

Review Article

Navigating uncertainty across the lifespan in contemporary work and careers: introduction to the special issue

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Abstract

Uncertainty is a pervasive and increasingly defining feature of work and careers across the lifespan. Uncertainty is a topic of growing relevance in light of demographic shifts, evolving career and retirement patterns, and ongoing work-related changes, such as technological advancements, shifting economic landscapes, and unforeseen global events. While traditionally regarded as an aversive state to be avoided, uncertainty is also recognized as a catalyst for growth, learning, and personal development. The aim of this special issue is to promote a more explicit consideration and integration of uncertainty in research related to work, aging, and retirement. In this editorial that accompanies the special issue, we (a) introduce the contributing articles and highlight how they enhance our understanding of the role of uncertainty in work, career, and retirement; and (b) discuss key issues and directions for future research and practice to support individuals, teams, and organizations in navigating uncertainty across diverse stages of working life.

Keywords: uncertainty, lifespan, work, retirement, careers

Uncertainty has become a defining feature of contemporary work life and careers. It may originate from the environment, for instance, as a result of rapid technological change, flexible work arrangements, shifting organizational structures, or socio-economic upheavals. It may also emerge from the person themselves, through an individual's reevaluations of their own abilities, identities, or career paths (Griffin & Grote, 2020). The modern workplace is increasingly shaped by automation, digitalization, globalization, and unforeseen global events such as the COVID-19 pandemic, all of which entail uncertainty for workers across the lifespan (Fraccaroli et al., 2024). Simultaneously, global demographic trends indicate a rapidly aging workforce. The convergence of increased longevity and prolonged career trajectories is changing the way individuals engage with work at different life stages throughout their careers (OECD, 2024). Although these are sources of uncertainty in their own right, these factors may further contribute to individuals being uncertain about their abilities, identities, and careers.

Understanding how individuals experience, regulate, and act upon uncertainty has never been more critical. The focal point of this special issue is to advance our understanding of the role of uncertainty in work, careers, and retirement for individuals across the lifespan. Key questions that emerge are: How do individuals at different life stages navigate uncertainty in work contexts? What mechanisms support or hinder their ability to

adapt? What are the implications for workers' well-being, development, and decisions around their careers and retirement? These questions are not only timely but also foundational to the evolving research on uncertainty in development and organizational psychology, gerontology, and management.

Traditionally, psychological research has conceptualized uncertainty primarily as a stressor, associated with insecurity, anxiety, and disengagement (e.g., Grupe & Nitschke, 2013; Hirsh et al., 2012). However, recent work challenges this narrow perspective, highlighting that uncertainty can also serve as a stimulus for growth, exploration, and personal development (Alquist & Baumeister, 2024; Griffin & Grote, 2020; Kruglanski et al., 2025). From this broader perspective, uncertainty is not merely an obstacle to be overcome but a dynamic force that individuals can regulate, embrace, and even seek out to pursue meaning, fulfillment, and well-being in their lives. Specifically, Griffin and Grote (2020) propose the uncertainty regulation model, which reconceptualizes uncertainty not merely as a threat to be minimized but as a dynamic resource that individuals actively regulate to enhance effectiveness (i.e., the ability to achieve desired goals). Drawing on self-regulation theory, the model distinguishes between *opening strategies* (which increase exposure to uncertainty to foster exploration and growth) and *closing strategies* (which reduce uncertainty to maintain stability and efficiency). Griffin and Grote argue that effectiveness is maximized when individuals align their level of

uncertainty with their personal goals and contextual demands. This perspective shifts the focus from eliminating uncertainty to managing it adaptively.

Lifespan development theories, though often not addressing it explicitly, suggest that uncertainty can evolve and interact dynamically with age, particularly during key life and work transitions across the lifespan. Frameworks such as the selective optimization with compensation (SOC) model (Baltes & Baltes, 1990), socioemotional selectivity theory (Carstensen, 1991), and the motivational theory of life-span development (Heckhausen et al., 2010) suggest that individuals adapt their goals and regulatory strategies based on shifting internal and external resources over time. Although uncertainty as a construct has generally not been systematically explored (or explicitly addressed) in conjunction with these theories, they acknowledge the central role of ambiguity in life and work transitions. More recently, Grote and Pfrombeck (2020) explicitly proposed uncertainty regulation as a core mechanism in successful aging at work, calling for empirical investigations that integrate lifespan theory and motivational frameworks.

Despite these theoretical advances, empirical research explicitly considering the role of uncertainty in work, aging, and retirement remains limited. A better understanding of how workers at different life stages interpret and respond to uncertainty is crucial in a labor market characterized by nonlinear career paths, late-career transitions, and evolving retirement expectations (Gati & Kulcsár, 2021). This special issue of *Work, Aging and Retirement* seeks to address this gap by presenting a diverse and interdisciplinary collection of research.

To this end, we issued a call for papers to scholars working across psychology, organizational behavior, labor economics, and related fields. Specifically, we called for papers on conceptual and empirical research using quantitative, qualitative, case study, and mixed methods, and investigations adopting a multidisciplinary and multilevel perspective. The six contributions to this special issue showcase this diversity. Through different methodological approaches, contexts, and samples (including age-diverse employees, older workers, and retirees), these papers collectively advance our understanding of how individuals at different life stages perceive, interpret, and regulate uncertainty in their working lives. Together, they explore how uncertainty can catalyze adaptability, shape occupational decisions, and inform practices to support sustainable working lives across different life stages.

In the following section, we briefly introduce the six articles in this special issue and highlight how they contribute to our understanding of the role of uncertainty in work, career, and retirement. We then reflect and discuss key insights and propose future research directions.

Summary of special issue articles

Across the six contributions, the interplay between age and uncertainty in the modern workplace is explored through diverse theoretical models such as the uncertainty regulation model (Griffin & Grote, 2020), lifespan developmental perspectives such as socioemotional selectivity theory (Carstensen, 1991), and methodological approaches (e.g., qualitative and quantitative studies). Together, these papers articulate a comprehensive framework in which different aspects or sources of uncertainty (i.e., dispositional and situational or their interaction) affect different responses (i.e., regulation strategies), and

have positive and/or negative impacts on multiple work, career, and retirement-related outcomes.

Cabib et al. (2025) present a qualitative study exploring how Chilean workers navigate working lives in the context of high labor market uncertainty. Drawing on 90 life story interviews conducted across 21 cities in Chile with individuals aged 60–86, the authors examine the ways in which older adults exert agency in response to exogenous uncertainty, defined as unpredictable employment and income conditions in a highly deregulated labor market. The study leverages the theoretical framework of uncertainty regulation within a life-course perspective and explores opening and closing career strategies. The study found that individuals with both stable and unstable career histories are equally likely to continue working, challenging the assumption that only the most financially insecure are forced to do so. Moreover, workers use a mix of opening and closing strategies throughout their entire life course to manage their careers in response to persistent market uncertainty. The Chilean case provides a counterpoint to research in more institutionalized welfare systems. Despite the absence of public policies to support longer working lives, Chile has experienced one of the largest increases in labor force participation among people aged 65+ in Latin America. To summarize, this study suggests that to understand the extension of working lives, we must look beyond economic necessity and consider the biography of individual agency. It shows that workers are not necessarily passive victims of circumstance; rather, they can be active agents who have spent their lives regulating uncertainty. The study suggests that high uncertainty, while challenging, can also be a powerful driver of adaptability and agency throughout people's careers.

Rudolph and Zacher's study (2025) explores whether increases in work-related uncertainty—across tasks, resources, and input/output processes—can buffer the typically negative association between chronological age and occupational future time perspective. Specifically, they propose that increases in work uncertainty can paradoxically help older workers maintain higher levels of occupational future time perspective. Drawing upon the model of uncertainty regulation and socioemotional selectivity theory, the authors theorize that as work uncertainty (defined across resource, task, and input/output dimensions) rises, it presents new opportunities. Older workers are uniquely positioned to leverage these opportunities due to their accumulated knowledge and experience, which enables them to cope more effectively with unpredictability. This, in turn, helps them to sustain a more optimistic view of their remaining time, opportunities, and limitations at work. Using longitudinal data from 720 German employees, collected over 18 months, the study provides partial support for this proposition. Specifically, increases in work uncertainty across a 3-month period were found to buffer the typically negative association between age and occupational future time perspective at subsequent time points. This suggests that while age generally leads to a narrowing of perceived future time at work, an increase in work-related uncertainty can mitigate this effect, fostering a more expansive and opportunity-focused outlook for older individuals. This study makes a novel empirical contribution by demonstrating that not all uncertainty is detrimental. Rather, under certain conditions, increasing work uncertainty may support more favorable aging-related outcomes. The findings suggest a promising direction for designing work interventions that leverage uncertainty as a developmental resource.

Growney et al. (2025) contribute with a study on a sample of 213 full-time workers in the United States, with a broad age range of 25–76 years, examining how age, occupational time horizons, and perceived work uncertainty shape preferences for emotionally meaningful versus career-advancing work tasks. The authors apply socioemotional selectivity theory, which posits that a person's perception of their remaining time shapes their motivational goals. When time is perceived as expansive (typical for younger adults), goals prioritize learning and future-oriented career advancement. When time is perceived as limited (typical for older adults), goals shift to prioritize present-focused, emotionally meaningful experiences. Their findings showed that older workers, and those with more limited occupational time horizons, preferred emotionally meaningful tasks, while younger workers and those with broader future perspectives favored career-advancing tasks. However, perceived work uncertainty moderates these preferences in age-specific ways. Perceived work uncertainty did not affect the preferences of younger or middle-aged workers. However, it had an effect on older workers, significantly reducing their preference for emotionally meaningful tasks. Specifically, under conditions of high uncertainty, older workers' motivations shifted to resemble those of younger workers, prioritizing career-advancing tasks over helping behaviors. This research highlights how contextual factors like uncertainty may erode the age-related prosocial tendencies in work settings (i.e., while older workers are often a source of mentorship, stability, and collaborative spirit, these behaviors can be suppressed by a climate of uncertainty). The study offers insight for organizations in fostering a secure and predictable work environment to unlock the motivational strengths of an age-diverse workforce. Inducing uncertainty, whether intentionally or not, may have the unintended consequence of diminishing the prosocial contribution of older workers to their teams and the organization's social landscape.

Harris et al. (2025) investigate how older workers regulate uncertainty arising from person–environment (P–E) misfit and how these strategies influence late-career intentions, such as retirement, bridge employment, and senior entrepreneurship. Drawing on the uncertainty regulation model (Griffin & Grote, 2020), the authors propose and empirically test whether opening and closing strategies mediate or moderate the relationship between uncertainty in work ability and late-career outcomes. Specifically, using a three-wave longitudinal dataset of 902 older workers in the United Kingdom (ages 50–67), the authors show that P–E misfit leads to increased uncertainty in work ability. This uncertainty, in turn, fosters the use of opening strategies, which are associated with stronger intentions for bridge employment and senior entrepreneurship, and weaker intentions to retire. Conversely, closing strategies were negatively linked to bridge employment and entrepreneurship intentions, but not significantly to retirement. Their findings support a serial mediation model, where uncertainty in work ability indirectly influences late-career outcomes through the use of opening strategies (while closing strategies do not). The study contributes to our understanding of successful aging at work by linking work environment misfit, self-regulation, and career development. The central takeaway is that proactively engaging with uncertainty through opening strategies is a key mechanism for successful late-career development. Rather than viewing uncertainty as a signal to withdraw, workers who use it as a catalyst for growth are more likely to envision and plan for continued work in various forms.

Laguerre and Barnes-Farrell (2025) contribute to the emerging literature on uncertainty regulation and its relevance for successful aging at work by empirically testing the influence of intolerance of uncertainty on work- and retirement-related outcomes through future time perspective. Drawing on theoretical frameworks proposed by Griffin and Grote (2020) and Grote and Pfrombeck (2020), the authors argue that a person's dispositional intolerance of uncertainty (i.e., a tendency to react negatively to an unknown future) affects their future time perspective and, subsequently, work- and retirement-related outcomes. Specifically, they hypothesize that individuals with a low intolerance of uncertainty will perceive their future (both in life and at work) as more open. This expansive future time perspective and occupational future time perspective, in turn, are expected to lead to more adaptive retirement planning and work-related outcomes. In two time-lagged studies of full-time working adults in the United States, the authors tested whether intolerance of uncertainty negatively affects future-oriented perceptions and outcomes. In both studies, intolerance of uncertainty was significantly and negatively related to having an open-ended future time perspective. People who better tolerate uncertainty see their future as more expansive. Moreover, this expanded time perspective fully mediated the link to key outcomes. Specifically, a lower intolerance of uncertainty (leading to a more open future) was indirectly associated with higher motivation to continue working, greater financial risk tolerance toward retirement, and higher perceived work ability. The findings support the theoretical models and clarify that tolerating uncertainty is beneficial for working adults because it helps shape a positive and expansive outlook on the future. The study offers both theoretical and practical insights, highlighting intolerance of uncertainty as an individual difference with implications for extending working lives and supporting workforce sustainability.

Dossinger and Beaver (2025) introduce and empirically test the concept of retirement self-uncertainty, defined as an individual's perception that their self-concept in retirement is unknown. Grounded in resource-based views and self-uncertainty theory, this study significantly contributes to the literature by explicitly integrating self-uncertainty into models of retirement adjustment. Using a time-lagged study design with 352 retired adults in the United States, the authors propose and test a moderated mediation model. Their findings reveal several key antecedents and outcomes of retirement self-uncertainty. Specifically, they found that the involuntariness of the retirement decision and financial hardship experienced during retirement were positively associated with higher levels of retirement self-uncertainty. Conversely, a higher subjective health status during retirement was negatively associated with retirement self-uncertainty, suggesting that good health acts as a stabilizing resource for one's self-concept. Moreover, a preretirement calling orientation (i.e., perceptions that one's work held significant meaning and purpose) was found to exacerbate the positive relationship between financial hardship and retirement self-uncertainty. This suggests that for individuals deeply invested in their work as a calling, financial difficulties in retirement can amplify the feeling of not knowing who they are, highlighting a potential "downside" or boundary condition to the otherwise positive effects of a calling. Calling orientation did not, however, moderate the relationships between involuntary retirement or subjective health with retirement self-uncertainty. Furthermore, retirement self-uncertainty was found to

be a significant psychological mechanism, being negatively associated with both retirement satisfaction and psychological well-being. This underscores the critical role of self-clarity in achieving a positive adjustment to retirement. By introducing and empirically validating retirement self-uncertainty, the authors make a significant theoretical contribution to understanding identity and adjustment in later-life transitions. Their work highlights the importance of attending not only to financial or health resources in retirement planning but also to the identity implications of retirement, especially for those with a strong professional calling. This work invites future research to explore interventions that can help mitigate self-uncertainty and support psychological well-being in retirement.

Reflections for future research and practice

The uncertainty regulation model (Griffin & Grote, 2020) challenges the traditional tendency to frame uncertainty solely as a threat, advocating instead for a more nuanced and dynamic understanding. This framework emphasizes that while uncertainty can undoubtedly be destabilizing, it also holds the potential to serve as a catalyst for agency, adaptability, and personal or professional growth. This idea resonates with theoretical propositions in research on career transitions and decision making (Gelatt, 1989; Mitchell et al., 1999). The studies included in this special issue take up this challenge and collectively make significant progress in unpacking the complex nature of uncertainty, specifically, delineating when (i.e., under which conditions), how (i.e., which underlying mechanisms) and for whom (e.g., younger and older workers, retirees) uncertainty becomes beneficial or detrimental. In particular, they adopt a lifespan perspective to understand how responses to uncertainty may shift across different ages and begin to map age-related differences in uncertainty experience and regulation. Importantly, the articles underscore that uncertainty is not a simple construct in terms of its antecedents and outcomes. Rather, its impact is context-dependent and affected by individual differences. Developing uncertainty regulation skills—the ability to flexibly engage with uncertainty, using both opening (i.e., exploration) and closing (i.e., exploitation) strategies—emerges as a core resource for navigating labor market uncertainties, technological advancement, and evolving retirement pathways and extended working lives.

Most papers in this special issue focus on individual-level outcomes related to work and career (e.g., workability, task preferences, and work continuance intentions) and retirement (e.g., retirement satisfaction and well-being, financial risk tolerance toward retirement). However, there are also some notable differences across the six papers. The study use different

approaches regarding the conceptualization and operationalization of uncertainty as well as regulatory mechanisms. Moreover, some studies focused on examining interindividual differences, whereas others focused on intraindividual variability and changes over time. Based on these commonalities and differences, we propose several avenues for future research.

Reflections for future research

In the following, we outline three directions for future research inspired by the studies included in this special issue and depicted in Figure 1.

Conceptualization and operationalization of uncertainty and regulatory mechanisms

Uncertainty may have multiple facets and may be related to different aspects (e.g., abilities, money, economy). Across the six papers, uncertainty is conceptualized and measured in diverse ways: it is rooted in contextual features such as economic volatility and job insecurity (Cabib et al., 2025) or evolving work task aspects (Growney et al., 2025; Rudolph & Zacher, 2025); in others, it is more closely tied to individual dispositions, such as intolerance of uncertainty (Laguerre & Barnes-Farrell, 2025) or self-identity (Dossinger & Beaver, 2025); still others examine it as an emergent characteristic of the person–environment interaction (Harris et al., 2025). While this diversity reflects the richness of the construct and its relevance across multiple domains, it also signals a pressing need for conceptual and operationalization clarity. If researchers are interested in measuring work uncertainty and changes in work uncertainty over time, they could follow the approach by Rudolph and Zacher (2025), who used the validated work uncertainty measure by Leach et al. (2013) and adopted a longitudinal design. As Cabib et al. (2025) highlighted the relevance of macroeconomic uncertainty at the country level in their qualitative study of individuals’ careers, one way to quantify this type of uncertainty in future research is to use economic indicators and their variability, such as volatility in unemployment rates or in gross domestic product (GDP). If researchers are interested in self-uncertainty in a specific context or life phase, such as retirement, they could follow the approach by Dossinger and Beaver (2025), who adapted Hohman and Hogg’s (2015) self-uncertainty measure.

In addition, we think it is important for future research to further explore the core assumption of uncertainty regulation, which is that individuals regulate uncertainty if they experience either too much or too little of it, depending on their preferred level of uncertainty, which serves as a reference point (Griffin & Grote, 2020). Laguerre and Barnes-Farrell (2025) measured

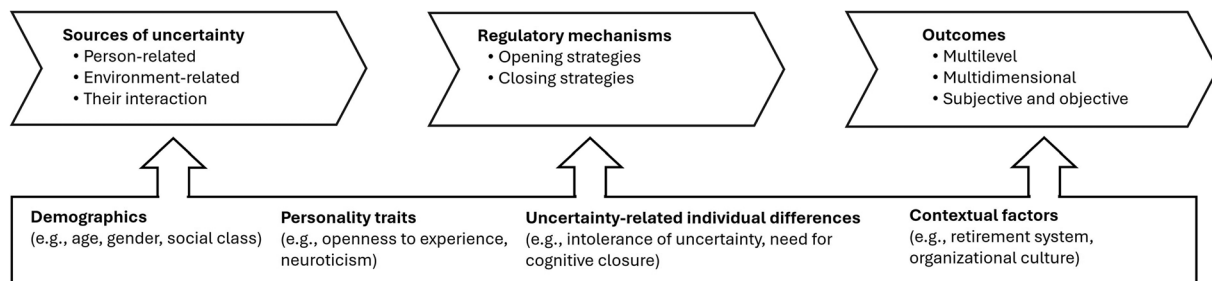


Figure 1. A framework for future research on uncertainty management across the lifespan.

intolerance of uncertainty, which is an individual difference that could be used for assessing individuals' preferred level of uncertainty. However, there are also other uncertainty-related individual differences that are worth considering in future studies. Gerlach and Pfrombeck (2025) discuss seven uncertainty-related individual differences in their review, including uncertainty avoidance, uncertainty orientation, tolerance for ambiguity, intolerance of uncertainty, need for cognitive closure, self-concept clarity, and curiosity. They noticed that these constructs differ in their conceptualizations and operationalizations in terms of valence (positive vs. negative), locus (internal vs. external), and degree of contextualization (generic vs. specific).

A similar issue applies to the mechanisms used to regulate uncertainty, particularly the concepts of opening and closing strategies derived from the uncertainty regulation model (Griffin & Grote, 2020). These constructs offer a promising framework to describe how individuals regulate uncertainty. However, the empirical application of these strategies varies considerably across studies (e.g., explored as behavioral aspects and/or cognitive and affective facets). Future research should aim to develop a more systematic taxonomy of uncertainty and regulatory mechanisms at work and a detailed mapping of the different operationalizations and measurements. By improving the clarity and consistency of how uncertainty and its regulation are conceptualized and operationalized, researchers will be better equipped to produce generalizable findings, refine measurement tools, and inform practical interventions to support individuals and organizations in navigating an increasingly uncertain world of work.

Intraindividual variability and person-centered analytic approaches

The six contributions to this special issue employ longitudinal and time-lagged survey designs, scenario-based study, and qualitative life-history interviews. This methodological pluralism enhances the understanding of the complex nature of uncertainty across the lifespan. However, promising methodological avenues remain untapped, particularly in relation to intraindividual variability and the application of person-centered analytical approaches.

One direction for future research involves examining how individuals regulate uncertainty over time and across different career and life transitions. Rather than treating uncertainty regulation as a static trait or outcome, future studies could explore it as a dynamic process that unfolds within individuals. Intensive longitudinal methods, such as experience sampling, daily diary studies, and time-series analyses, are especially well-suited for capturing this temporal variability. These designs would allow researchers to observe how uncertainty is perceived and managed in real-time, across both micro-level transitions (e.g., changes in daily tasks or leadership roles) and macro-level career shifts (e.g., job loss, promotions, and retirement).

In addition, person-centered analytic techniques, such as latent profile analysis and growth mixture modeling, offer valuable tools for identifying distinct subgroups of workers who may differ in their patterns of uncertainty regulation. These approaches acknowledge the heterogeneity among aging workers and move beyond one-size-fits-all models. By uncovering meaningful profiles, such as those who thrive under uncertainty

versus those who experience maladaptive responses, researchers can better inform tailored interventions and organizational practices that address specific needs and strengths across the workforce.

Expanding the scope of the outcomes of uncertainty

The contributions in this special issue provide valuable insights into how individuals experience and regulate uncertainty in their working lives. However, most studies have focused primarily on individual-level outcomes, often assessed through self-reported measures. While this approach captures important subjective experiences, it only offers a partial view of the broad and complex consequences of uncertainty. To advance the field theoretically and practically, future research should adopt a more comprehensive outcome framework that is multilevel (e.g., incorporating individuals, teams, and organizations), multidimensional (e.g., capturing a broader range of outcomes such as performance, motivation, health/wellbeing, career trajectories), and based on both subjective (e.g., self-reports) and objective (e.g., behavioral and physiological) indicators. Additionally, research should explore specific age-sensitive work outcomes (e.g., emotion regulation, and retirement intentions) to obtain a better understanding of the potential impacts of increases and decreases in uncertainty among workers of different ages.

Regarding the multilevel feature, while individual responses to uncertainty are foundational, future research should also investigate how uncertainty is negotiated and regulated at the team and organizational levels. In today's complex work environments, uncertainty can also be a shared experience among coworkers or a product of leadership style, organizational change, and culture. Future studies should therefore examine how uncertainty is co-regulated in team contexts, and how leaders and organizational cultures shape—intentionally or unintentionally—employees' responses to uncertainty. These dynamics are particularly relevant in age-diverse workplaces, where age-related differences may result in distinct appraisals of, and responses to, uncertainty. Therefore, understanding how leaders and organizations regulate uncertainty will be crucial in developing a more inclusive and resilient workforce.

In terms of multidimensional outcomes, a broader array of aspects that reflect the multifaceted effects of uncertainty across the lifespan should be considered in future research, for example: performance-related outcomes (e.g., individual, team, and organizational performance, creativity, innovation, learning behaviors, adaptability, and proactive behaviors such as job crafting); motivational and attitudinal outcomes (e.g., engagement, goal orientation, job satisfaction, and organizational commitment); health and well-being (e.g., mental and psychical health); career and retirement (e.g., career sustainability, employability, job transitions, and retirement).

Moreover, to deepen the understanding of these outcomes, future studies should integrate objective behavioral and physiological data alongside self-reports. While self-reports remain indispensable for capturing perceptions and experiences, combining them with more objective indicators (e.g., decision-making tasks, risk-taking profiles, information-seeking behavior, cortisol levels, heart rate variability, skin conductance, or wearable device data) and neurological indicators (e.g., activities of different brain regions) can enhance both the validity and

insight of the findings. These approaches may enhance ecological validity and enable research to explore real-time and real-life uncertainty regulation and its results, and this can also be applied to the assessment of uncertainty-related constructs.

Reflections for practice

Because a more explicit consideration and integration of uncertainty in applied research related to work, aging, and retirement is still nascent, it may be too early to be able to draw clear evidence-based implications for practice. However, the contributions to this special issue provide several interesting insights suggesting that a broader view of uncertainty and a more proactive management of uncertainty by individuals, teams, and organizations may offer beneficial outcomes. Below, we begin with recommendations emerging from the six contributions to this special issue. We then expand our discussion, asking questions relevant to practice that are important to address in future research.

Practical implications based on the six contributions to this special issue

Becoming mindful about uncertainty

By explicitly considering the role of uncertainty in applied settings, the special issue contributions suggest that uncertainty matters for individuals in work, aging, and retirement. The findings by [Rudolph and Zacher \(2025\)](#) demonstrate that workers at different ages experience different levels of work uncertainty and increases or decreases in work uncertainty affect younger and older workers differently. [Growney et al.'s \(2025\)](#) findings further suggest that work uncertainty may shape older workers' task preferences. While the downstream consequences for employees, teams, and organizations are still poorly understood, we conclude from these insights that practitioners would benefit from becoming more mindful about uncertainty, whether employees and managers in organizational settings or career and retirement counselors. For example, an assessment of work uncertainty could become an integrated part of work design assessments. Uncertainty is also present, for example, in the design and implementation of flexible work arrangements, performance evaluations, and feedback processes, internal organizational career progression and promotion plans, as well as retirement plans and opportunities for employees.

A first step for organizations would be to assess and become conscious of the presence or absence of uncertainty in the workplace. Career and retirement counselors may also benefit from considering uncertainty more explicitly, for example, by acknowledging self-uncertainty in retirement, which has been conceptualized by [Dossinger and Beaver \(2025\)](#) as relevant for retirement satisfaction and well-being, and by considering non-linear career trajectories as discussed in [Cabib et al. \(2025\)](#) from an uncertainty perspective.

Becoming proactive about uncertainty

Uncertainty regulation has been a core lens across the special issue articles. Although becoming proactive about uncertainty may not require awareness about it, as regulation could happen implicitly and intuitively, awareness about uncertainty would allow a more deliberate and targeted regulation and utilization of it. Based on the findings by [Laguette and Barnes-Farrell \(2025\)](#), career counselors and organizations may develop

uncertainty tolerance training to promote an extended perception of remaining time and opportunities at work, which is positively associated with work ability perceptions and work continuance intentions. Such training may build on materials developed in cognitive behavioral therapy (CBT) studies (e.g., [Robichaud & Buhr, 2018](#)). Career coaches may use [Cabib et al.'s \(2025\)](#) categorization of career strategies into opening and closing behaviors to develop a better understanding of ways in which individuals craft their careers. As the findings by [Harris et al. \(2025\)](#) highlight, engagement in opening strategies due to a current misfit with the current employment and uncertainty about one's workability can open new perspectives on senior entrepreneurship and bridge employment for older workers. Thus, when experiencing a misfit and uncertainty about one's workability, career counselors may encourage older employees to engage in opening strategies, such as identifying new skills and how to approach learning new skills, exploring different ways to carry out a task, or upskilling existing competencies.

Research questions relevant for practice

We encourage future research to take this discussion to the next level by exploring specific ways in which organizations, managers, and practitioners can support individuals and teams in channeling and managing uncertainty. We focus on two avenues for developing relevant insights for practice that complement and are logical extensions of the two recommendations mentioned above (i.e., to become mindful and proactive about uncertainty).

Promoting a constructive uncertainty culture

How can organizations cultivate a workplace culture that does not view uncertainty solely as a threat but rather as a potentially valuable feature, source of opportunity, learning, and innovation without backfiring? More specifically, how can leaders and HR professionals address open communication about uncertainty that fosters both psychological safety and position change as a developmental opportunity for experimentation and learning? Leaders, in particular, can play a key role in shaping how uncertainty is experienced at work. Research shows that creating uncertainty by being sporadically fair is detrimental for employees (e.g., [Matta et al., 2017](#)). However, creating different types of uncertainty that allow learning and curiosity may be beneficial. Future research needs to examine how managers (e.g., which leadership styles) can help employees and teams navigate uncertain situations by offering support in decision-making, promoting a calculated risk-taking culture, recognizing signs of maladaptive responses to uncertainty (e.g., withdrawal, burnout, and disengagement), and proactively intervening. Given the diverging effects of work uncertainty for employees at different career stages, future research may also investigate whether age-diverse teams may benefit from leaders who can acknowledge and accommodate different uncertainty experiences based on their specific age-related needs. In general, effective organizational practices may be tailored to reflect the diversity of employees' experiences, motivations, and life stages. Specifically, recognizing the unique strengths, vulnerabilities, and motivational orientations of workers of different ages may be important. Diversity research may investigate whether promoting an inclusive and age-sensitive culture can not only enhance engagement and retention across age groups but also foster organizational resilience in the face of uncertainty.

Investing in uncertainty training and interventions

Just as organizations train employees in technical skills, future research may also investigate the effectiveness of training intended to build employees' uncertainty regulation capabilities. Such training programs may build on cognitive flexibility, resilience, and emotion regulation. Specific interventions might include mindset changing and reflective exercise to help reframe uncertainty as a growth opportunity, and workshops and coaching programs that tailor uncertainty management to individual needs (e.g., considering age-related differences). Understanding whether these efforts are age-sensitive because employees at different life stages may require different tools to navigate uncertainty effectively (e.g., younger workers may benefit from strategies that build future orientation and experimentation, whereas older employees may require tools to navigate identity transitions and sustain motivation in the face of change) is also critical.

Furthermore, research is needed on tailored interventions during work and career transitions (e.g., such as entering a new job or role, adapting to technological changes, or preparing for retirement) in which uncertainty can peak. Specifically, research is encouraged on tailored interventions that include uncertainty regulation. Such interventions may provide structured support in these critical phases, including mentoring programs, transition coaching, phased retirement plans, or bridge employment options. For example, career counseling services that address identity shifts (e.g., during retirement) could be helpful in mitigating retirement self-uncertainty and promoting post-retirement well-being.

Conclusion

In sum, the contributions to this special issue offer a rich and multifaceted picture of how to navigate the evolving landscape of work and retirement under conditions of uncertainty. They move the research forward by not only emphasizing the challenges posed by uncertainty but also its developmental potential. Future research should deepen our understanding of uncertainty regulation across diverse contexts and life stages and identify pathways for empowering individuals, teams, and organizations to respond in a productive and healthy way to an increasingly unpredictable world of work.

Data availability

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