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Antecedent Mechanisms of Successful Aging at Work: Postprint

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Abstract

The global workforce is undergoing demographic aging. Successful aging at work plays a significant role in enhancing productivity, facilitating career development, and enabling work value realization among older employees, and has garnered considerable scholarly attention in recent years. Through content analysis of 74 relevant publications, factors influencing successful aging at work can be categorized into four types: organizational and work environment, adaptive strategies, proactive strategies, and personal characteristics, based on which a comprehensive model of the underlying mechanism is proposed. Future research should pursue more in-depth investigations along three dimensions: exploring the integration of “structural” factors and interdisciplinary theories, further examination of antecedents and underlying mechanisms, and optimization of research methods and design.

Full Text

Preamble

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The Antecedent Mechanisms of Successful Aging at Work*

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Abstract: The global workforce is experiencing aging. Successful aging at work has received considerable scholarly attention in recent years due to its significant role in promoting productivity improvement, career development, and the realization of work values among older workers. Through content analysis of 74 relevant papers, the factors that influence successful aging at work

can be summarized into four categories: organizational and work environment, adaptive strategies, proactive strategies, and personal characteristics. Accordingly, a comprehensive model of the occurrence mechanism is proposed. In the future, more in-depth research should be conducted in three areas: exploring “structural” factors and the integration of interdisciplinary theories, further investigating antecedents and occurrence mechanisms, and optimizing research methods and designs.

Keywords: older worker, successful aging at work, antecedent mechanism

Classification: B844: C93

Introduction

Economic, technological, and medical advancements have significantly extended human life expectancy. Coupled with the aging of the baby boomer generation and persistently declining birth rates, population aging continues to intensify globally, making older workers a primary labor source for the foreseeable future. On one hand, aging brings declines in cognition, motivation, and work capacity (Kooij et al., 2020). Older workers face work challenges and pressures such as increased unemployment risk, reduced training opportunities, and skill obsolescence while adapting to physical decline (Robson & Hansson, 2007). On the other hand, older workers possess more work experience and clearer self-awareness regarding their conditions and career aspirations, enabling them to actively shape their work environment and adapt to age-related changes by integrating available resources (Abraham & Hansson, 1995; Kooij, 2015), thereby creating greater value for organizations. How to enhance the work motivation of older workers, maintain and restore their work potential, and improve their performance and well-being has gradually become an important research direction in organizational and management psychology (Wang et al., 2019; Kooij et al., 2020).

Against this backdrop, research on aging at work has expanded considerably over the past decade, with “successful aging at work” emerging as a prominent concept. This concept primarily examines how older workers cope with age-related changes and maintain success in specific work contexts (Abraham & Hansson, 1995; Kooij, 2015; Zacher, 2015). However, since its introduction, successful aging at work has remained a complex and broad concept. Regarding age definitions, while gerontology-focused successful aging research concentrates on individuals aged 60 and above and retired populations, studies in work contexts have not reached a consensus on defining older workers, generally focusing on younger groups. Commonly used thresholds include 55 years (Sanders & McCready, 2010), 50 years (Thrasher et al., 2018), 45 years (Cheung & Wu, 2014), and 40 years (Robson & Hansson, 2007). Conceptually, three perspectives define successful aging at work: (1) a comparative perspective, where employees achieve successful aging if they deviate increasingly positively from average developmental trajectories in subjective and objective work outcomes throughout their careers (Zacher, 2015); (2) a person-job fit perspective, defining success-

ful aging as maintaining health, motivation, and work capacity in current and future jobs (Kooij, 2015); and (3) a process-outcome integration perspective, viewing successful aging as the proactive maintenance or adaptive recovery of high-level ability and motivation to continue working after decline (Kooij et al., 2020). These varying age definitions and conceptualizations have led to diversity and convergence in influencing factors and theoretical explanations.

As research has proliferated, scholars have conducted several reviews. Foreign reviews fall into three categories: first, those proposing definitions and basic research frameworks by tracing conceptual development and lifespan theories (Kooij, 2015; Kooij et al., 2020; Olson & Shultz, 2019; Zacher, 2015; Zacher & Rudolph, 2017), which emphasize theoretical guidance but discuss mechanisms primarily through conceptual understanding rather than empirical evidence. Second, reviews of existing research, most notably Zacher et al.'s (2018) content analysis and methodological summary of six empirical articles on successful aging at work in a *Work, Aging and Retirement* special issue, though with limited coverage. Third, conceptually reviews examining influencing factors from specific perspectives, such as Pak et al.'s (2023) analysis of technology's impact through job design. Domestically, research is still emerging. Wang et al. (2019) first introduced the concept, reviewing its conceptualization and operational definitions in the context of late-career job crafting. Peng et al. (2022) provided the first comprehensive review of concepts, measurement, theoretical foundations, and empirical research, though with insufficient discussion of antecedents and mechanisms. Therefore, addressing these gaps, this paper reviews research progress on successful aging at work and its antecedent mechanisms to inform future studies. We focus on the overall research landscape, influencing factors, and occurrence mechanisms rather than reiterating well-discussed conceptual definitions, measurements, and lifespan developmental psychology foundations.

Literature Search, Screening, and Content Analysis

Systematic Literature Search and Screening Process

To ensure quality and comprehensiveness, we followed the PRISMA guidelines (Moher et al., 2009) for literature search and screening, including identification, screening, eligibility, and inclusion stages. First, we identified literature in major Chinese and English databases (CNKI, Wanfang, Web of Science, EBSCO, JSTOR) from 1995 to 2022, using keywords including “successful aging at work,” “workplace successful aging,” and combinations of “successful aging” with “older workers,” “older employees,” “workplace,” “work,” and “organization.” This yielded 606 English and 4 Chinese articles. Second, we screened for duplicates, removing 128 English and 1 Chinese article. Third, we determined eligibility: successful aging at work research spans gerontology, geriatrics, management, psychology, and organizational behavior. After excluding 349 English and 1 Chinese article based on titles and abstracts, we read full texts and removed 60 articles that mentioned search terms but did not address both successful aging

and work contexts. Finally, 71 articles remained (69 English, 2 Chinese), with 3 additional English articles added later, resulting in 74 articles for analysis.

Content Analysis

Basic Literature Information We used content analysis to organize basic information from the 74 articles. Detailed timelines of authors' countries, institutions, and research fields were compiled (see). The term “successful aging at work” has been used for nearly 30 years, with rapid development in the past decade. Scholars from the United States, Netherlands, and Germany have led research, with the field expanding from traditional gerontology and geriatrics to management, psychology, and labor studies, indicating future research will increasingly occur within organizational management psychology.

Theoretical Application in Antecedent Research Focusing on antecedent mechanisms, we examined 37 articles that explicitly treated successful aging at work as an outcome variable. Rather than detailing specific theories, we extracted theories applied at least twice and compiled representative highly-cited studies (see). Research primarily draws on lifespan developmental psychology and organizational behavior theories. Lifespan developmental theories examine mechanisms for balancing age-related gains and losses throughout life (Rudolph & Zacher, 2022), with Selective Optimization with Compensation (SOC), Socioemotional Selectivity Theory (SST), and Motivational Theory of Lifespan Development (MTLD) most frequently applied. SOC theory, most widely used, explains selection, optimization, and compensation strategies for coping with aging. SST theory emphasizes how age-related changes in future time perspective influence goal selection, particularly emotional goals (Carstensen et al., 2003). MTLD theory similarly focuses on behavioral strategies, conceptualizing control acquisition as primary and secondary control (Heckhausen et al., 2010). The most applied organizational behavior theories are Conservation of Resources (COR) theory and the Job Demands-Resources (JD-R) model, both concerning resource acquisition in older workers. COR theory examines organizational environment effects through resource acquisition and protection, while JD-R analyzes work demands and resources. Other theories like role theory, organizational support theory, and self-identity theory examine general organizational behavior variables. Notably, these theories are not applied independently; researchers increasingly combine two or more theories for comprehensive explanation, addressing lifespan psychology's relative neglect of environmental influences (Zacher & Rudolph, 2017). Combining lifespan and organizational theories represents an important future trend.

Influencing Factors of Successful Aging at Work

Successful aging at work represents an integration of organizational behavior and lifespan developmental psychology, influenced jointly by organizational/work environment factors, age-related personal characteristics, and coping strategies

(Kooij et al., 2020; Pak et al., 2023; Zacher, 2015). As a self-regulation process, coping with aging involves both adapting to and actively shaping age-related conditions. Based on 37 antecedent studies, we elaborate how four factor categories—organizational/work environment, adaptive strategies, proactive strategies, and personal characteristics—affect successful aging at work, while noting theoretical applications.

Organizational and Work Environment Factors

These factors play crucial roles in older workers' successful aging (Kooij et al., 2020; Pak et al., 2023). Research primarily uses resource-related organizational behavior theories to examine structural factors—opportunities and constraints—in organizational and work environments.

Work Characteristics Scholars widely apply JD-R theory and demand-control theory to explain how work characteristics (including content and relational features) predict successful aging. The JD-R framework uniquely values distinguishing potential effects of different work characteristics on older workers' motivation and understanding health impairment processes. According to JD-R theory (Demerouti et al., 2001), job demands (e.g., workload, role conflict) consume personal energy, while job resources reduce demand-related stress and promote development and goal achievement. Research consistently confirms that job demands negatively predict successful aging outcomes by reducing perceived work ability, motivation to continue working (Pak et al., 2020), and sustainable employability (de Lange et al., 2020). Work-family conflict and age discrimination create stress, consuming resources and affecting adaptability, goal setting, and capacity to handle demands (Cheung & Wu, 2012).

Conversely, job resources are believed to compensate for age-related resource losses. Key facilitative resources include job control, autonomy, and social support (supervisor and colleague). Job control and autonomy enhance older workers' sense of control by allowing them to arrange tasks and select skills, while social support reduces age-related stress and discrimination, positively influencing work ability and motivation (Cheung & Wu, 2012; Müller et al., 2012). Learning opportunities provide conditions for developing new resources (skills and knowledge), correlating positively with leukocyte telomere length—a biological aging indicator (Weber et al., 2019). Notably, while job complexity represents high demands, research suggests it promotes utilization of existing knowledge and abilities and increases focus on future opportunities (Zacher & Frese, 2011). As Sanders and McCready (2010) noted based on demand-control theory, healthy job design provides opportunities for decision-making, skill variety, and social networks, enhancing support, control, and work ability for successful aging.

Organizational Environmental Factors Organizations can motivate older workers and create conditions for development and career success by address-

ing their distinct needs and providing suitable opportunities. Research focuses on human resource management policies and leadership support, explained through COR theory, job crafting theory, organizational support theory, and leader-member exchange theory. Regarding management policies, supportive HR practices help older workers enter a growth cycle of resource protection and acquisition, facilitating successful aging. Pak et al. (2021) confirmed that adaptive, utility, maintenance, and developmental HR practices as organizational resources help retain existing or develop new personal resources, positively correlating with work ability and retirement age. Beyond holistic HR policies, Bal et al. (2015) demonstrated that offering personalized career choices through large-scale career customization enables older workers to align career needs with organizational expectations and enhance organizational commitment and career success despite aging.

Regarding organizational support and leadership, supportive environments that understand personal needs, goals, and values and concern older workers' well-being can mitigate age-related work stress. Cheung and Wu (2013) validated the positive effect of perceived organizational support on job satisfaction and successful aging based on organizational support theory. Cheung et al. (2018) further confirmed from a leadership perspective that transformational leadership promotes all dimensions of successful aging (adaptability and health, positive relationships, career growth, goal achievement, sustained focus), transactional leadership promotes career growth, and laissez-faire leadership negatively correlates with all dimensions.

Adaptive Strategies

Successful aging requires older workers to adopt adaptive strategies against potential losses in physical, psychological, and career opportunity resources (Abraham & Hansson, 1995), focusing on adjusting goals and actions to cope with current age-related losses and work stress while reducing person-environment misfit to maintain healthy development and positive outcomes.

SOC Strategies Based on COR theory, people strive to obtain, maintain, and protect valuable resources when facing loss threats. While COR provides direct theoretical explanation (Hobfoll et al., 2018), SOC theory from lifespan developmental psychology, which also addresses resource loss and acquisition, has become most widely used by explicitly specifying how individuals leverage resources against age-related losses. SOC theory summarizes general, dynamic adaptation processes throughout life, crucial for maintaining and regulating declines in physical, psychological, and social reserves. Baltes and Baltes (1990) proposed that with age, growth goals decrease while more resources are applied to maintaining current functioning and managing losses. Selection involves choosing what one can and wants to do when constrained by age-related plasticity changes and potential losses. Optimization involves acquiring, improving, and coordinating resources to achieve selected important goals, enriching

general reserves. Compensation involves using alternative means to maintain goal pursuit when existing resources are insufficient (Baltes, 1997). Notably, older workers' various combinations of selection, optimization, and compensation should emphasize their adaptive essence (Andrei & Parker, 2022).

SOC strategy research falls into two categories: first, qualitative studies exploring SOC use in specific older worker groups. Ng and Law (2014) applied the SOC framework to summarize how workers over 55 adapt to work, enriching specific content such as health-driven prioritization, work-life preferences due to flexibility, and perspective-taking regarding mortality. Second, studies treating SOC strategies as variables using standardized questionnaires to test predictive effects on successful aging. Numerous studies confirm that synchronized or coordinated use of the three SOC strategies enables older workers to allocate available resources effectively, maintaining focus on work opportunities (Zacher & Frese, 2011) and positively affecting performance, ability maintenance (Abraham & Hansson, 1995), coping with career changes, and sustaining work functioning (Ng & Law, 2014). Some studies combine SOC with other lifespan theories (MTLD, SST) because they all emphasize that adaptive lifespan development requires goal selection and resource allocation. For instance, Müller and Weigl (2017) linked MTLTD' s secondary control strategies, finding that older workers using SOC strategies for maintaining good work relationships effectively promoted organizational citizenship behaviors toward colleagues. Taneva and Arnold (2018) used SOC and SST theories to show that SOC strategies enable older workers to effectively cope with work challenges and pursue growth goals, correlating positively with thriving at work.

Other Adaptive Strategies Other adaptive strategies include job modifications under career adaptation and “surviving at work” strategies aimed at protecting and maintaining late-life personal resources. Sanders and McCready (2009) conducted a case study of two older workers based on career adaptation theory, finding they used adaptive work adjustments like reducing burdens, seeking help, and pacing themselves to cope with changed work and medical conditions. For older workers, protecting mental and physical resources represents a primary late-career task. Taneva et al. (2016) proposed the “surviving at work” adaptive strategy, defining it based on SST theory as a short-term goal-driven behavioral strategy comprising “meeting requirements” and “maintaining status quo” dimensions. Surviving at work involves limiting work activities and perspectives to preserve resources when facing demanding conditions. Empirical research confirmed that while this strategy does not reduce in-role performance, it decreases proactivity and extra-role performance (Taneva & Arnold, 2018).

Proactive Strategies

Older workers are not merely passive recipients of environmental change but also shapers of their own environment (Kooij, 2015; Wang et al., 2019). Proactive strategies in successful aging emphasize self-initiated positive actions to

achieve future person-environment fit or reduce anticipated misfit caused by age changes.

Job Crafting Job crafting is a bottom-up proactive behavior where older workers reshape tasks, relational boundaries, and cognitions to 积极应对 aging-related changes and improve future person-environment fit or reduce anticipated misfit (Wrzesniewski & Dutton, 2001). While job crafting is a typical proactive behavior in organizational behavior, scholars like Kooij integrated lifespan developmental psychology theories with job crafting concepts, making older workers' job crafting both proactive and adaptive. This reflects a self-regulation process where older workers must align actions with current physical, ability, cognitive, and motivational conditions while actively approaching or disengaging from goals (Kooij et al., 2020). This distinguishes older workers' job crafting from general job crafting by emphasizing active adaptation to age-related personal and environmental changes while proactively pursuing future development.

First, SOC theory-based job crafting. Kooij et al. (2015) proposed that under resource loss constraints, older workers should shape job boundaries differently than younger workers, identifying three forms: developmental crafting (focusing on growth), utilization crafting (maximizing existing skills), and adaptive crafting (managing losses). These three forms significantly enhance work motivation, ability, and self-development (Kooij et al., 2022).

Second, MTL theory-integrated job crafting. MTL theory proposes that individuals achieve functional balance through primary and secondary control strategies (Heckhausen et al., 2010). Wong and Tetrick (2017) extended MTL to job crafting, suggesting task and relational crafting correspond to primary control (changing environment to fit needs), while cognitive crafting corresponds to secondary control (changing self-perceptions to improve work experience). In aging contexts, task and relational crafting help allocate limited resources to important duties and relationships for person-job fit, while cognitive crafting enables disengaging from unattainable goals to enhance consistency between work behavior and self-perception when tasks and relationships cannot be changed.

Third, strengths- and interest-based job crafting. Kooij et al. (2015) emphasized the positive role of personal strengths in successful aging. Since abilities and interests change over time, strengths and interest crafting help older workers fully utilize resources by adjusting task boundaries according to personal strengths and interests, significantly improving person-job fit (Kooij et al., 2017; Kuijpers et al., 2020).

Proactive Career Development Strategies Older workers face more limited career planning and training opportunities due to age-related resource losses. Standardized, professional management becomes less effective, requiring enhanced proactivity and development strategies for career advancement and value realization. Cheung et al. (2019) confirmed that developmental proactive

behaviors positively affect work efficiency, challenging goal setting, and self-perceived ability, securing more career development opportunities. Specific personal career development strategies—including relationship development, continuous learning, skill expansion, and career management—also promote perceived success (Robson & Hansson, 2007).

Personal Characteristics

Personal characteristics influence successful aging at work primarily through age, cognition, motivation, and emotion.

Age Factors Age affects successful aging at work through chronological age and other conceptualizations. Chronological age, the most common measure, reflects declines in physiological, psychological, social, and organizational functions in late career (Kooij & van de Voorde, 2015). Research shows chronological age negatively correlates with developmental, promotion, security, and social motives (Thrasher et al., 2018) and negatively affects sustainable employability (de Lange et al., 2020; Le Blanc et al., 2017). However, as age increases, accumulated experience and deeper self-understanding create heterogeneity among older workers (Zacher, 2015), making chronological age insufficient to fully capture age's effects. Scholars have expanded the “age” concept to include organizational age, functional age, lifespan age, and subjective (or psychological) age, reflecting health, career stage, and family status. These richer, more individualized conceptualizations show more complex relationships with positive work outcomes than chronological age. For instance, organizational age (tenure) negatively correlates with continued work ability, subjective age negatively correlates with self-esteem, while functional age (performance) and lifespan age (life stage/family status) positively affect work ability and motivation (Le Blanc et al., 2017; Marcus et al., 2019).

Cognitive Factors These mainly manifest as cognitive decline and shifts in future time perspective. Cognitive decline reduces attention, task focus, organizational and planning abilities, and insufficient cognitive resources hinder successful aging (Cheung et al., 2019). Future time perspective shifts involve perceiving future time as increasingly limited rather than open with age (Carstensen et al., 2003). According to SST theory (Carstensen et al., 2003), limited future time perspective leads to focusing on short-term emotional goals, negatively correlating with developmental, promotion, security, and social work motives (Thrasher et al., 2018). Open future time perspective, perceiving more developmental time and opportunities, fosters positive, growth-oriented attitudes, positively affecting adaptability, health, relationships, career growth, safety, and sustained focus (Cheung et al., 2019). Given its malleability, research emphasizes open future time perspective's positive role. Notably, as future time perspective also reflects subjective time perception, some scholars include it within subjective age (Akkermans et al., 2016).

Motivational and Emotional Factors Motivation and identity affect emotional experiences and behavioral choices, promoting or hindering successful aging. Promotion-focused motivation demonstrates proactivity in enhancing person-job fit, positively predicting motivation-related successful aging (Beier et al., 2018). Cognitive and emotional identity helps older workers leverage strengths and accept measures to adapt to age-related changes (Cheung & Wu, 2014). Effective emotion regulation is crucial for maintaining person-environment fit throughout life. Emotional events—responses to work-related people, objects, or experiences—consume limited psychological resources when highly arousing, impeding adaptive emotion regulation (Toomey & Rudolph, 2018). SST theory is often combined with emotion regulation theory because it emphasizes that aging prioritizes goals related to positive emotional experiences and close social partnerships.

An Integrated Model of Antecedent Mechanisms

Based on the four factor categories, we propose a comprehensive model of antecedent mechanisms (see [Figure 1: see original paper]). Drawing on Kooij et al. (2015, 2020) and Beier et al. (2022), we operationalize successful aging at work as: (1) ability to continue working, measured by work ability and performance; (2) motivation to continue working, including work engagement and opportunity focus; and (3) health and well-being, including physical health and job satisfaction.

Mediating Mechanisms

Organizational/work environment factors influence successful aging through adaptive and proactive strategies. On one hand, changing work tasks and requirements narrow skill ranges, requiring adaptive actions to mitigate stress and maintain performance, such as developing relationships, expanding skills, and career management (Robson & Hansson, 2007). On the other hand, organizations can support older workers in actively managing current resources and achieving career success by providing favorable resources and conditions. For example, job control enables SOC strategy use to enhance work ability (Müller et al., 2012), while job crafting interventions stimulate strengths and interest crafting to improve person-job fit (Kooij et al., 2017). Notably, both adaptive and proactive strategies represent behavioral changes that dynamically match work and personal needs while adapting to aging changes (Kooij, 2015), making them mutually influential and jointly promoting successful aging.

Personal characteristics influence successful aging through adaptive and proactive strategies. As physical conditions, cognition, and socioemotional needs change, older workers must implement adaptive or proactive behaviors to integrate resources, cope with challenges, and achieve career development, such as reducing tasks, seeking help, and self-pacing to maintain performance despite physical decline (Sanders & McCready, 2009).

Moderating Mechanisms

Organizational/work environment and personal characteristics not only directly or indirectly affect successful aging but also moderate the process of using adaptive and proactive strategies. Three moderation patterns exist:

First, organizational/work environment and personal characteristics interact to influence successful aging. For example, age and future time perspective moderate the relationship between job resources and work ability (de Lange et al., 2020), while organizational climate for successful aging buffers the negative relationship between employee age and opportunity focus (Zacher & Yang, 2016).

Second, organizational/work environment and personal characteristics interactively affect strategy adoption. Employee age moderates the relationship between job design interventions and strengths crafting, with older workers better able to use job design to enhance person-job fit (Kooij et al., 2017).

Third, organizational/work environment and personal characteristics moderate the effect of proactive and adaptive strategies on successful aging. Research shows job complexity moderates the positive relationship between SOC strategy use and opportunity focus (Zacher & Frese, 2011), and age moderates the SOC strategy-work ability relationship, with stronger effects at older ages (Müller et al., 2012). Notably, three-way interactions may also affect successful aging: Weigl et al. (2013) found age, job control, and SOC strategy use interactively affect work ability, with the weakest negative age-work ability relationship among those with high job control and SOC use.

Future Research Directions

We propose future research directions in three areas: emphasizing “structural” factors and interdisciplinary theory integration, further exploring antecedent mechanisms, and improving research methods and designs.

Emphasizing “Structural” Factors and Interdisciplinary Theory Integration

Successful aging at work originated in gerontology and geriatrics, with organizational behavior research largely based on lifespan developmental psychology. However, lifespan theories tend to focus on internal developmental processes while neglecting environmental influences (Olson & Shultz, 2019). Individual lifespan development depends on sociocultural conditions, groups, and organizations—“structural” factors—representing a cross-disciplinary, multilevel phenomenon (Rudolph & Zacher, 2022). Scholars from occupational health psychology, work and organizational psychology, and career management have studied extended working lives (Kooij, 2015; Pak et al., 2021; Zacher, 2015), increasingly combining lifespan and organizational theories. Yet current research emphasizes individual agency over structural factors (Rudolph & Zacher, 2022). Future research should emphasize organizational and work context complexity, examining

“structural” factors that interact with individual agency, including social groups (e.g., family), occupational roles (e.g., blue-collar workers), and institutional memberships (e.g., organizations) (Tomlinson et al., 2018). Strengthening interdisciplinary dialogue and integrating theoretical perspectives will enhance joint explanatory power.

Regarding personal coping strategies, current research tends to examine holistic effects of adaptive or proactive strategies (e.g., SOC, job crafting). Since strategies may have synergistic effects (Kooij, 2015), future research should systematically examine and compare mechanisms of different strategy dimensions, whether strategy combinations outperform single strategies, and how these combinations change with age. Additionally, most studies measure strategies through self-reports, lacking independent observation or intervention research on actual workplace behaviors, making it difficult to capture implementation processes, learning mechanisms, obstacles, and supporting factors, or identify which strategies are trainable. Finally, while adaptive and proactive strategies have different goal orientations, they influence and integrate with each other. Kooij et al. (2020) attempted integrating them into a self-regulation framework, proposing both address person-job misfit through goal engagement and disengagement: proactive strategies are adopted when anticipating misfit changes, otherwise adaptive strategies are used; under both strategies, goal engagement occurs when perceived control over misfit changes is high, otherwise goal disengagement occurs. This framework of predictability and controllability provides a foundation for further understanding, comparing, and integrating these strategies.

Regarding personal factors, research has extensively examined age, particularly conceptualizations beyond chronological age, to explain outcome variations within age groups. However, two issues require attention: First, subjective age perceptions change with age and correlate with important outcomes like work engagement and stress (Rudolph et al., 2019). Future research should validate subjective age measures and their incremental validity. Second, age concepts reflecting health and cognition should be examined as explanatory mechanisms rather than mere chronological age substitutes (Rudolph & Zacher, 2022). Future research should investigate their moderating roles, such as how experiential age moderates chronological age’s effects on opportunity recognition and entrepreneurship (Gielnik et al., 2018). Additionally, regarding time-related individual variables beyond age, research has examined cognition, motivation, and emotion regulation variables (e.g., future time perspective) based on lifespan theory. These reflect theoretically-grounded cognitive and motivational shifts during development, but current research is fragmented, making it difficult to compare effects and relationships. Some studies provide useful models: Zacher and Rudolph (2019) found subjective age predicts work skills depending on occupational future time perspective. Future research should further examine relationships among these time-related variables and their joint effects on strategy selection, processes, and outcomes in addressing work aging challenges.

Improvements in Sampling and Methods

Most foreign literature samples workers over 55, relatively neglecting “middle-aged” individuals in mid-career (approximately 35-55). In some industries (e.g., China’s internet sector), 35 marks the threshold for older workers. Research shows mid-career individuals experience lower career well-being and satisfaction due to increased work-family demands and reduced resources (Katz et al., 2019; Zacher et al., 2014). Rudolph and Zacher (2022) note that some successful aging perspectives may only emerge in mid-career, particularly fertility/concern for guiding the next generation and retirement/continued work motivation. Future research should focus more on mid-career employees with rigorous empirical studies examining characteristics and successful aging outcomes during this period.

Regarding methodological choices, first, existing research predominantly uses quantitative methods, neglecting qualitative approaches. Ng and Law (2014) noted that qualitative methods and content analysis excel at inductively exploring themes and patterns. Given multiple operational definitions and unsettled measurement scales, future research should emphasize qualitative methods, such as case studies tracking older workers’ career trajectories to comprehensively understand their successful aging processes.

Second, regarding quantitative designs, successful aging at work is a dynamic process (Zacher et al., 2018), involving two key research questions: (1) how age/time-related psychological, physiological, and behavioral changes affect outcomes, requiring long-term tracking to capture within-person changes; and (2) how variable relationships differ across age groups or developmental stages (Wang & Fang, 2022). Current cross-sectional designs cannot capture variable changes or reflect how daily psychology and behavior evolve with age. Future research should emphasize longitudinal panel studies, experience sampling, and mixed longitudinal designs. While longitudinal designs have advantages, experimental research remains ideal for establishing causality, and intervention studies are more reliable for determining behavioral strategy effects. However, experimental and intervention studies are scarce. To increase value, future research should actively apply experiments and effective interventions to address age-work issues (Hommelhoff & Scheibe, 2022). For example, systematically comparing intervention characteristics (e.g., timing, session intervals, participant composition, techniques) could identify optimal methods for cultivating SOC behaviors (Müller et al., 2018).

Finally, regarding measurement, current research relies heavily on subjective assessments of organizational factors and individual strategies, which cannot objectively answer questions about actual age-related workplace changes and employee perceptions. Future research should supplement subjective measures with independent observations, peer ratings, expert job analysis ratings, or archival data. For example, using observations, email data, and organizational records can measure how older workers respond to events or track behavioral reactions

through narrative methods.

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