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The Self-Regulation of Healthy Aging: Goal-Related Processes in Three Domains

Marie Hennecke, PhD,[1,*,] **Veronika Brandstätter, PhD,**[2] **and Gabriele Oettingen, PhD**[3,4]

[1]Department of Psychology, Universität Siegen, Germany. [2]Department of Psychology, Universität Zürich, Switzerland. [3]Department of Psychology, New York University, USA. [4]Department of Psychology, Universität Hamburg, Germany.

*Address correspondence to: Marie Hennecke, PhD, Department of Psychology, University of Siegen, Adolf-Reichwein-Str. 2a, 57068 Siegen, Germany. E-mail: marie.hennecke@uni-siegen.de

Abstract

As people age, they experience typical age-graded challenges and opportunities, for example, their own retirement, changes in their social networks, or a decline in health condition. The extent to which people successfully process, respond to, and act on these challenges and opportunities is highly important for their health, at the core of which the WHO sees the possibility of "doing what one has reason to value." In this article, we posit that individuals can play an active role in determining whether they can, in response to these age-graded influences, continue doing what they have reason to value, and that they can do so by deploying the self-regulatory processes of *goal setting* (including reengagement in new goals after disengaging from a previous goal), *goal pursuit*, and *goal disengagement*. We discuss the role of these self-regulatory processes in three important goal domains: work/retirement, interpersonal relationships, and health. Across these domains, we consider typical challenges and opportunities including the increased availability of daily time in old age, the long past that lies behind older adults, and their limited future time perspective. Finally, we derive open research questions that may be studied to better understand how the very old may self-regulate their response to age-graded influences.

Keywords: Aging, Development, Health, Goal pursuit, Self-regulation

Throughout their lives, people share the experience of typical age-graded challenges and opportunities. As people approach late adulthood, for example, they face their own retirement from the work force, changes in their social networks (e.g., after the death of close relationship partners), and declines in their cognitive and physical functioning. Transitions and experiences like these can be subsumed under the term *age-graded influences* and defined as "determinants that (a) have a fairly strong relation with chronological age and are therefore fairly predictable in their temporal sequence (onset, duration), and (b) are, for the most part, similar in their direction among individuals" (Baltes, 1987, p. 621). Whereas some are, to a large extent, biologically determined, such as the physical and cognitive decline associated with aging, others, like the timing of re-

tirement, are more strongly determined by environmental factors such as a society's norms and regulations (Baltes, 1987). Given that, by definition, experiencing age-graded influences is the norm, it is a source of interindividual similarity in developmental trajectories. How individuals idiosyncratically process, respond to, and act on these age-graded influences should, however, be an important source of interindividual dissimilarity in developmental trajectories (Bleidorn et al., 2020). A person who copes well with retirement and makes the best out of it may, for example, age differently (e.g., more active, happy, and healthy) than a person who copes less well with this important life transition (Wang & Shultz, 2010).

The current article investigates the question of how older adults can leverage goal setting, goal pursuit,

and goal disengagement in a way that fosters their own healthy aging in the face of typical age-graded influences. We too (see Freund et al., 2021) adopt the World Health Organization's (WHO, 2015) definition of healthy aging as the "process of developing and maintaining the functional ability that enables well-being in older age" (p. 28), where functional ability denotes the "attributes that enable people to be and to do what they have reason to value" (p. 28).

Note that our considerations about "older age" or "older adults" do not refer to adults within a specific age range even though people above the retirement age (e.g., 65 years) are often considered as older adults. However, we discuss retirement as a process that starts before the actual date of retirement. Sticking to an age range above 65 would not be in line with this perspective. In addition, empirical studies also vary regarding how age groups are formed and ideally investigate change as a more continuous process across adulthood rather than creating age groups. Lastly and most importantly, defining age groups by using specific age ranges would suggest a level of precision in predicting the onset of age-graded challenges that does not exist. Someone who develops arthritis or whose spouse dies in their mid-50s may experience the same challenges as a 70-year old in the same situation. It nevertheless makes sense to discuss these challenges as *age-graded* challenges, given that they are correlated with age.

For reasons elaborated below, we will focus on age-graded influences in three goal domains: work/retirement, social relationships, and health. In addition, we will consider an age-graded influence that transcends goal domains and has not, in our view, received sufficient attention so far, namely people's changing perspective on and experience of the past, present, and future (Kooij et al., 2018). These considerations are scattered across the article where we see fit. We will first, however, introduce what we mean by goals and the goal-related, self-regulatory processes of goal setting, goal pursuit, and goal disengagement.

Goals and Goal-Related Processes

Goals represent a central construct in the analysis of human motivation. They can be defined as cognitive representations of desired (or feared) states that are approached (or avoided; Elliott & Fryer, 2008; Emmons, 1996). They represent an important aspect of people's identities (Brunstein et al., 1999) and give structure to people's lives (Klinger, 1977). Most importantly, goals provide guidelines for navigating one's social world in a way that satisfies one's affective needs (implicit motives; Schultheiss & Brunstein, 2010). Accordingly, it is not surprising that goal characteristics and goal-related processes predict people's well-being (see Hennecke & Brandstätter, 2017, for a review), likely through affecting which outcomes people attain in important domains of life including work (e.g., Lee et al., 1989), relationships (e.g., Impett et al., 2010), and health (e.g., Mann et al., 2013). Whereas goals are moderately stable

aspects of people's personalities (Atherton et al., 2020; Bleidorn et al., 2010), they are also, as emphasized in models of developmental regulation, dynamic in the sense of responding to available resources and opportunity structures in a given developmental context (e.g., Freund & Baltes, 2000; Heckhausen & Schulz, 1995).

At least three processes or groups of processes are crucial in this regard: Processes of *goal setting* involve individuals choosing from a plenitude of potential goals, weighing their advantages and disadvantages, and commiting to goals that they consider both feasible and valuable (e.g., Gollwitzer, 1990). Processes of *goal pursuit* (or goal striving) require individuals deploying goal-conducive means (Shah & Kruglanski, 2003), and that they remain persistent or return to goal pursuit in the face of conflicting impulses, shifting priorities, interruptions, and obstacles (Moshontz & Hoyle, 2019). If goal pursuit does not go as planned and a goal turns out to be unfeasible or of low value, processes of *goal disengagement* may become relevant (e.g., Brandstätter & Schüler, 2013; Wrosch et al., 2003). Goal disengagement seems important to avoid entrapment (Brockner & Rubin, 1985) but may entail a painful process (Brandstätter et al., 2013; Klinger, 1975). Lastly, successful goal disengagement can free resources for reengaging in more feasible or valuable goals (Wrosch & Scheier, 2020). Given that goal reengagement can be considered a special type of goal setting, we will not treat it as its own group of goal-related processes here.

Goal-Related Processes for Healthy Ageing in the Contexts of Work/Retirement, Social Relationships, and Health

We will focus on goal-related processes in response to age-graded influences in three goal domains, namely (a) work/retirement, (b) social relationships, and (c) health, given that these domains are closely related to three basic needs or motives whose fulfillment is linked to well-being and health: First, the need for achievement (McClelland, 1987) or competence (Deci & Ryan, 2000) usually finds a major "outlet" in the goals that individuals pursue in their work context and thus its fulfillment may become more difficult after retirement. Second, the need for affiliation (McClelland, 1987) or social relatedness (Deci & Ryan, 2000) shapes interpersonal relationships. Third, the need for power (McClelland, 1987) or autonomy (Deci & Ryan, 2000) requires the individual to be efficacious and self-determined, for which health is an important resource.

Disengaging From and Reengaging Into Goals in the Domain of Work/Retirement

Retirement as a sequence of goal-related processes
Retirement is a critical transition in the life course (Holmes & Rahe, 1967; Luhmann et al., 2012) and has a powerful

impact on different areas of life (financial, social, health) and, thus, on individuals' psychological and physical well-being (Beier et al., 2018; Hamm et al., 2019; Wang & Shi, 2014). Retirement is a process that lasts well beyond one's last day at work as it means adapting to one's new life that offers plenty of promising new opportunities (e.g., time for new leisure activities or volunteer work) but also taxing challenges (e.g., a reduced structure in everyday life). Goal-related everyday routines, meaningful engagements, social contacts, but also financial resources undergo radical changes, often from one day to another. As such, retirement requires a thorough restructuring of an individual's goal system (Kruglanski et al., 2002).

Specific self-regulatory challenges in retirement

Self-regulation of retirement is characterized by three challenges: First, after withdrawal from work, retirees are forced to deliberately reshape major parts of their life that were previously governed by organizational requirements and external structures (e.g., daily routines such as when to go to work, where and with whom to interact). Second, retiring means leaving behind a goal context that has perhaps governed one's life for decades (Kooij et al., 2018). At work, people pursue a myriad of goals that reach from concrete low-level, task-related goals codified by their job description (e.g., draw up financial reports) over mid-level goals (e.g., excel in one's job) to abstract lifelong, high-level goals (e.g., engage in meaningful tasks; Kanfer et al., 2017; Zacher et al., 2016). With leaving work, a broad array of low- and mid-level personal goals fall away and have to be substituted in order to secure satisfying enduring motives (Schultheiss & Brunstein, 2010) and high-level goals like values (Rokeach, 1973) and idealized notions of the self or one's identity (e.g., being a successful lawyer; Gollwitzer & Wicklund, 1985; Markus & Nurius, 1986). Indeed, retirees who strongly identify with their work roles and for whom work is the most important area of life have a more difficult time adjusting to postretirement life (Houlfort et al., 2015; Wang & Shi, 2014). Accordingly, retiring means giving up specific goals and habits but ideally also reengaging in meaningful new activities in order to create purpose and sense in one's new life. Third, when deliberating how to spend this new phase of life, the more limited future time perspective might become salient to retirees (Kooij et al., 2017). In one's mid-60s, for the first time, one might feel that life is too short to start new projects even if they are deemed important and meaningful.

In the context of work, disengaging from certain personal goals as well as identifying, committing to, and pursuing new goals that provide meaning to life outside of work can be seen the most important self-regulatory tasks of retiring individuals. After having retired, however, for some retirees, a paradoxical situation may exist. For years, they have yearned for more autonomy in shaping their lives, and then, after retirement, with plenty of time during the day and little or even no external constraints and pressures, they may feel lost in how to shape their time, and experience choice overload (Chernev et al., 2015). Even if individuals have a bucket list with important leisure and social goals (Freund, 2020) that they had deferred until retirement, they might have a hard time getting started on these goals. In this phase of the retirement process, the self-regulatory challenge is to identify, commit to, and act on new goals that align with one's values, interests, and implicit motives. But, how would one find out what is meaningful to oneself, attractive, and feasible to strive for? Moreover, even if retirees have an idea with what to occupy themselves, they might find that the necessary competencies are lacking but, at the same time, think—given the salient shorter future time perspective—that their active lifetime left is not enough to acquire these competencies (e.g., to take a course that takes years).

The process of disengagement and reengagement

Disengaging from a goal unfolds on the cognitive, affective, and behavioral levels. Even if an individual no longer acts on a specific goal, ruminative thoughts (Martin & Tesser, 1989) and regret about the relinquished goal (Carver & Scheier, 2005; Wrosch & Scheier, 2020) may continue, and thus impede commitment to alternative goals. Thus, disengagement and reengagement must go hand in hand as committing to an attractive and feasible new goal will detach the individual from the "lost" goal (Klinger, 1975). But how to identify and commit to attractive and feasible alternative goals? Individuals will have to "get a taste of their goals" (Job & Brandstätter, 2009) to feel whether a concrete endeavor could satisfy basic needs (motives). As implicit motives are not consciously represented (Schultheiss & Brunstein, 2010), however, individuals would have to select a detour to find out their basic affective needs. One way to find out is to take a step back and sense one's wishes or positive fantasies about the future as they have been found to originate from these needs (Kappes et al., 2012; Oettingen & Sevincer, 2018). Otherwise, people might try to remember instances of deep positive feelings and identify what motive theme was present: competing with a standard of excellence (achievement), having impact on other people (power), or socializing with others in a trusting way (affiliation). In a next step, one would deliberate what type of goals could satisfy one's motive(s). For example, a power-motivated business woman might envision being active in voluntary work and help those in need. An achievement-motivated retiree might choose to acquire new skills in a challenging context (e.g., taking a formalized course in computer programming). Lastly, an affiliation-motivated retiree might want to spend time with close friends and family.

Feeling what one's important wishes are is just the first step, though. As wishes are not binding, one must turn a wish into a goal. A self-regulatory strategy to support commitment to fulfil an attractive and feasible wish and strive for its attainment is mental contrasting. In mental contrasting, people

positively fantasize about wish fulfilment and then identify and imagine the critical hurdle in themselves that stands in the way of wish fulfilment (e.g., an emotion, irrational belief, ingrained habit; Oettingen, 2014; see also woopmylife.org). Such mental contrasting of the desired future with the obstacle of reality standing in the way provides what is necessary for successful goal setting and goal pursuit: the direction to act and the energy to act. In a nutshell, by sensing what "one has reason to value" and reengaging in goals outside the work context, goal disengagement from the old work life may then happen as a side effect.

Setting, Pursuing, and Disengaging From Goals in the Social Domain

A basic need and changing circumstances of fulfillment

Social connection is a central psychological need whose fulfillment is an important precondition for human well-being and health (e.g., Baumeister & Leary, 1995; Deci & Ryan, 2000). As people age, however, their social lives change as well and some of these changes might be challenging for older adults' social integration: Many older people live in a one-person household (Peplau et al., 1982). Even if they are still cohabitating, having to care for a spouse can diminish opportunities for social contact (Nieboer et al., 1998). Many older adults experience the loss of their spouse and other close relationships, a major disruption of their social lives and a major source of distress (Arbuckle & de Vries, 1995; Holmes & Rahe, 1967). Lastly, functional limitations (e.g., deteriorating sight) may constrain older adults' mobility and reduce opportunities for social contact (Rosso et al., 2013). While these age-graded influences appear as potentially problematic, the data paint a somewhat more optimistic picture of older adults' social integration. Loneliness and social isolation are less common than one might expect, at least among the younger old (Luhmann & Hawkley, 2016). Some researchers have even concluded that older adults have better social relationships (Luong et al., 2011). Next, we describe how goal-related processes can help older adults to do and be what they have reason to value in the context of social relationships.

Age-related changes in which social goals are desirable

The goals that older adults have in the social domain appear to foster high-quality social relationships. First, the availability of more daily time after retirement allows older adults to more freely choose with whom they are spending their time (Ginn & Fast, 2006; Rosenkoetter et al., 2001). Therefore, social goals can be more autonomously regulated in old age (Sheldon & Elliott, 1999). Second, in response to their shorter future time perspective, older adults prefer smaller networks of very close others that can fulfill their social goal of satisfying emotional experiences in the here and now (Carstensen, 2006). Third, older adults choose social goals with a more intrinsic (affiliation, community feeling) rather than extrinsic goal content (social recognition), which, in turn, can also promote their well-being (Kasser & Ryan, 1993; Sheldon & Kasser, 2001).

Younger but not older adults also report more social *approach* (directed at attaining positive social outcomes) than social *avoidance* goals (directed at avoiding negative social outcomes) and whereas having social approach goals is positively and having social avoidance goals negatively associated with younger adults' daily well-being, there is no such association for middle-aged and older adults' daily social well-being (Nikitin et al., 2014). This difference has been explained based on the different developmental tasks or life goals of younger adults: After moving out of their parents' homes, younger adults are expected to establish new social contacts, including social networks at the work place, and to find a romantic partner (Arnett, 2000; Eccles et al., 2003). Later in life, and especially in older adulthood, maintaining well-established social relationships is prioritized (e.g., Antonucci et al., 2010). Older adults may also be under the impression that it seems difficult to form new close satisfying relationships in older age, given that this may require time. Therefore, they might have little interest in getting to know new relationship partners, even when their own social networks shrink involuntarily, through the death of close others.

Age-related changes in the pursuit of social goals

Older adults do not only seem competent in setting social goals that foster high-quality relationships, they also seem to pursue their social goals in a way that makes their experience rewarding and minimizes social conflicts. They are highly competent in choosing strategies that are helpful in navigating social situations (Blanchard-Fields et al., 2007; Hess, 2006). For example, they appear to be more appeasing and less aggressive in response to interpersonal conflicts than younger people (Birditt & Fingerman, 2005), possibly due to their lifelong experience of dealing with a variety of interpersonal relationships. It could also be their limited future time perspective that lets older adults prioritize positive experiences in the here and now, possibly at the expense of other social goals (e.g., social influence or status).

Conversely, functional limitations may render interpersonal goal pursuit such as visiting other people in their homes, meeting them in a cafe, or even inviting them in one's own home, more effortful. To the extent that effort requirements place upper limits on engagement for goals, pursuing social goals might become too effortful to maintain through familiar and available means (Brehm & Self, 1989). Here, we see promise in new technologies, which might help older adults to overcome geographical distance and mobility barriers to maintain a sense of connectedness with lower effort (Hülür & Macdonald, 2020).

Disengagement from social goals

Lastly, the largest self-regulatory challenge in old age may be the loss of one's spouse. It is considered a source of major and enduring psychological distress (Bonanno & Kaltmann, 2001; Holmes & Rahe, 1967), and related

to decrements in physical health of the remaining partner (Stroebe et al., 2007). Here, the term "disengagement" might not do justice to the complexities of the grief process (e.g., Stroebe et al., 2001). There may nevertheless be some similarities with the process of disengagement from personal goals (Klinger, 1975). Generally, goal disengagement might work better if individuals can reengage into alternative goals (Wrosch et al., 2003). However, when a partnership has persisted for an extended past and the future is rather limited, it may appear and, in fact, be, unlikely (Rapp, 2018) to find an alternative partner with whom a similar attachment can be formed and with whom the need for intimacy (McAdams & Constantian, 1983) can still be satisfied.

Nevertheless, even if a relationship partner cannot be replaced, it may be possible that other social partners may take on roles to compensate, to some degree, for the loss of the partner. Older adults, like everyone else, might rely on other people for their own goals (Orehek & Forest, 2016) and the loss of relationship partners might therefore obstruct the continued pursuit of these goals. The loss of one's spouse may, for example, be associated with a loss of mobility, if that spouse used to drive the couple to places in a car. Other social partners may take on instrumental roles that have previously been fulfilled by other, lost relationship partners. Even if social partners and their effects on need fulfillment may be irreplaceable, maintaining and potentially deepening other social relationships may be helpful to maintain a sense of social connection and important for coping with the impact of the loss of a loved one on other. This, in turn, should allow older adults to continue "being and doing what they have reason to value."

Setting, Pursuing, and Disengaging From Goals in the Health Domain

Health declines in old age

In old age, objective declines in physical and mental health cannot be avoided even when people are embedded in the most favorable work or social relationship contexts. Whereas health losses can occur gradually (e.g., hearing or vision loss) or suddenly (e.g., a fall), they are foreseeable with old age. In studies of population health, age stands out as the most powerful predictor of a person's health state and their risk of morbidity and mortality (United Nations, 2015).

Nevertheless, there is also heterogeneity in people's individual health trajectories. For example, individuals' health is influenced by genetic factors (Brooks-Wilson, 2013), level of income or educational attainment, environmental factors such as pollution or accessible infrastructure, and behavioral or "lifestyle" factors such as tobacco use or physical inactivity (United Nations, 2015). Because such behavioral factors codetermine older adults' health trajectories, people may respond to foreseeable and experienced

age-graded influences with setting health behavior change goals geared to benefit the later years in their lives.

Health challenges in old age might necessitate disengagement and reengagement regarding various life areas. For example, it might require disengaging from illusions of invulnerability (e.g., "I will not get cancer"; Perloff & Fetzer, 1986), from subjectively attractive activities (e.g., engaging in risky sports), and from long-cherished habits (e.g., having heavy dinners late in the evening) that older adults have enjoyed for many years. Preventing or slowing health challenges will be easier for those who already have healthy habits in place (e.g., are already adhering to an Italian diet and regular exercise; Orbell & Verplanken, 2010) and who have, over the past, developed a strong health-conscious identity (Oyserman et al., 2007; Strachan & Brawley, 2009). But even for health-conscious adults, goals might have to change to accommodate the specific health challenges of old age.

Age-related changes in setting health goals

Coping with the onset of ill health in old age requires considering health as a priority in one's goal setting: William James (1890; see also Taylor, 1983) has argued that when steep emotional changes occur, as is the case when threats of deteriorating health in old age suddenly occur, people set clear priorities in the service of coping with the threatening events. That is, when a health threat hits, people will disengage from now trivial-seeming everyday goals (e.g., to prepare for a birthday party) and set priorities to cope with the threatening event (e.g., focusing on supportive interpersonal relationships; see Carstensen, 2006). Indeed, older adults are more selective in setting goals (Freund & Baltes, 2000; Riediger & Freund, 2006) and prioritize goals directed at maintaining their health (Saajanaho et al., 2016).

To prepare for their later years, middle-aged and older adults may feel impelled to focus their goals on *preventing* or slowing the onset of health problems. In fact, older but not younger adults' goals tend to be directed toward maintaining their cognitive and physical functioning and toward preventing respective losses. In turn, this shift in goal orientation towards prevention is positively correlated with well-being in old but not in young age (Ebner et al., 2006).

Next to the types of goals, there might also be age-related differences in which context such prevention-oriented goals are pursued. The increased availability of daily time and the decreased future time span in old age might play a role here. After retirement, older adults often have more time to spend on their own health, for example, for medical checkups, exercise, or healthy meals. Given their stronger emphasis on experiencing an emotionally rewarding here and now, a consequence of their shorter future time perspective (Carstensen et al., 1999), they should be attracted by health-related activities that also allow for an enjoyable and meaningful experience in the here and now (e.g., exercising together, cooking healthy meals for others).

Specific self-regulatory challenges in the pursuit of health goals

There is still the open question of how the pursuit of prevention-oriented health goals can be maintained in everyday life and without a time limit (e.g., when people have to take medicine every day, practice physiotherapy every day). Focusing on maintaining adjustments and keeping the status quo is often more challenging than focusing on reaching improvements and reaching a desired future (e.g., changing behavior to reach a desired weight is often easier than sustaining the behavior change to maintain weight loss; De Leon et al., 2020; Wing et al., 2004). One reason may be that once people obtain positive feedback of achieving their goal (e.g., when they feel that they have successfully adjusted to the health challenge), they slow down or stop trying altogether: The nonconscious processes which make goal pursuit effective fall apart (Gollwitzer et al., 2009; e.g., strong associative links responsible for goal striving are dissolving; Kappes & Oettingen, 2014; see also Lewin, 1946). Second, because the status quo is already familiar and does not imply an exciting change for the better, the incentive value of keeping the status quo should be relatively moderate. And because goal setting and goal striving are the products of expectancy and value (Atkinson, 1957; Fishbein & Ajzen, 2010; McClelland, 1985), a future that is geared towards keeping the status quo may hold less commitment than a future that is geared towards improvement. Third, sustaining a known future cannot embellish people's fantasies and daydreams to the extent that a hoped for, improved future can (Oettingen & Chromik, 2018), and thus imagining the status quo prolonged in the future may give less direction to act than imagining an improved future. Given these risks to older adults' active maintenance of the status quo, the provision of extrinsic rewards such as points systems, social contracts, or monetary rewards may partly substitute for the lack of incentive value and lack of positive daydreams implied in wanting to keep the status quo. Findings show that under conditions of relatively low incentive value, extrinsic rewards can foster active engagement and goal pursuit (Nuijten et al., 2019; Vitharana & Basu, 2019).

Conclusion

Given that the goal-related processes of goal setting, goal pursuit, and goal disengagement are, by definition, instrumental for "being and doing what one has reason to value," they should take a crucial role in maintaining health in old age. As described above, many older adults seem to adapt their goals and the way they pursue them to their developmental tasks in the domains of work/retirement, social relationships, and health. It will be a task for future research to translate what we know about adaptive goal-related processes into practical recommendations and interventions to support those older adults who do not entertain these goal-related processes already. First, however, it will be crucial to discover whether goal-related processes that have primarily been studied in groups of younger adults work similarly in older adults.

Take, for example, the important task of reengaging into other more feasible but still valuable goals if previous goals can no longer be attained. How does an older person identify what a valuable goal is? Does "getting a taste" of one's affective needs by remembering instances of deep positive feelings and identifying what motive theme was present work for older adults the way it works for younger adults? Or may age-related differences regarding memory performance (Radvansky, 1999) or affective reactivity (e.g., Röcke & Brose, 2013) render this strategy less effective for older than for younger adults? May a person's needs equally translate in wishes and dreams about the future in older adults as has been shown in young adults (Kappes et al., 2012)? Likewise, strategies of goal pursuit (e.g., monitoring one's goal progress) that are helpful in young age might—for example because they impose a certain load on a person's working memory—not be equally helpful in older adults (Hennecke & Bürgler, 2020).

Despite our main point that goal-related processes should be helpful in navigating the challenges of aging, we would also like to acknowledge that at some point in many older adults' lives, functional limitations are overwhelming (e.g., in certain stages of dementia or arthritis) and impose clear limits to their personal agency. While it remains the individual's task to cope with the realization of that limited agency, society has a responsibility in creating compensatory structures in which limits to individual agency can be counteracted. The fact that the oldest old report high levels of loneliness (Luhmann & Hawkley, 2016) may, for example, indicate that they can no longer adapt their own goals to age-graded influences, likely because their functional limitations are too strong. In these cases, built (infra)structures should ensure that not only physical but also psychological needs and motives can still be satisfied. Multigenerational houses may, for example, allow older adults to fulfill their need for affiliation with others. Senior centers or public spaces may offer (playful) challenges (e.g., through classes, chess, or bingo) to fulfill older adults' need for achievement.

In addition, we are aware that our discussion of how goal striving can support healthy aging is highly selective, given that we restricted it to goal setting (including reengagement), goal pursuit, and goal disengagement. These processes, however, consist of a multitude of subprocesses that we have not considered in detail, including for example processes by which individuals avoid or manage goal conflict, or execute self-control in the face of competing impulses. Moreover, while it is a useful heuristic to separate goal setting, goal pursuit, and goal disengagement from each other, the interplay of these processes is more dynamic than the separation would suggest: Much of goal striving is probably best characterized as an ongoing process of revising and adjusting

existing goals or putting goals "on hold" (Moshontz & Hoyle, 2019) while temporarily attending more to other goals, all without disengaging from previous goals or setting entirely new goals.

We have chosen to restrict our discussion on work/retirement, social relationships, and health based on the clear connection of these goal domains to the three basic psychological needs or motives. However, other more data-driven approaches of identifying the most important goal domains in old age might also be fitting to our theory-driven approach. From the perspective of older adults, additional goal domains like emotional growth, environmental conservation, prosocial engagement, leisure, and global issues may be equally or more important (see Bühler et al., 2019; Nurmi, 1992).

Lastly, we would like to acknowledge that most of the research we report above has focused on people from Western, educated, industrialized, rich, and democratic societies (Germany, Switzerland, the United States; Henrich et al., 2010). When we discuss environmentally determined age-graded influences, this discussion focuses on these societies and in this time of history. We are aware that this is a clear constraint on generality (Simons et al., 2017), given that old age might look very different in other cultures and in future cohorts. In addition, we did not cover gender differences or the role of people's socioeconomic status. Moderators like culture, cohort, gender, and socioeconomic status likely influence the processes by which individuals self-regulate their own healthy development. They will have to be addressed in future work.

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References

Antonucci, T. C., Fiori, K. L., Birditt, K., & Jackey, L. M. (2010). Convoys of social relations: Integrating life-span and life-course perspectives. In R. M. Lerner, M. E. Lamb, & A. M. Freund (Eds.), *The handbook of life-span development* (Vol. **2**, pp. 434–473). Wiley. doi:10.1002/9780470880166.hlsd002012

Arbuckle, N. W., & de Vries, B. (1995). The long-term effects of later life spousal and parental bereavement on personal functioning. *The Gerontologist*, **35**(5), 637–647. doi:10.1093/geront/35.5.637

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, **55**(5), 469–480. doi:10.1037/0003-066X.55.5.469

Atherton, O. E., Grijalva, E., Roberts, B. W., & Robins, R. W. (2020). Stability and change in personality traits and major life goals from college to midlife. *Personality and Social Psychology Bulletin*. Advance online publication. doi:10.1177/0146167220949362

Atkinson, J. W. (1957). Motivational determinants of risk-taking behavior. *Psychological Review*, **64**(6, Pt.1), 359–372. doi:10.1037/h0043445

Baltes, P. B. (1987). Theoretical propositions of life-span developmental psychology: On the dynamics between growth and decline. *Developmental Psychology*, **23**(5), 611–626. doi:10.1037/0012-1649.23.5.611

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, **117**(3), 497–529. doi:10.1037/0033-2909.117.3.497

Beier, M. E., LoPilato, A. C., & Kanfer, R. (2018). Successful motivational aging at work: Antecedents and retirement-related outcomes. *Work, Aging and Retirement*, **4**(2), 213–224. doi:10.1093/workar/wax034

Birditt, K. S., & Fingerman, K. L. (2005). Do we get better at picking our battles? Age group differences in descriptions of behavioral reactions to interpersonal tensions. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, **60**(3), P121–P128. doi:10.1093/geronb/60.3.p121

Blanchard-Fields, F., Mienaltowski, A., & Seay, R. B. (2007). Age differences in everyday problem-solving effectiveness: Older adults select more effective strategies for interpersonal problems. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, **62**(1), 61–64. doi:10.1093/geronb/62.1.P61

Bleidorn, W., Hopwood, C. J., Back, M. D., Denissen, J. J., Hennecke, M., Jokela, M., Kandler, C., Lucas, R. E., Luhmann, M., Orth, U., Roberts, B. W., Wagner, J., Wrzus, C., & Zimmermann, J. (2020). Longitudinal experience-wide association studies—A framework for studying personality change. *European Journal of Personality*, **34**, 285–300. doi:10.1002/per.2247

Bleidorn, W., Kandler, C., Hülsheger, U. R., Riemann, R., Angleitner, A., & Spinath, F. M. (2010). Nature and nurture of the interplay between personality traits and major life goals. *Journal of Personality and Social Psychology*, **99**(2), 366–379. doi:10.1037/a0019982

Bonanno, G. A., & Kaltman, S. (2001). The varieties of grief experience. *Clinical Psychology Review*, **21**(5), 705–734. doi:10.1016/s0272-7358(00)00062-3

Brandstätter, V., Herrmann, M., & Schüler, J. (2013). The struggle of giving up personal goals: Affective, physiological, and cognitive consequences of an action crisis. *Personality & Social Psychology Bulletin*, **39**(12), 1668–1682. doi:10.1177/0146167213500151

Brandstätter, V., & Schüler, J. (2013). Action crisis and cost–benefit thinking: A cognitive analysis of a goal-disengagement phase. *Journal of Experimental Social Psychology*, **49**, 543–553. doi:10.1016/j.jesp.2012.10.004

Brehm, J. W., & Self, E. A. (1989). The intensity of motivation. *Annual Review of Psychology*, **40**, 109–131. doi:10.1146/annurev.ps.40.020189.000545

Brockner, J. & Rubin, J. Z. (1985). *Entrapment in escalating conflicts: A social psychological analysis*. Springer.

Brooks-Wilson, A. R. (2013). Genetics of healthy aging and longevity. *Human Genetics*, **132**(12), 1323–1338. doi:10.1007/s00439-013-1342-z

Brunstein, J. C., Schultheiss, O. C., & Maier, G. W. (1999). The pursuit of personal goals: Motivational approach to well-being and life adjustment. In J. Brandtstädter & R. M. Lerner (Eds.), *Action and self-development: Theory and research through the lifespan* (pp. 169–196). Sage.

Bühler, J. L., Weidmann, R., Nikitin, J., Grob, A., & Wrzus, C. (2019). A closer look at life goals across adulthood: Applying a developmental perspective to content, dynamics, and outcomes of goal importance and goal attainability. *European Journal of Personality*, **33**(3), 359–384. doi:10.1002/per.2194

Carstensen, L. L. (2006). The influence of a sense of time on human development. *Science (New York, N.Y.)*, **312**(5782), 1913–1915. doi: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**(3), 165–181. doi:10.1037/0003-066X.54.3.165

Carver, C. S., & Scheier, M. F. (2005). Engagement, disengagement, coping, and catastrophe. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 527–547). Guilford Publications.

Chernev, A., Böckenholt, U., & Goodman, J. (2015). Choice overload: A conceptual review and meta-analysis. *Journal of Consumer Psychology*, **25**(2), 333–358. doi:10.1016/j.jcps.2014.08.002

De Leon, A., Roemmich, J., & Casperson, S. (2020). Barriers to adherence to a weight loss diet using the nominal group technique. *Current Developments in Nutrition*, **4** (suppl. 2), 1297–1297. doi:10.1093/cdn/nzaa059_014

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, **11**(4), 227–268. doi:10.1207/S15327965PLI1104_01

Ebner, N. C., Freund, A. M., & Baltes, P. B. (2006). Developmental changes in personal goal orientation from young to late adulthood: From striving for gains to maintenance and prevention of losses. *Psychology and Aging*, **21**(4), 664–678. doi:10.1037/0882-7974.21.4.664

Eccles, J., Templeton, J., Barber, B., & Stone, M. (2003). Adolescence and emerging adulthood: The critical passage ways to adulthood. In M. H. Bornstein, L. Davidson, C. L. M. Keyes, & K. A. Moore (Eds.), *Crosscurrents in contemporary psychology. Well-being: Positive development across the life course* (pp. 383–406). Lawrence Erlbaum Associates Publishers.

Elliott, A. J., & Fryer, J. W. (2008). The goal construct in psychology. In J. Y. Shah & W. L. Gardner (Eds.), *Handbook of motivation science* (pp. 235–250). Guilford Press.

Emmons, R. A. (1996). Striving and feeling: Personal goals and subjective well-being. In P. M. Gollwitzer & J. A. Bargh (Eds.), *The psychology of action: Linking cognition and motivation to behavior* (pp. 313–337). The Guilford Press.

Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior: The reasoned action approach*. Psychology Press. doi:10.4324/9780203838020

Freund, A. M. (2020). The bucket list effect: Why leisure goals are often deferred until retirement. *The American Psychologist*, **75**(4), 499–510. doi:10.1037/amp0000617

Freund, A. M., & Baltes, P. B. (2000). The orchestration of selection, optimization and compensation: An action–theoretical conceptualization of a theory of developmental regulation. In W. J. Perrig & A. Grob (Eds.), *Control of human behavior, mental processes, and consciousness: Essays in honor of the 60th birthday of August Flammer* (pp. 35–58). Lawrence Erlbaum Associates Publishers.

Freund, A. M., Hennecke, M., Brandstätter, V., Martin, M., & the Participants of the Workshop "Motivation and Healthy Aging" (2021). *Motivation and healthy aging: A model and research agenda*.

Ginn, J., & Fast, J. (2006). Employment and social integration in midlife: Preferred and actual time use across welfare regime types. *Research on Aging*, **28**(6), 669–690. doi:10.1177/0164027506291748

Gollwitzer, P. M. (1990). Action phases and mind-sets. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition: Foundations of social behavior* (Vol. 2, pp. 53–92). The Guilford Press.

Gollwitzer, P. M., Sheeran, P., Michalski, V., & Seifert, A. E. (2009). When intentions go public: Does social reality widen the intention–behavior gap? *Psychological Science*, **20**(5), 612–618. doi:10.1111/j.1467-9280.2009.02336.x

Gollwitzer, P. M., & Wicklund, R. A. (1985). The pursuit of self-defining goals. In J. Kuhl & J. Beckmann (Eds.), *Action control: From cognition to behavior* (pp. 61–85). Springer.

Hamm, J. M., Heckhausen, J., Shane, J., Infurna, F. J., & Lachman, M. E. (2019). Engagement with six major life domains during the transition to retirement: Stability and change for better or worse. *Psychology and Aging*, **34**(3), 441–456. doi:10.1037/pag0000343

Heckhausen, J., & Schulz, R. (1995). A life-span theory of control. *Psychological Review*, **102**(2), 284–304. doi:10.1037/0033-295x.102.2.284

Hennecke, M., & Brandstätter, V. (2017). Means, ends, and happiness: The role of goals for subjective well-being. In M. Robinson & M. Eid (Eds.), *The happy mind: Cognitive contributions to well-being* (pp. 235–252). Springer. doi:10.1007/978-3-319-58763-9_13

Hennecke, M., & Bürgler, S. (2020). Many roads lead to Rome: Self-regulatory strategies and their effects on self-control. *Social and Personality Psychology Compass*, **14**(6), e12530. doi:10.1111/spc3.12530

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *The Behavioral and Brain Sciences*, **33**(2–3), 61–83; discussion 83. doi:10.1017/S0140525X0999152X

Hess, T. M. (2006). Adaptive aspects of social cognitive functioning in adulthood: Age-related goal and knowledge influences. *Social Cognition*, **24**(3), 279–309. doi:10.1521/soco.2006.24.3.279

Holmes, T. H., & Rahe, R. H. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research*, **11**(2), 213–218. doi:10.1016/0022-3999(67)90010-4

Houlfort, N., Fernet, C., Vallerand, R. J., Laframboise, A., Guay, F., & Koestner, R. (2015). The role of passion for work and need satisfaction in psychological adjustment to retirement. *Journal of Vocational Behavior*, **88**, 84–94. doi:10.1016/j.jvb.2015.02.005

Hülür, G., & Macdonald, B. (2020). Rethinking social relationships in old age: Digitalization and the social lives of older adults. *The American Psychologist*, **75**(4), 554–566. doi:10.1037/amp0000604

Impett, E. A., Gordon, A. M., Kogan, A., Oveis, C., Gable, S. L., & Keltner, D. (2010). Moving toward more perfect unions: Daily and long-term consequences of approach and avoidance goals in romantic relationships. *Journal of Personality and Social Psychology*, **99**(6), 948–963. doi:10.1037/a0020271

James, W. (1890). *The principles of psychology*. H. Holt. https://www.jstor.org/stable/1423317

Job, V., & Brandstätter, V. (2009). Get a taste of your goals: Promoting motive–goal congruence through affect–focus goal fantasy. *Journal of Personality*, **77**(5), 1527–1559. doi:10.1111/j.1467-6494.2009.00591.x

Kanfer, R., Frese, M., & Johnson, R. E. (2017). Motivation related to work: A century of progress. *The Journal of Applied Psychology*, **102**(3), 338–355. doi:10.1037/apl0000133

Kappes, A., & Oettingen, G. (2014). The emergence of goal pursuit: Mental contrasting connects future and reality. *Journal of Experimental Social Psychology*, **54**, 25–39. doi:10.1016/j.jesp.2014.03.014

Kappes, H. B., Schwörer, B., & Oettingen, G. (2012). Needs instigate positive fantasies of idealized futures. *European Journal of Social Psychology*, **42**(3), 299–307. doi:10.1002/ejsp.1854

Kasser, T., & Ryan, R. M. (1993). A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology*, **65**(2), 410–422. doi:10.1037//0022-3514.65.2.410

Klinger, E. (1975). Consequences of commitment to and disengagement from incentives. *Psychological Review*, **82**(1), 1–25. doi:10.1037/h0076171

Klinger, E. (1977). *Meaning & void: Inner experience and the incentives in people's lives*. University of Minnesota Press.

Kooij, D. T. A. M., Kanfer, R., Betts, M., & Rudolph, C. W. (2018). Future time perspective: A systematic review and meta-analysis. *The Journal of Applied Psychology*, **103**(8), 867–893. doi:10.1037/apl0000306

Kooij, D. T., Tims, M., & Akkermans, J. (2017). The influence of future time perspective on work engagement and job performance: The role of job crafting. *European Journal of Work and Organizational Psychology*, **26**(1), 4–15. doi:10.1080/1359432X.2016.1209489

Kruglanski, A. W., Shah, J. Y., Fishbach, A., Friedman, R., Chun, W. Y., & Sleeth-Keppler, D. (2002). A theory of goal systems. In M. P. Zanna (Ed.), *Advances in experimental social psychology*, *Vol. 34* (pp. 331–378). Academic Press. doi:10.1016/S0065-2601(02)80008–9

Lee, T. W., Locke, E. A., & Latham, G. P. (1989). Goal setting theory and job performance. In L. A. Pervin (Ed.), *Goal concepts in personality and social psychology* (pp. 291–326). Lawrence Erlbaum Associates, Inc.

Lewin, K. (1946). Behavior and development as a function of the total situation. In L. Carmichael (Ed.), *Manual of child psychology* (pp. 791–844). John Wiley & Sons Inc. doi:10.1037/10756-016

Luhmann, M., & Hawkley, L. C. (2016). Age differences in loneliness from late adolescence to oldest old age. *Developmental Psychology*, **52**(6), 943–959. doi:10.1037/dev0000117

Luhmann, M., Hofmann, W., Eid, M., & Lucas, R. E. (2012). Subjective well-being and adaptation to life events: A meta-analysis. *Journal of Personality and Social Psychology*, **102**(3), 592–615. doi:10.1037/a0025948

Luong, G., Charles, S. T., & Fingerman, K. L. (2011). Better with age: Social relationships across adulthood. *Journal of Social and Personal Relationships*, **28**(1), 9–23. doi:10.1177/0265407510391362

Mann, T., de Ridder, D., & Fujita, K. (2013). Self-regulation of health behavior: Social psychological approaches to goal setting and goal striving. *Health Psychology*, **32**(5), 487–498. doi:10.1037/a0028533

Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist*, **41**(9), 954–969. doi:10.1037/0003-066X.41.9.954

Martin, L. L., & Tesser, A. (1989). Toward a motivational and structural theory of ruminative thought. In J. S. Uleman & J. A. Bargh (Eds.), *Unintended thought* (pp. 306–326). The Guilford Press.

McAdams, D. P., & Constantian, C. A. (1983). Intimacy and affiliation motives in daily living: An experience sampling analysis. *Journal of Personality and Social Psychology*, **45**(4), 851–861. doi:10.1037/0022-3514.45.4.851

McClelland, D. C. (1985). How motives, skills, and values determine what people do. *American Psychologist*, **40**(7), 812–825. doi:10.1037/0003-066X.40.7.812

McClelland, D. C. (1987). *Human motivation*. Cambridge University Press.

Moshontz, H., & Hoyle, R. H. (2019). *Resisting, recognizing, and returning: A three-component model and review of persistence in episodic goals*. https://psyarxiv.com/b8pxq/download

Nieboer, A. P., Schulz, R., Matthews, K. A., Scheier, M. F., Ormel, J., & Lindenberg, S. M. (1998). Spousal caregivers' activity restriction and depression: A model for changes over time. *Social Science and Medicine*, **47**(9), 1361–1371. doi:10.1016/S0277-9536(98)00214-7

Nikitin, J., Schoch, S., & Freund, A. M. (2014). The role of age and motivation for the experience of social acceptance and rejection. *Developmental Psychology*, **50**(7), 1943–1950. doi:10.1037/a0036979

Nuijten, R. C. Y., Van Gorp, P. M. E., Kaymak, U., Simons, M., Kemperman, A. D. A. M., & Van den Berg, P. E. W. (2019). Evaluation of the impact of extrinsic rewards on user engagement in a health promotion context. *41st Annual International Conference of the IEEE Engineering in Medicine and Biology Society. IEEE Engineering in Medicine and Biology Society. Annual International Conference*, **2019**, 3600–3604. doi:10.1109/EMBC.2019.8856296

Nurmi, J. E. (1992). Age differences in adult life goals, concerns, and their temporal extension: A life course approach to future-oriented motivation. *International Journal of Behavioral Development*, **15**(4), 487–508. doi:10.1177/016502549201500404

Oettingen, G. (2014). *Rethinking positive thinking: Inside the new science of motivation*. Penguin Random House.

Oettingen, G., & Chromik, M. P. (2018). How hope influences goal-directed behavior. In M. W. Gallagher & S. J. Lopez (Eds.), *The Oxford handbook of hope* (pp. 69–79). Oxford University Press. doi:10.1093/oxfordhb/9780199399314.013.6

Oettingen, G., & Sevincer, A. T. (2018). Fantasy about the future as friend and foe. In G. Oettingen, A. T. Sevincer, & P. Gollwitzer

(Eds.), *The psychology of thinking about the future* (pp. 127–149). The Guilford Press.

Orbell, S., & Verplanken, B. (2010). The automatic component of habit in health behavior: Habit as cue-contingent automaticity. *Health Psychology*, **29**(4), 374–383. doi:10.1037/a0019596

Orehek, E., & Forest, A. L. (2016). When people serve as means to goals: Implications of a motivational account of close relationships. *Current Directions in Psychological Science*, **25**(2), 79–84. doi:10.1177/0963721415623536

Oyserman, D., Fryberg, S. A., & Yoder, N. (2007). Identity-based motivation and health. *Journal of Personality and Social Psychology*, **93**(6), 1011–1027. doi:10.1037/0022-3514.93.6.1011

Peplau, L. A., Bikson, T. K., Rook, K. S., & Goodchilds, J. D. (1982). Being old and living alone. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy* (pp. 327–347). Wiley.

Perloff, L. S., & Fetzer, B. K. (1986). Self–other judgments and perceived vulnerability to victimization. *Journal of Personality and Social Psychology*, **50**(3), 502–510. doi:10.1037/0022-3514.50.3.502

Radvansky, G. A. (1999). Aging, memory, and comprehension. *Current Directions in Psychological Science*, **8**(2), 49–53. doi:10.1111/1467–8721.00012

Rapp, I. (2018). Partnership formation in young and older age. *Journal of Family Issues*, **39**(13), 3363–3390. doi:10.1177/0192513x18783469

Riediger, M., & Freund, A. M. (2006). Focusing and restricting: Two aspects of motivational selectivity in adulthood. *Psychology and Aging*, **21**(1), 173–185. doi:10.1037/0882-7974.21.1.173

Röcke, C., & Brose, A. (2013). Intraindividual variability and stability of affect and well-being: Short-term and long-term change and stabilization processes. *GeroPsych*, **26**(3), 185–199. doi:10.1024/1662–9647/a000094

Rokeach, M. (1973). *The nature of human values*. Free Press.

Rosenkoetter, M. M., Gams, J. M., & Engdahl, R. A. (2001). Postretirement use of time: Implications for preretirement planning and postretirement management. *Activities, Adaptation and Aging*, **25**(3–4), 1–18. doi:10.1300/J016v25n03_01

Rosso, A. L., Taylor, J. A., Tabb, L. P., & Michael, Y. L. (2013). Mobility, disability, and social engagement in older adults. *Journal of Aging and Health*, **25**(4), 617–637. doi:10.1177/0898264313482489

Saajanaho, M., Rantakokko, M., Portegijs, E., Törmäkangas, T., Eronen, J., Tsai, L. T., Jylhä, M., & Rantanen, T. (2016). Life resources and personal goals in old age. *European Journal of Ageing*, **13**(3), 195–208. doi:10.1007/s10433-016-0382-3

Schultheiss, O. C., & Brunstein, J. C. (Eds.). (2010). *Implicit motives*. Cambridge University Press.

Shah, J. Y., & Kruglanski, A. W. (2003). When opportunity knocks: Bottom-up priming of goals by means and its effects on self-regulation. *Journal of Personality and Social Psychology*, **84**(6), 1109–1122. doi:10.1037/0022-3514.84.6.1109

Sheldon, K. M., & Elliot, A. J. (1999). Goal striving, need satisfaction, and longitudinal well-being: The self-concordance model. *Journal of Personality and Social Psychology*, **76**(3), 482–497. doi:10.1037//0022-3514.76.3.482

Sheldon, K. M., & Kasser, T. (2001). Getting older, getting better? Personal strivings and psychological maturity across the life span. *Developmental Psychology*, **37**(4), 491–501. doi:10.1037/0012-1649.37.4.491

Simons, D. J., Shoda, Y., & Lindsay, D. S. (2017). Constraints on generality (COG): A proposed addition to all empirical papers. *Perspectives on Psychological Science*, **12**(6), 1123–1128. doi:10.1177/1745691617708630

Strachan, S. M., & Brawley, L. R. (2009). Healthy-eater identity and self-efficacy predict healthy eating behavior: A prospective view. *Journal of Health Psychology*, **14**(5), 684–695. doi:10.1177/1359105309104915

Stroebe, M. S., Hansson, R. O., Stroebe, W., & Schut, H. (Eds.). (2001). *Handbook of bereavement research: Consequences, coping, and care*. American Psychological Association. doi:10.1037/10436-000

Stroebe, M., Schut, H., & Stroebe, W. (2007). Health outcomes of bereavement. *Lancet (London, England)*, **370**(9603), 1960–1973. doi:10.1016/S0140-6736(07)61816-9

Taylor, S. E. (1983). Adjustment to threatening events: A theory of cognitive adaptation. *American Psychologist*, **38**(11), 1161–1173. doi:10.1037/0003-066X.38.11.1161

United Nations (2015). *World population ageing 2015*. United Nations. https://www.un.org/en/development/desa/population/publications/pdf/ageing/WPA2015_Report.pdf.

Vitharana, P., & Basu, A. (2019). Examining end users' ability to select business services: A conceptual framework and an empirical study. *Information & Management*, **57**(6), 103241. doi:10.1016/j.im.2019.103241

Wang, M., & Shi, J. (2014). Psychological research on retirement. *Annual Review of Psychology*, **65**, 209–233. doi:10.1146/annurev-psych-010213-115131

Wang, M., & Shultz, K. S. (2010). Employee retirement: A review and recommendations for future investigation. *Journal of Management*, **36**(1), 172–206. doi:10.1177/0149206309347957

Wing, R. R., Hamman, R. F., Bray, G. A., Delahanty, L., Edelstein, S. L., Hill, J. O., Horton, E. S., Hoskin, M. A., Kriska, A., Lachin, J., Mayer-Davis, E. J., Pi-Sunyer, X., Regensteiner, J. G., Venditti, B., & Wylie-Rosett, J.; Diabetes Prevention Program Research Group. (2004). Achieving weight and activity goals among diabetes prevention program lifestyle participants. *Obesity Research*, **12**(9), 1426–1434. doi:10.1038/oby.2004.179

World Health Organization (WHO). (2015). *World report on ageing and health*. WHO Press.

Wrosch, C., & Scheier, M. F. (2020). Adaptive self-regulation, subjective well-being, and physical health: The importance of goal adjustment capacities. *Advances in Motivation Science*, **7**, 199–238. doi:10.1016/bs.adms.2019.07.001

Wrosch, C., Scheier, M., Carver, C., & Schulz, R. (2003). The importance of goal disengagement in adaptive self-regulation: When giving up is beneficial. *Self and Identity*, **2**(1), 1–20. doi:10.1080/15298860309021

Zacher, H., Hacker, W., & Frese, M. (2016). Action Regulation across the Adult Lifespan (ARAL): A metatheory of work and aging. *Work, Aging and Retirement*, **2**(3), 286–306. doi:10.1093/workar/waw015