, plan in detail how to pursue them, persist in striving for them, and constantly reflect and refine their approach chosen in order to succeed. Even a rather haphazard and unorganized approach bears good chances of being successful.

Policies and regulations. Also relevant at least for unemployed job seekers is the welfare regime of their respective country and thus the policies surrounding their social safety net devised for supporting unemployed job seekers (Bambra, 2007) and older unemployed job seekers in particular. Some countries, most prominently those that follow the logic of a Scandinavian welfare state regime, offer quite generous social transfers in the form of relatively high net replacement rates during unemployment and a long duration during which unemployment insurance benefits are being paid. Others, however, most notably the Anglo-Saxon regimes, offer far less net replacement and for considerably shorter times. Also, benefits in these systems are usually means-tested (i.e., services and payments are given only to those below a certain income threshold) and benefit recipients are often stigmatized for needing state support (Bambra & Eikemo, in press). Finally, regulations may still differ for older job seekers compared to younger ones, as such allowing them to take longer to find (re)employment and thus paying credit to their enhanced difficulties on the labor market. As an example, the regular insurance benefit duration in Germany is up to 12 months – but can extend to up to 24 months for job seekers aged 50 and above.

This is relevant for the job search process, as more generous systems tend to co-vary with less intense job search among the unemployed (Krueger & Mueller, 2010; Lindeboom & Theeuwes, 1993) and more time needed to end the unemployment (Atkinson & Micklewright, 1991; Krueger & Meyer, 2002). That said – before suggesting that one should resort to less generous systems – it is important to note that up to now no research has

addressed the link between unemployment system and the quality of this search. Also, the results from the few studies predicting the quality of employment are far from clear (Tatsiramos & Van Ours, 2014). Research on time pressure suggests that having only little time to search may have severe consequences. Time pressure undermines people's self-efficacy in managing complex tasks (Durham, Locke, Poon, & McLeod, 2000; Smith, Mitchell, & Beach, 1982), increases anxiety and negative affectivity (Maule, Hockey, & Bdzola, 2000), causes people to consider less (Maule et al., 2000) and primarily negative information (Ben Zur & Breznitz, 1981) and to come up with fewer alternatives (Mann & Tan, 2016). Hampering the search for appropriate strategies, time-pressure ultimately impairs effective decision-making (Zakay & Wooler, 1984). Facing only little and short-term benefits, i.e., having little time for finding a new job before their benefits run out, may thus foster the intensity with which people search for a new job, but may impair the quality of their search.

Support and Demands by Family and Friends

Finally, older workers' job search process will depend on their imminent social surroundings, too, namely the support and demands presented by their family and friends.

Social support. Social support is an important predictor not only for the intensity with which people search for employment (Kanfer et al., 2001), but it can also support the quality of this job search. After all, support can offer encouragement and affirmation, thus refilling emotional resources that help prevent depletion despite the lack of positive feedback usually encountered during job search. Further, social support often also implies task related support, which can help job seekers to manage the job search related tasks ahead of them, and feedback and information support, which may help job seekers establish clear goals, develop suitable plans, and obtaining diagnostic information about their goal striving (Van Hooft et al., 2013). Finally, social networks are a powerful source of finding job

leads and gaining (re)employment (Van Hoye, van Hooft, & Lievens, 2009). Social support is particularly relevant for older job seekers, as their social interconnectedness tends to decline with age (Wrzus, Hänel, Wagner, & Neyer, 2013). This may be particularly true for work-related networks, as potentially helpful friends and acquaintances start to retire.

Alternative obligation. Sometimes social ties can also impair job search. People losing their jobs can come to appreciate the spare time that they suddenly have in order to spend with their families, reconnecting with the people closest to them (e.g., Zikic & Richardson, 2007). As a side effect, however, this facilitates a less painful transition away from work-related identities to alternative identities such as homemaker or caretaker, thus threatening a process of work-related goal establishment (selection and commitment to a clear employment goal) and maintenance. Also, families may come to raise the time demands that they place on the older job seeker, e.g., by asking them to take on care responsibilities for grandchildren, children, parents or other relatives (Szinovacz & Davey, 2005). While we know that care responsibilities can lead to early retirement, especially among women (Lumsdaine & Vermeer, 2014), the same responsibilities may undermine the dedication with which older unemployed job seekers search for (re)employment. Actually, in a study about the reasons of unemployed individuals to search versus not to search for a new job, the expectations of others such as family members emerged as a prime reason not to search (M. Vansteenkiste, Lens, De Witte, De Witte, & Deci, 2004), thus disrupting the goal establishment and pursuit during the job search.

Context: A final note

Finally, it is worth noting that the above contextual factors often interact with one another. For example, stereotypes related to age and to unemployment can place people at double jeopardy when they fit that pattern. After all, unemployment easily undermines some of the positive stereotypes otherwise associated with age (e.g., dependable), while resonating

with some of the negative ones (e.g., poor performers with shorter employment prospect, resistant to learning and change; Posthuma & Campion, 2009). Also, stigmatizing stereotypes about unemployed job seekers being ‘poor performers’ and ‘unmotivated’ grow particularly strong in the presence of a healthy labor market when many suitable job openings seem available, given that organizational decision makers lose a viable alternative explanation for unemployed job seekers’ unemployment (Roed, 1997). A final example is the observation that the same Anglo-Saxon countries that adopt the Protestant work ethics’ critical stance toward unemployment provide some of the least generous benefit system to unemployed job seekers. These points are relevant insofar as a measure of one contextual factor may also require the control of another in order to rule out alternative possible explanations.

Recommendations for Empirical Research

As the usefulness of any conceptual model also depends on researchers’ ability to actually test it, we now outline methodological considerations relevant for studying job search and (re)employment from a lifespan development perspective, focusing on necessary features of a suitable longitudinal design and on the measurement of theoretical constructs.

Considerations when Setting Up a Longitudinal Study

Given the dynamic nature of the job search process, research on older workers' job search should survey the same participants over multiple time points to study change over time (Ployhart & Vandenberg, 2010; Taris, 2000; Wang et al., 2017). Table 1 summarizes the questions, conceptual and statistical considerations when setting up a respective study.

Number of time points required. Studies on *causal priority* need at least two, and studies for *future predictions* and *change* at least three time points, with the inclusion of *mediating mechanisms* (e.g., regarding to what extent aging strategies mediate links between aging experiences and job search behavior) making even further time points necessary

(Bentley, 2011; Preacher, 2015). Alternatively, to ensure that mediation models do not grow too complex, one may also break down the overall model of job search and (re)employment among older workers into different smaller models to study.

Optimal time interval. The best time interval between the time points also depends on the number of time points because the total time period should reflect the change process studied (Wang et al., 2017). In the case of job search, this implies covering the job search process throughout the entire time of unemployment and into (re)employment or into job seekers' decision to retire. This implies starting as soon as possible, ideally during the first days of unemployment or even before that (e.g., if workers receive sufficient advanced notice), something that is often not feasible due to difficulties in accessing study participants in time (Wanberg et al., 2005). Such early start may also be particularly relevant if one aims to cover the processes of goal establishment and pursuit during job search before or during job seekers' experience of age- and unemployment-related stereotypes and discrimination. At the least, scholars should control for participants' length of unemployment prior to Time 1.

Covering the whole process of job search and (re)employment is a challenge in a context where some job seekers find (re)employment within days and others fail to do so for years, depending on personal and economic conditions, as well as country-specific variables such as social benefits, pension and early retirement schemes, besides plain luck. Also, within each country and time-period, the duration of unemployment varies greatly between individuals. In the United States, for example, the majority of older unemployed found a job within the first six months (< 1 month: 43.9%; 1 to < 3 months: 19.0%; 3 to < 6 months: 11.3%), only few (7.5%) between six and twelve months, and 18.3% in more than twelve months (data from 2016, OECD, 2017).² This example shows that setting up a study over a

² In comparison, in Germany, a quarter of all older unemployed found a new job within the first six months (< 1 month: 6.8%; 1 to < 3 months: 9.9%; 3 to < 6 months: 10.6%), 14.9% between six and twelve months, and the majority (58.1%) in more than twelve months (data from 2016, OECD, 2017).

too long period could exclude a substantial amount of participants or at least neglect some aspects of their job search process. To insure a representative allocation of unemployed people in the final sample, it is therefore important to compile a study in a time frame that allows capturing the relevant changes in job search behavior even for people with shorter unemployment duration (i.e., < 3months).

Further, it is important to consider the changeable nature of study variables. Whereas many aging experiences and self-regulation skills are expected to be rather stable, job search behaviors (Wanberg, Glomb, Song, & Sorenson, 2005), the use of aging strategies (Baltes, Wynne, Sirabian, Krenn, & de Lange, 2014), and even some aging experiences (e.g., in regard to self-knowledge; Kira & Klehe, 2016) may change within weeks or even days. While generalizations about the optimal interval for assessing causal effects cannot be made (Cohen, Cohen, West, & Aiken, 2003), Dormann and Griffin (2015) suggest calculating the optimal interval between time points from existing data or a 'shortitudinal' pilot study. Also, they suggest that the stability (i.e., the autoregressive effect) of the variables studied and their bidirectional cross-lagged effects can be used to estimate the optimal interval.

For highly dynamic patterns, *experience sampling* or *daily diary studies* allow the study of short-term within-person fluctuations (cf. Fisher & To, 2012). As a special case of longitudinal research with intensive data collection (i.e., up to five times a day) over a short period of time, these methods have been used both in the study of job search (Wanberg, Zhu, & Van Hooft, 2010) and of aging strategies (e.g., Baethge, Müller, & Rigotti, 2016; Yeung & Fung, 2009; Zacher, Chan, Bakker, & Demerouti, 2015). They may prove most useful for disentangling the more stable differences between older job seekers' aging experiences, occupational future time perspective, and self-regulatory skills from their dynamic use of and relationships between aging strategies and goal establishment and pursuit during job search.

Attrition and missing data. A special concern is attrition and missing data, as participant drop-out and non-response in unemployment research is often both high and not only random (e.g., due to forgetfulness, lack of time) but also selective (e.g., due to having found (re)employment or the salience of negative emotions), causing spurious, overestimated or underestimated relationships between the variables studied (Goodman & Blum, 1996). Some non-response reasons can be addressed by design considerations such as automatic reminders (against forgetfulness), shorter surveys with fewer constructs and/or shorter scales (against boredom and lack of time) or monetary or nonmonetary incentives that increase across the time points (Wang et al., 2017). A more difficult issue to tackle is nonresponse due to negative emotions related to job seekers' many disappointments, negative feedback or the lack of response from potential employers during the job search, and possible concerns about effects on job seekers' unemployment benefits. Besides clear but sensitive communication, explaining research procedures, being available, and the response to questions, it is continued contact with participants throughout the duration of a longitudinal study that likely best increases belongingness and commitment to the research efforts (Laurie, 2008). Also, researchers can offer psychological support during the time of data collection, for example, in form of a hot line (via phone or email), where participants can seek additional support if needed. Finally, researchers need to statistically test to what extent the inevitable remaining attrition is selective and take according measures (see Goodman & Blum, 1996). If the drop out of participants occurs non-systematically, the data may be corrected by estimating missing values (Goodman & Blum, 1996). As Wang et al. (2017, p. 18) argue: "More data = more useful information that can reduce bias and increase statistical power".

Measurement of the Theoretical Constructs

In the following, we will discuss the measurement of the theoretical constructs. In particular, we will focus on aging related (i.e., aging experience) and job search related

measurement issues (i.e., goal establishment, goal pursuit, and employment quality).

Aging related measurement issues. *Occupational future time perspective* has been constructed for the work context (Zacher & Frese, 2009) and has been used in the job search context (Zacher, 2013), although the dimensionality of the construct (i.e., focus on opportunities or limitations and actual remaining occupational future time) is not always clear (Rudolph, Kooij, Rauvola, & Zacher, 2018). Also, the measurement of *aging strategies* is well-established in the work context (Moghimi et al., 2017), but may still need adaptation and subsequent validation to suit the job search context.

More problematic to date is the measurement of *aging experience*, the ideographic understanding of what aging entails. Individuals' subjective age may roughly indicate how old they feel (e.g., Spuling, Miche, Wurm, & Wahl, 2013; Weiss & Lang, 2012; Westerhof & Barrett, 2005). Yet, such unidimensional and largely de-contextualized measurement approach adds only little to our understanding of what it means to grow older (Diehl et al., 2014; Fasbender et al., 2014; Steverink et al., 2001). Based on the lifespan perspective, Dittmann-Kohli et al. (1997) developed a taxonomy of aging experiences capturing the positive changes of personal growth and gaining self-knowledge and the negative changes of physical and social loss (Fasbender et al., 2014). While promising, this leaves other cognitive and affective changes unaddressed, such as likely changes in one's ability to memorize or speed of thinking, or one's focus on positive versus negative emotions and potentially improved emotion-regulation skills. This calls for a wider empirical investigation about the individual experience(s) of aging.

Job search related measurement issues. Historically, the job search domain started with research on job search intensity as a clear indication of goal pursuit, and only later focused on job search quality, thus addressing also aspects of the goal establishment phase.

Goal establishment. The job search literature has no fixed set of measures to address

the phase of goal establishment. There are, however, measures addressing actions and cognitions discussed as antecedents of job search that may serve as a starting point, focusing on goal setting, goal clarity, goal proximity, and goal commitment during job search.

Regarding the act of *goal setting* itself, some research has asked respondents to write down what position they wanted to find in the coming 12 to 18 months, coding responses as 1, if respondents had provided one coherent answer to this question, or as 0, if respondents had provided no or several alternative options (e.g., Sugalski & Greenhaus, 1986). Adapted to the case of older workers, one could adjust this procedure to code the degree to which goals reflect growth goals versus socio-emotional goals.

More common is the use of Gould's (1979) six-item career planning scale, which has proven useful for predicting the quality of employment after unemployment (Koen et al., 2010; Zikic & Klehe, 2006). That said, the scale is relatively general in targeting one's career goals overall (e.g., "My career objectives are not clear"; reverse coded), and in mixing the existence of such goals with thoughts on how to reach them (e.g., "I know what I need to do to reach my career goals"), and thus rather an indication of the existence of a *goal hierarchy*.

The content of such goals, however, is not being addressed. An exception is a study by Mor-Barak (1995) that focuses not on goals but on the meaning that older job seekers attach to work. For addressing growth and/ or socio-emotional goals more specifically, it may help to adjust existing scales or checklists, asking job seekers to rate the importance of growth (e.g., challenging work; opportunity for personal development) and socio-emotional job features (e.g., positive social interactions at work; the chance to teach and train others; see for example Kooij & Van De Voorde, 2011).

Goal clarity is usually addressed via pretty straightforward four- (Wanberg et al., 2002) or five- (Zikic & Saks, 2009) item measures of job search clarity (e.g., "I have a clear idea of the type of job that I want to find" or "I have very clear job search objectives").

Goal commitment is usually assessed generally as employment commitment (e.g., Warr, Cook, & Wall, 1979, including items such as “having a job is very important to me”). It should again be easy to adjust such measures to the content-dimensions (i.e., features of growth or socio-emotional goals). As job seekers are willing to compromise on some aspects of their job search more than on others (Vansteenkiste, Verbruggen, & Sels, 2016), one may ask job seekers about their commitment to any particular feature of the job aspired to (rather than asking for their overall employment commitment).

Goal pursuit. Goal pursuit can be measured by job search intensity and self-monitoring. A first option to measure *job search intensity* is the single question as to how many hours per week job seekers spent searching for a job (Barron & Mellow, 1981). Besides correlating highly with more elaborate measures (Wanberg et al., 2005), the pure brevity of the measure makes it potentially suitable for high-frequency assessments. That said, beside reliability issues, such measure is open to job seekers’ interpretation as to which actions are part of job search and which are not. Thus, most researchers ask respondents to indicate how often they have completed several preparatory (e.g., read the help wanted adds, revised your resume) or active job search actions (e.g., sent out resumes to potential employers, contacted an employment agency) in the close past (Blau, 1994, later adjusted by van Hooft, Born, Taris, & van der Flier, 2004; Wanberg et al., 1999). This provides a decent overview of different behaviors that job seekers undertake when searching for new employment.

When it comes to *self-monitoring* during job search, however, we miss suitable measures, at least unless one wants to go beyond a mere observation of changes in job search intensity over time. Turban et al. (2009) developed a six-item scale that addresses the degree to which job seekers monitor and analyze their progress toward accomplishing their goals. Yet, the scale also contains items that reflect goal establishment as they address issues of goal

setting and plan development. Overall, variables related to goal pursuit have been far less prominent in the job search literature and highlight a need for further measure development.

Employment outcomes. As Saks (2006) pointed out, “the effectiveness of job search depends on the criteria used to measure success” (p. 401). *Quantitative employment outcomes* usually include self-report or database information about relatively objective data such as participants’ employment status at a given time, the time needed to find this employment, or the expiration exhaustion of their unemployment benefits (e.g., Wanberg et al., 2002), as well as job seekers own estimates of number of job interviews and job offers in a given timeframe.

Also, *qualitative employment outcomes* may be measured objectively (e.g., is the job temporary or unlimited) or by comparing the new job with an old one on features such as job security, salary, or working hours (Burke, 1986; Wanberg et al., 1999; Zikic & Klehe, 2006). Most measures, however, ask for direct evaluations of the new job and organization in terms of the perceived fit (Cable & DeRue, 2002, e.g., in Koen, Klehe, & Van Vianen, 2012; Koen et al., 2010), satisfaction (e.g., Colarelli, 1984) affective commitment (Meyer & Allen, 1991), organizational identification (Mael & Ashforth, 1992, e.g., in Saks & Ashforth, 2002; Zikic & Klehe, 2006), and/or potential turnover intentions (Colarelli, 1984, see Koen et al., 2012, 2010; Zikic & Klehe, 2006), besides sometimes also including career considerations (Zikic & Klehe, 2006). While they all take a slightly different perspective, subjective evaluations tend to co-vary strongly and often represent a common latent employment quality factor (e.g., Zikic & Klehe, 2006). Yet, none of these measures addresses whether the employment found truly reflects the employment originally searched for. For this purpose, one might again use the same scales addressing the growth and socio-emotional employment goals (e.g., Kooij & Van De Voorde, 2011) and assess the degree to which the new job offers the respective opportunities, thus allowing an indirect (and thus more objective) measure of fit.

Concluding Thoughts

Even though empirical research and unemployment statistics revealed that older workers face longer unemployment periods compared to younger or middle-aged workers, little knowledge exists about the job search process among older workers. This paper made a first attempt in addressing this knowledge gap by theorizing how job search may change when getting older. In sum, we presented a conceptual model of job search and (re)employment from a lifespan development perspective. The conceptual model emphasized the importance of aging as an overarching process that influences older workers in searching for a new job. Going beyond chronological age as an insufficient indicator to what getting older means to people, we introduced job seekers' aging experiences, namely their experienced gains and losses over the lifespan as relevant factor shaping their goal establishment and goal pursuit during the self-regulatory job search process.

More specifically, we highlighted job seekers' occupational future time and their use of aging strategies as relevant mechanisms of how aging experiences influence their job search. Based on socio-emotional selectivity theory (Carstensen, 1992, 2006; Carstensen et al., 1999), we argued that job seekers' occupational future time perspective informs their goal establishment in a way that socio-emotional goals are prioritized over growth goals when job seekers perceive their occupational future time as limited (vs. open-ended). Based on selection, optimization, and compensation theory (Baltes & Baltes, 1990; Freund & Baltes, 2002), we argued that job seekers' elective and loss-based selection strategies facilitate their goal establishment, whereas job seekers' optimization and compensation strategies facilitate their goal pursuit. In addition, we described (job search) self-efficacy, trait self-control, and proactivity as relevant self-regulatory resources supporting the job search process and explained how job seekers' occupational future time perspective likely moderates the predictive effects. Further, we inspected the context in which job search among older workers

takes place. In particular, we introduced age and unemployment stereotypes, regulatory and labor market conditions, as well as support and demands by family and friends as important context factors that shape the job search for older workers. Finally, we discussed potential research designs and methodological issues that may guide future research directions. As a result, the paper contributes to a better understanding of how the job search process potentially changes for older workers.

References

- Atkinson, A., & Micklewright, J. (1991). Unemployment compensation and labor market transitions: A critical review. *Journal of Economic Literature*, *29*, 1679–1727.
- Baay, P. E., de Ridder, D. T. D., Eccles, J. S., van der Lippe, T., & van Aken, M. A. G. (2014). Self-control trumps work motivation in predicting job search behavior. *Journal of Vocational Behavior*, *85*, 443–451. <https://doi.org/10.1016/j.jvb.2014.09.006>
- Baethge, A., Müller, A., & Rigotti, T. (2016). Nursing performance under high workload: A diary study on the moderating role of selection, optimization and compensation strategies. *Journal of Advanced Nursing*, *72*, 545–557. <https://doi.org/10.1111/jan.12847>
- Bal, P. M., de Lange, A. H., Van der Heijden, B. I. J. M., Zacher, H., Oderkerk, F. A., & Otten, S. (2015). Young at heart, old at work? Relations between age, (meta-) stereotypes, self-categorization, and retirement attitudes. *Journal of Vocational Behavior*, *91*, 35–45. <https://doi.org/10.1016/j.jvb.2015.09.002>
- Baltes, B. B., Wynne, K., Sirabian, M., Krenn, D., & de Lange, A. (2014). Future time perspective, regulatory focus, and selection, optimization, and compensation: Testing a longitudinal model. *Journal of Organizational Behavior*, *35*, 1120–1133. <https://doi.org/10.1002/job.1970>
- Baltes, P. B. (1987). Theoretical propositions of life-span developmental psychology: On the dynamics between growth and decline. *Developmental Psychology*, *23*, 611–626. <https://doi.org/10.1037/0012-1649.23.5.611>
- Baltes, P. B., & Baltes, M. M. (1990). Psychological perspectives on successful aging: The model of selective optimization with compensation. In P. B. Baltes & M. M. Baltes (Eds.), *Successful aging: Perspectives from the behavioral sciences*. (pp. 1–34). New

York, NY: Cambridge University Press.

<https://doi.org/10.1017/CBO9780511665684.003>

Baltes, P. B., Reese, H. W., & Lipsitt, L. P. (1980). Life-span developmental psychology.

Annual Review of Psychology, *31*, 65–110.

<https://doi.org/10.1146/annurev.ps.31.020180.000433>

Bambra, C. (2007). Going beyond the three worlds: Regime theory and public health research. *Journal of Epidemiology and Community Health*, *61*, 1098–1102.

Bambra, C., & Eikemo, T. A. (2018). Insecurity, unemployment, and health: A social epidemiological perspective. In U.-C. Klehe & E. A. J. Van Hoof (Eds.), *The Oxford Handbook of Job Loss and Job Search*. Oxford, UK: Oxford University Press.

Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, *50*, 248–287. [https://doi.org/10.1016/0749-5978\(91\)90022-L](https://doi.org/10.1016/0749-5978(91)90022-L)

Barron, J. M., & Mellow, W. (1981). Changes in labor force status among the unemployed. *Journal of Human Resources*, *16*, 427–441. <https://doi.org/10.2307/145630>

Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior*, *14*, 103–118. <https://doi.org/10.1002/job.4030140202>

Ben Zur, H., & Breznitz, S. J. (1981). The effect of time pressure on risky choice behavior. *Acta Psychologica*, *47*, 89–104. [https://doi.org/10.1016/0001-6918\(81\)90001-9](https://doi.org/10.1016/0001-6918(81)90001-9)

Bentley, J. P. (2011). *An examination of statistical methods for longitudinal mediation modeling*. The University of Alabama at Birmingham.

Berger, E. D. (2006). "Aging" identities: Degradation and negotiation in the search for employment. *Journal of Aging Studies, 20*, 303–316.

<https://doi.org/10.1016/j.jaging.2005.11.002>

Brown, D. J., Cober, R. T., Kane, K., Levy, P. E., & Shalhoop, J. (2006). Proactive personality and the successful job search: A field investigation with college graduates.

Journal of Applied Psychology, 91, 717–726. <https://doi.org/10.1037/0021-9010.91.3.717>

Burke, R. J. (1986). Reemployment on a poorer job after a plant closing. *Psychological Reports, 58*, 559–570. <https://doi.org/10.2466/pr0.1986.58.2.559>

Burmeister, A., Fasbender, U., & Deller, J. (2018). Being perceived as knowledge sender or knowledge receiver: A multi-study investigation of the effect of age on knowledge

transfer. *Journal of Occupational and Organizational Psychology, 1–28*.

<https://doi.org/10.1111/joop.12208>

Cable, D. M., & DeRue, D. S. (2002). The convergent and discriminant validity of subjective fit perceptions. *Journal of Applied Psychology, 87*, 875–884.

<https://doi.org/10.1037/0021-9010.87.5.875>

Carstensen, L. L. (1992). Social and emotional patterns in adulthood: Support for socioemotional selectivity theory. *Psychology and Aging, 7*, 331–338.

Carstensen, L. L. (2006). The influence of a sense of time on human development. *Science, 312*, 1913–1915. <https://doi.org/10.1126/science.1127488>

Carstensen, L. L., Isaacowitz, D. M., & Charles, S. T. (1999). Taking time seriously: A theory of socioemotional selectivity. *American Psychologist, 54*, 165–181.

- Claes, R., & De Witte, H. (2002). Determinants of graduates' preparatory job search behavior: a competitive test of proactive personality and expectancy-value theory. *Psychologica Belgica*, *42*, 251–266.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences*. Mahwah, NJ: Erlbaum.
- Colarelli, S. M. (1984). Methods of communication and mediating processes in realistic job previews. *Journal of Applied Psychology*, *69*, 633–642.
- Crossley, C. D., & Stanton, J. M. (2005). Negative affect and job search: Further examination of the reverse causation hypothesis. *Journal of Vocational Behavior*, *66*, 549–560.
<https://doi.org/10.1016/j.jvb.2004.05.002>
- De Battisti, F., Gilardi, S., Guglielmetti, C., & Siletti, E. (2016). Perceived employability and reemployment: Do job search strategies and psychological distress matter? *Journal of Occupational and Organizational Psychology*, *89*, 813–833.
<https://doi.org/10.1111/joop.12156>
- De Ridder, D. T. D., De Boer, B. J., Lugtig, P., Bakker, A. B., & van Hooft, E. A. J. (2011). Not doing bad things is not equivalent to doing the right thing: Distinguishing between inhibitory and initiatory self-control. *Personality and Individual Differences*, *50*, 1006–1011. <https://doi.org/10.1016/j.paid.2011.01.015>
- De Ridder, D. T. D., Lensvelt-Mulders, G., Finkenauer, C., Stok, F. M., & Baumeister, R. F. (2012). Taking stock of self-control: A meta-analysis of how trait self-control relates to a wide range of behaviors. *Personality and Social Psychology Review*, *16*, 76–99.
<https://doi.org/10.1177/1088868311418749>
- Diehl, M., Wahl, H.-W., Barrett, A. E., Brothers, A. F., Miche, M., Montepare, J. M., ...

- Wurm, S. (2014). Awareness of aging: Theoretical considerations on an emerging concept. *Developmental Review, 34*, 93–113. <https://doi.org/10.1016/j.dr.2014.01.001>
- Dittmann-Kohli, F., Kohli, M., Künemund, H., Motel, A., Steinleitner, C., & Westerhof, G. (1997). *Lebenszusammenhänge, Selbst- und Lebenskonzeptionen [Life coherence, self-concept and life design: The conceptualization of the German Aging Survey]*. Berlin, Germany: Freie Universität.
- Dormann, C., & Griffin, M. A. (2015). Optimal time lags in panel studies. *Psychological Methods, 20*, 489–505. <https://doi.org/10.1037/met0000041>
- Durham, C. C., Locke, E. A., Poon, J. M. L., & McLeod, P. L. (2000). Effects of group goals and time pressure on group efficacy, information-seeking strategy, and performance. *Human Performance, 13*, 115–138. https://doi.org/10.1207/s15327043hup1302_1
- European Commission. (2014). *Population ageing in Europe: Facts, implications and policies. Procedia - Social and Behavioral Sciences (Vol. 19)*. Luxembourg: Publications Office of the European Union. <https://doi.org/10.1016/j.sbspro.2011.05.106>
- Fasbender, U., Deller, J., Wang, M., & Wiernik, B. M. (2014). Deciding whether to work after retirement: The role of the psychological experience of aging. *Journal of Vocational Behavior, 84*, 215–224. <https://doi.org/10.1016/j.jvb.2014.01.006>
- Fasbender, U., & Wang, M. (2017a). Intergenerational contact and hiring decisions about older workers. *Journal of Managerial Psychology, 3*, 210–224. <https://doi.org/10.1108/JMP-11-2016-0339>
- Fasbender, U., & Wang, M. (2017b). Negative attitudes toward older workers and hiring decisions: Testing the moderating role of decision makers' core self-evaluations. *Frontiers in Psychology, 7*(2057), 1–10. <https://doi.org/10.3389/fpsyg.2016.02057>

Fasbender, U., Wang, M., Voltmer, J.-B., & Deller, J. (2016). The meaning of work for post-retirement employment decisions. *Work, Aging and Retirement*, 2, 12–23.

<https://doi.org/10.1093/workar/wav015>

Finegan, T. A. (1987). Discouraged workers and economic fluctuations. *Industrial & Labor Relations Review*, 35, 88–102.

Finlay, W., & Coverdill, J. E. (2002). *Headhunters: Matchmaking in the labor market*.

Cornell University Press.

Fisher, C. D., & To, M. L. (2012). Using experience sampling methodology in organizational behavior. *Journal of Organizational Behavior*, 33, 865–877.

<https://doi.org/10.1002/job.1803>

Fraher, A. L., & Gabriel, Y. (2014). Dreaming of flying when grounded: Occupational identity and occupational fantasies of furloughed airline pilots. *Journal of Management Studies*, 51, 926–951. <https://doi.org/10.1111/joms.12081>

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>

Fuller, B., & Marler, L. E. (2009). Change driven by nature: A meta-analytic review of the proactive personality literature. *Journal of Vocational Behavior*, 75, 329–345.

<https://doi.org/10.1016/j.jvb.2009.05.008>

Gabriel, Y., Gray, D. E., & Goregaokar, H. (2013). Job loss and its aftermath among managers and professionals: Wounded, fragmented and flexible. *Work, Employment and Society*, 27, 56–72. <https://doi.org/10.1177/0950017012460326>

- 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/10.1016/S0149-2063\(96\)90027-6](https://doi.org/10.1016/S0149-2063(96)90027-6)
- Gould, S. (1979). Characteristics of career planners in upwardly mobile occupations. *Academy of Management Journal*, *22*, 539–550.
- 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*, 109–121. <https://doi.org/10.1037//0012-1649.25.1.109>
- Heckhausen, J., Wrosch, C., & Schulz, R. (2010). A motivational theory of life-span development. *Psychological Review*, *117*, 32–60. <https://doi.org/10.1037/a0017668>
- Heisig, J. P., & Radl, J. (2017). Adding scars to wrinkles? Long-run effects of late-career job loss on retirement behavior and personal income. *Work, Aging and Retirement*, *3*, 257–272. <https://doi.org/10.1093/workar/wax006>
- Henry, H., Zacher, H., & Desmette, D. (2015). Reducing age bias and turnover intentions by enhancing intergenerational contact quality in the workplace: The role of opportunities for generativity and development. *Work, Aging and Retirement*, *1*, 243–253.
<https://doi.org/10.1093/workar/wav005>
- Henry, H., Zacher, H., & Desmette, D. (2017). Future time perspective in the work context: A systematic review of quantitative studies. *Frontiers in Psychology*, *8*, 1–22.
<https://doi.org/10.3389/fpsyg.2017.00413>
- Hetschko, C., Knabe, A., & Schöb, R. (2014). Changing identity: Retiring from unemployment. *The Economic Journal*, *124*, 149–166.
<https://doi.org/10.1111/ecoj.12046>

- Kanfer, R. (2012). Work motivation: Theory, practice, and future directions. In S. W. J. Kozlowski (Ed.), *The Oxford Handbook of Organizational Psychology, Volume 1* (pp. 455–495). Oxford, UK: Oxford University Press.
<https://doi.org/10.1093/oxfordhb/9780199928309.013.0014>
- Kanfer, R., Beier, M. E., & Ackerman, P. L. (2013). Goals and motivation related to work in later adulthood: An organizing framework. *European Journal of Work and Organizational Psychology, 22*, 253–264.
<https://doi.org/10.1080/1359432X.2012.734298>
- Kanfer, R., & Bufton, G. (2015). Job loss, job search, and reemployment in later adulthood. In N. A. Pachana (Ed.), *Encyclopedia of Geropsychology* (pp. 1–11). Singapore: Springer Singapore. https://doi.org/10.1007/978-981-287-080-3_304-1
- 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>
- Karoly, P. (1993). Mechanisms of self-regulation: A systems view. *Annual Review of Psychology, 44*, 23–52. <https://doi.org/10.1146/annurev.psych.44.1.23>
- Karren, R., & Sherman, K. (2012). Layoffs and unemployment discrimination: A new stigma. *Journal of Managerial Psychology, 27*, 848–863.
<https://doi.org/10.1108/02683941211280193>
- 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., Koen, J., Pater, I. E. De, & Kira, M. (2018). Too old to tango? Job loss and job

search among older workers. In U.-C. Klehe & E. A. J. van Hooft (Eds.), *The Oxford Handbook of Job Loss and Job Search* (pp. 433–464). Oxford, UK: Oxford University Press.

Koen, J., Klehe, U.-C., & Van Vianen, A. E. M. (2012). Training career adaptability to facilitate a successful school-to-work transition. *Journal of Vocational Behavior, 81*, 395–408. <https://doi.org/10.1016/j.jvb.2012.10.003>

Koen, J., Klehe, U.-C., Van Vianen, A. E. M., Zikic, J., & Nauta, A. (2010). Job-search strategies and reemployment quality: The impact of career adaptability. *Journal of Vocational Behavior, 77*, 126–139. <https://doi.org/10.1016/j.jvb.2010.02.004>

Kooij, D. T. A. M., & Van De Voorde, K. (2011). How changes in subjective general health predict future time perspective, and development and generativity motives over the lifespan. *Journal of Occupational and Organizational Psychology, 84*, 228–247. <https://doi.org/10.1111/j.2044-8325.2010.02012.x>

Krueger, A. B., & Meyer, B. D. (2002). Labor supply effects of social insurance. In A. J. Auerbach & M. Feldstein (Eds.), *Handbook of Public Economics, 4* (pp. 2327–2392). Elsevier.

Krueger, A. B., & Mueller, A. (2010). Job search and unemployment insurance: New evidence from time use data. *Journal of Public Economics, 94*, 298–307.

Lang, F. R., & Carstensen, L. L. (2002). Time counts: Future time perspective, goals, and social relationships. *Psychology and Aging, 17*, 125–139. <https://doi.org/10.1037/0882-7974.17.1.125>

Laurie, H. (2008). Minimizing panel attrition. In S. Menard (Ed.), *Handbook of longitudinal research: Design, measurement, and analysis*. Burlington, MA: Academic Press.

- Lindeboom, M., & Theeuwes, J. (1993). Search, benefits and entitlement. *Economica*, *60*, 327–346.
- 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>
- Locke, E. A., & Latham, G. P. (1990). *A theory of goal-setting and task performance*. Englewood Cliffs, NJ: Prentice-Hall.
- Lord, R. G., Diefendorff, J. M., Schmidt, A. M., & Hall, R. J. (2010). Self-regulation at work. *Annual Review of Psychology*, *61*, 543–568.
<https://doi.org/10.1146/annurev.psych.093008.100314>
- Lumsdaine, R. L., & Vermeer, S. J. C. (2014). Retirement timing of women and the role of care responsibilities for grandchildren. *NBER Working Paper*, *20756*, 1–55.
- Mael, F., & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior*, *13*, 103–123.
- Maestas, N., & Li, X. (2006). Discouraged workers? Job search outcomes of older workers. *Michigan Retirement Research Center*, *133*. <https://doi.org/10.2139/ssrn.1095278>
- Mann, L., & Tan, C. (2016). The hassled decision maker: The effects of perceived time pressure on information processing in decision making. *Australian Journal of*

Management, 18, 197–209. <https://doi.org/10.1177/031289629301800204>

Maule, A. J., Hockey, G. R. J., & Bdzola, L. (2000). Effects of time-pressure on decision-making under uncertainty: Changes in affective state and information processing strategy. *Acta Psychologica*, 104, 283–301. [https://doi.org/10.1016/S0001-6918\(00\)00033-0](https://doi.org/10.1016/S0001-6918(00)00033-0)

Mcfadyen, R. G. (1995). Coping with threatened identities: Unemployed people's self-categorizations. *Current Psychology*, 14, 233–256. <https://doi.org/10.1007/BF02686910>

Mcfadyen, R. G. (1998). Attitudes toward the unemployed. *Human Relations*, 51, 179–199. <https://doi.org/10.1023/A:1016914319477>

Mendenhall, R., Kalil, A., Spindel, L. J., & Hart, C. M. D. (2008). Job loss at mid-life: Managers and executives face the “New Risk Economy.” *Social Forces*, 87, 185–209. <https://doi.org/10.1353/sof.0.0074>

Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1, 61–89. [https://doi.org/10.1016/1053-4822\(91\)90011-Z](https://doi.org/10.1016/1053-4822(91)90011-Z)

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*, 275, 247–275. <https://doi.org/10.1002/job.2108>

Mor-Barak, M. (1995). The meaning of work for older adults seeking employment: The generativity factor. *The International Journal of Aging and Human Development*, 41, 325–344.

- Norris, P., & Inglehart, R. (2004). *Sacred and Secular*. Cambridge, UK: Cambridge University Press.
- North, M. S., & Fiske, S. T. (2015). Modern attitudes toward older adults in the aging world: A cross-cultural meta-analysis. *Psychological Bulletin, 141*, 993–1021.
<https://doi.org/10.1037/a0039469>
- Organisation for Economic Co-operation and Development. (2006). *Live Longer, Work Longer*. Paris: OECD Publishing. <https://doi.org/10.1787/9789264035881-en>
- Organization for Economic Cooperation and Development [OECD]. (2017). *Average duration of unemployment*. Retrieved from
https://stats.oecd.org/Index.aspx?DataSetCode=AVD_DUR#
- Petriglieri, J. L. (2011). Under threat: Responses to and the consequences of threats to individuals' identities. *Academy of Management Review, 36*, 641–662.
<https://doi.org/10.5465/amr.2009.0087>
- Ployhart, R. E., & Vandenberg, R. J. (2010). Longitudinal research: The theory, design, and analysis of change. *Journal of Management, 36*, 94–120.
<https://doi.org/10.1177/0149206309352110>
- 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>
- Preacher, K. J. (2015). Advances in mediation analysis: A survey and synthesis of new developments. *Annual Review of Psychology, 66*, 825–52.
<https://doi.org/10.1146/annurev-psych-010814-015258>

- 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*(3), 467–479. <https://doi.org/10.1348/096317905X66828>
- Roed, K. (1997). Hysteresis in unemployment. *Journal of Economic Surveys*, *11*, 389–418. <https://doi.org/10.1111/1467-6419.00040>
- Rudolph, C. W. (2016). Lifespan developmental perspectives on working: A literature review of motivational theories. *Work, Aging and Retirement*, *2*, 130–158. <https://doi.org/10.1093/workar/waw012>
- Rudolph, C. W., Kooij, D. T. A. M., Rauvola, R. S., & Zacher, H. (2018). Occupational future time perspective: A meta-analysis of antecedents and outcomes. *Journal of Organizational Behavior*, *39*, 229–248. <https://doi.org/10.1002/job.2264>
- Saks, A. M. (2005). Job search success: A review and integration of the predictors, behaviors, and outcomes. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting the-ory and research to work* (pp. 155–179). Hoboken, NJ: Wiley.
- Saks, A. M. (2006). Multiple predictors and criteria of job search success. *Journal of Vocational Behavior*, *68*, 400–415. <https://doi.org/10.1016/j.jvb.2005.10.001>
- Saks, A. M., & Ashforth, B. E. (2000). Change in job search behaviors and employment outcomes. *Journal of Vocational Behavior*, *56*, 277–287. <https://doi.org/10.1006/jvbe.1999.1714>
- Saks, A. M., & Ashforth, B. E. (2002). Is job search related to employment quality? It all depends on the fit. *Journal of Applied Psychology*, *87*, 646–654. <https://doi.org/10.1037/0021-9010.87.4.646>

- Smith, J. F., Mitchell, T. R., & Beach, L. R. (1982). A cost-benefit mechanism for selecting problem-solving strategies: Some extensions and empirical tests. *Organizational Behavior and Human Performance*, *29*, 370–396. [https://doi.org/10.1016/0030-5073\(82\)90251-3](https://doi.org/10.1016/0030-5073(82)90251-3)
- Spuling, S. M., Miche, M., Wurm, S., & Wahl, H. W. (2013). Exploring the causal interplay of subjective age and health dimensions in the second half of life: A cross-lagged panel analysis. *Zeitschrift Fur Gesundheitspsychologie*, *21*(1), 5–15. <https://doi.org/10.1026/0943-8149/a000084>
- Steverink, N., Westerhof, G. J., Bode, C., & Dittmann-Kohli, F. (2001). The personal experience of aging, individual resources, and subjective well-being. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, *56B*, 364–373. Retrieved from <http://psychogerontology.oxfordjournals.org/content/56/6/P364.short>
- Sugalski, T. D., & Greenhaus, J. H. (1986). Career exploration and goal-setting among managerial employees. *Journal of Vocational Behavior*, *29*, 102–114.
- Szinovacz, M. E., & Davey, A. (2005). Predictors of perceptions of involuntary retirement. *The Gerontologist*, *45*, 36–47. <https://doi.org/10.1093/geront/45.1.36>
- Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality*, *72*, 271–324. <https://doi.org/10.1111/j.0022-3506.2004.00263.x>
- Taris, T. (2000). *Longitudinal Data Analysis*. London, UK: Sage Publications.
- Tatsiramos, K., & Van Ours, J. (2014). Labor market effects of unemployment insurance design. *Journal of Economic Surveys*, *28*, 284–311.

- Turban, D. B., Stevens, C. K., & Lee, F. K. (2009). Effects of conscientiousness and extraversion on new labor market entrants' job search: The mediating role of metacognitive activities and positive emotions. *Personnel Psychology, 62*, 553–573. <https://doi.org/10.1111/j.1744-6570.2009.01148.x>
- Van Hooft, E. A. J., Born, M. P., 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., Wanberg, C. R., & van Hoye, 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>
- Van Hoorn, A., & Maseland, R. (2013). Does a Protestant work ethic exist? Evidence from the well-being effect of unemployment. *Journal of Economic Behavior & Organization, 91*, 1–12. <https://doi.org/10.1016/j.jebo.2013.03.038>
- Van Hoyer, G., van Hooft, E. a. J., & Lievens, F. (2009). Networking as a job search behaviour: A social network perspective. *Journal of Occupational & Organizational Psychology, 82*, 661–682. <https://doi.org/10.1348/096317908X36067S>
- Vansteenkiste, M., Lens, W., De Witte, S., De Witte, H., & Deci, E. L. (2004). The “why” and “why not” of job search behaviour: Their relation to searching, unemployment experience, and well-being. *European Journal of Social Psychology, 34*, 345–363. <https://doi.org/10.1002/ejsp.202>
- Vansteenkiste, S., Verbruggen, M., & Sels, L. (2016). Flexible job search behaviour among unemployed jobseekers: antecedents and outcomes. *European Journal of Work and*

Organizational Psychology, 25, 862–882.

<https://doi.org/10.1080/1359432X.2016.1168402>

Wanberg, C. R. (2012). The individual experience of unemployment. *Annual Review of Psychology*, 63, 369–396. <https://doi.org/10.1146/annurev-psych-120710-100500>

Wanberg, C. R., Glomb, T. M., Song, Z., & Sorenson, S. (2005). Job-search persistence during unemployment: A 10-wave longitudinal study. *Journal of Applied Psychology*, 90, 411–430. <https://doi.org/10.1037/0021-9010.90.3.411>

Wanberg, C. R., Hough, L. M., & Song, Z. (2002). Predictive validity of a multidisciplinary model of reemployment success. *Journal of Applied Psychology*, 87, 1100–1120. <https://doi.org/10.1037/0021-9010.87.6.1100>

Wanberg, C. R., & Kammeyer-Mueller, J. (2008). A self-regulatory perspective on navigating career transitions. In G. C. R. Kanfer & R. D. Pritchard (Eds.), *Work Motivation: Past, Present, and Future* (pp. 433–469). New York, NY: Routledge. <https://doi.org/10.4324/9780203809501>

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., Kanfer, R., & Rotundo, M. (1999). Unemployed individuals: Motives, job-search competencies, and job-search constraints as predictors of job seeking and reemployment. *Journal of Applied Psychology*, 84, 897–910. <https://doi.org/10.1037/0021-9010.84.6.897>

Wanberg, C. R., Zhu, J., Kanfer, R., & Zhang, Z. (2012). After the pink slip: Applying dynamic motivation frameworks to the job search experience. *Academy of Management*

Journal, 55, 261–284. <https://doi.org/10.5465/amj.2010.0157>

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>

Warr, P., Cook, J., & Wall, T. (1979). Scales for the measurement of some work attitudes and aspects of psychological well-being. *Journal of Occupational Psychology*, 52, 129–148. <https://doi.org/10.1111/j.2044-8325.1979.tb00448.x>

Weiss, D., & Lang, F. R. (2012). “They” are old but “I” feel younger: Age-group dissociation as a self-protective strategy in old age. *Psychology and Aging*, 27, 153–63. <https://doi.org/10.1037/a0024887>

Westerhof, G. J., & Barrett, A. E. (2005). Age identity and subjective well-being: A comparison of the United States and Germany. *Journals of Gerontology Series B-Psychological Sciences and Social Sciences*, 60, 129–136. <https://doi.org/10.1093/geronb/60.3.S129>

Wöhrmann, A. M., Fasbender, U., & Deller, J. (2016). Using work values to predict post-retirement work intentions. *Career Development Quarterly*, 64, 98–113. <https://doi.org/10.1002/cdq.12044>

Wöhrmann, A. M., Fasbender, U., & Deller, J. (2017). Does more respect from leaders postpone the desire to retire? Understanding the mechanisms of retirement decision-

- making. *Frontiers in Psychology*, 8, 1–11. <https://doi.org/10.3389/fpsyg.2017.01400>
- Wurm, S., Tesch-Römer, C., & Tomasik, M. J. (2007). Longitudinal findings on aging-related cognitions, control beliefs, and health in later life. *Journal of Gerontology: Social Sciences*, 62, 156–164.
- Yeung, D. Y., & Fung, H. H. (2009). Aging and work: How do SOC strategies contribute to job performance across adulthood? *Psychology and Aging*, 24, 927–940. <https://doi.org/10.1037/a0017531>
- Zacher, H. (2013). Older job seekers' job search intensity: The interplay of proactive personality, age and occupational future time perspective. *Ageing and Society*, 33, 1139–1166. <https://doi.org/10.1017/S0144686X12000451>
- Zacher, H. (2015). Successful aging at work. *Work, Aging and Retirement*, 1, 4–25. <https://doi.org/10.1093/workar/wau006>
- 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>
- Zacher, H., Chan, F., Bakker, A. B., & Demerouti, E. (2015). Selection, optimization, and compensation strategies: Interactive effects on daily work engagement. *Journal of Vocational Behavior*, 87, 101–107. <https://doi.org/10.1016/j.jvb.2014.12.008>
- Zacher, H., & Frese, M. (2009). Remaining time and opportunities at work: Relationships between age, work characteristics, and occupational future time perspective. *Psychology and Aging*, 24, 487–493. <https://doi.org/10.1037/a0015425>
- Zakay, D., & Wooler, S. (1984). Time pressure, training and decision effectiveness. *Ergonomics*, 27, 273–284. <https://doi.org/10.1080/00140138408963489>

- 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>
- Zikic, J., & Richardson, J. (2007). Unlocking the careers of business professionals following job loss: Sensemaking and career exploration of older workers. *Canadian Journal of Administrative Sciences, 24*, 58–73.
- Zikic, J., & Saks, A. M. (2009). Job search and social cognitive theory: The role of career-relevant activities. *Journal of Vocational Behavior, 74*, 117–127.
<https://doi.org/10.1016/j.jvb.2008.11.001>
- Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13–39). San Diego, CA: Academic Press.

Table 1

Design Issues and Conceptual and Statistical Considerations Related to the Propositions

Design Issues	Conceptual and Statistical Considerations	Propositions
1. How many time points are required?	<p>Define the research purpose and select a statistical approach to determine the time points required:</p> <ul style="list-style-type: none"> a. <i>Causal priority</i>: Cross-lagged panel regression or cross-lagged panel models (at least two time points) b. <i>Future predictions</i>: Autoregressive models and latent growth models (at least three time points) c. <i>Change</i>: Latent growth model (at least three time points) d. <i>Mediation</i>: Autoregressive models (at least three time points) or growth model with two-stage piecewise process (at least five time points) 	<p>P1, and P4</p> <p>P8a/b, P9a/b, and P10a/b</p> <p>P2, P3a/b, P5a-c, P6a/b, and P7a/b</p> <p>P2, P3a/b, P5a-c, and P6a/b</p>
2. What is the best time interval between them?	<p>Methodological approaches:</p> <ul style="list-style-type: none"> • Determine the number of time points depending on the research purpose and statistical approach chosen (see above) • Conduct a ‘shortitudinal’ pilot study to estimate the optimal interval between time points (see Dormann & Griffin, 2015) <p>Conceptual considerations:</p> <ul style="list-style-type: none"> • Capture the job search process including the entire time of unemployment and ideally, some additional time in employment of the newfound job • Commence the study at the first day of unemployment if possible, or as a rule of thumb, the earlier the better, and at least control for participants’ length of unemployment • Know the average duration of unemployment among older workers in the country (or region) of data collection, consider individual differences within that group to ensure a representative allocation in the final sample • Consider the changeable nature of your study variables, in particular the job search behavior (i.e., goal establishment and goal pursuit) and the use of aging strategies 	<p>All Propositions</p> <p>All Propositions</p> <p>All Propositions</p> <p>All Propositions</p> <p>P8a/b, P9a/b, and P10a/b</p> <p>P2, P3a/b, P5a-c, P6a/b, and P7a/b</p>

3. How to deal with attrition and missing data?	Reduce attrition due to nonresponse to a minimum:	All Propositions
	• Critically reflect on the complexity of the research design, if necessary break down the overall model into different data collections	All Propositions
	• Send automatically reminders via participants' mobile	All Propositions
	• Control the length of the survey by reducing the number of investigated constructs or potentially the length of scales	All Propositions
	• Provide variable monetary (or nonmonetary) incentives across time points (i.e., should be higher during the later stages of data collection)	All Propositions
	• Keep continued contact via clear and sensitive communication and explain the research procedures to participants	All Propositions
	• Potentially offer psychological support	All Propositions
	Statistically examine to what extent the sample may be biased by selective drop out:	
	• Explore mean differences in the study variables between those participants, who responded and those, who did not	P8a/b, P9a/b, and P10a/b
	• Check for variance restriction	All Propositions
	• Investigate whether the relationships among the study variables change as a consequence of attrition	P8a/b, P9a/b, and P10a/b
	• Correct data by estimating missing values	All Propositions

Figure 1

Conceptual Model of Job Search and (Re)employment from a Lifespan Development Perspective

Perspective

