



(REVIEW ARTICLE)



ECONOMIC SECURITY IN AN AGING AMERICA: A REVIEW OF LABOR FORCE PARTICIPATION DYNAMICS, BARRIERS, AND INCENTIVES AMONG ADULTS AGED 55 AND OLDER

Kingsley Chima Mbam *

Department of Gerontology, University of Massachusetts Boston, USA.

* Corresponding Author

Magna Scientia Advanced Research and Review, 2026, 18(01), 097–109

Publication history: Received on 03 August 2026; revised on 13 September 2026; accepted on 15 September 2026

Article DOI: <https://doi.org/10.30574/msarr.2026.18.1.0185>

Copyright © 2026 Author(s) retain the copyright of this article. This article is published under the terms of the Creative Commons Attribution License 4.0

ABSTRACT

The U.S. labor market is grappling with population aging, which is increasingly making it more critical for adults over the age of 55 to maintain their employment to ensure individual financial security as well as national economic growth. The purpose of this review is to summarize the literature on the Labor Force Participation (LFP) trends, barriers, and incentives that influence older workers' employment options. The historical LFP of older adults fell throughout most of the twentieth century, began a steady increase in the 1990s, was interrupted by early retirements during COVID-19, and is now stagnant. But these patterns of aggregates obscure significant differences among males and females, different races, and varying levels of education. Structural obstacles, such as age-based hiring discrimination, poor health, lack of digital skills, caregiving duties, and benefit lock-in related to health insurance and pensions, limit older adults' ability to continue work. Delayed Social Security benefits, phased retirement, and psychosocial rewards of meaningful work are examples of countervailing incentives that promote longer engagement, but are not equally available. The policy landscape remains heavily reliant on financial incentives and insufficiently attentive to structural barriers, which leaves the most vulnerable older workers behind. These findings align with life-course perspectives showing that disadvantages compound over time. Collaborative policies that combine health promotion, anti-discrimination enforcement, re-training and work flexibility will be necessary to ensure equitable and long-term employment in an aging workforce.

Keywords: Labor force participation; Older workers; Age discrimination; Economic security; Retirement policy; Aging population

1 INTRODUCTION

Economic growth in the United States (U.S.) relies increasingly on the participation of older people in the labor force (Maestas *et al.*, 2023). As population aging slows labor force growth and reshapes the age structure of the workforce, older adults aged 55 and above are becoming an increasingly important source of labor supply, productivity, and economic resilience (Sullivan, 2017). However, the ability of older adults to continue working is itself closely tied to their financial security, and the relationship runs in both directions: financial need pushes people to keep working, while continued earnings shape the resources they carry into later life (Cahill *et al.*, 2017; Quinn & Cahill, 2018). This connection has become more pressing in the face of a major demographic turnaround in the U.S. The population of

Americans aged 65 and older rose to 61.2 million in 2024, a 3.1% increase over the prior year, and is projected to climb to roughly 82 million by 2050 (U.S. Census Bureau, 2025). Population aging can negatively affect aggregate labor force participation, even when many older adults continue working, because participation rates drop sharply in older age groups (Maestas *et al.*, 2016). As a result, keeping older people in the labor force has become an economic imperative and a policy issue. This change is not just a product of the aging of a single cohort; it reflects long-term demographic shifts in the U.S. population that will affect the nation's workforce for the foreseeable future (Toossi, 2016). The macroeconomic stakes are considerable. Because labor force participation declines sharply with age, the growing share of the population in older age brackets exerts downward pressure on the aggregate participation rate even when participation *within* the older group is rising. Sustaining the labor supply of adults aged 55 and older is therefore one of the few available levers for offsetting the drag that population aging places on economic growth (Maestas *et al.*, 2023).

In an increasingly vulnerable older citizenry, financial stability is taking a beating (Lusardi *et al.*, 2019). The traditional three-legged stool of retirement income (Social Security, employer pensions and personal savings) has been gradually dismantled over the last three decades (Ervin *et al.*, 2009). Defined-benefit pension has been largely displaced by defined-contribution plans that shift risk onto workers; stagnant real wages have constrained private saving (Machin, 2016); and the long-term solvency of the Social Security trust fund remains uncertain (Kashin *et al.*, 2015). For millions of adults approaching or past traditional retirement age, continued labor force participation is therefore not a lifestyle preference but an economic imperative (Sewdas *et al.*, 2017).

However, the choice of labor force participation is not a purely personal one. It is shaped by a complex and interwoven set of structural barriers such as institutionalized age discrimination (Neumark *et al.*, 2017), declining health (Kachan *et al.*, 2015), lack of digital skills (Arbogast *et al.*, 2018), caring giving responsibilities, and benefits lock-in that systematically hinder the LFP of older people, especially those at the lowest end of the financial spectrum. Meanwhile, a changing incentive landscape, in which Social Security reform policies, employer-level flexibility, and the demonstrated psychosocial benefits of continued work create opportunities for greater and longer engagement in the labor force remains unevenly distributed (İmrohoroglu & Kitao, 2010; Maimaris *et al.*, 2010).

Despite decades of policy attention, many older Americans still leave the workforce earlier than they can afford to, and others are unable to keep working even when they need the income. U.S. policy has rested largely on a single premise: that older adults will remain employed if the financial reward is large enough, the logic underlying Social Security claiming rules and pension design. That premise assumes the worker is in a position to respond. In practice, health limitations, age discrimination in hiring, caregiving obligations, and skills obsolescence determine whether working longer is available at all. Incentives and barriers are therefore not two independent influences to be weighed against each other; barriers set the conditions under which incentives can operate. Yet the two literatures have developed largely in parallel, and the resulting policy framework has inherited the same separation. The consequence is distributional: incentives to work longer accrue most reliably to workers who face the fewest obstacles, so an incentive-led approach risks widening the very insecurity it is meant to address. This narrative review brings both strands together to clarify how labor force participation dynamics, barriers, and incentives jointly determine who among U.S. adults aged 55 and older can extend their working life, and with what consequences for economic security.

2 LABOR FORCE PARTICIPATION TRENDS AMONG ADULTS AGED 55 AND OLDER

To know what factors have influenced older workers' (aged 55 and older) participation in the labor force, it is necessary to first determine what has occurred in terms of their labor force status. This section chronicles that history in two parts. The first explores the aggregate trend: a long twentieth-century fall in the participation of older workers followed by a turnaround starting around the mid-1980s and the unprecedented upheaval caused by the COVID-19 pandemic. The second breaks down that aggregate and reveals that the headline recovery conceals quite significant and enduring differences between boys and girls, between differences by gender, race/ethnicity, and socio-economic status. This difference is important for the remainder of this review: Policies based on the overall trend might not be a fit for the groups who did not experience growth in their participation.

2.1 Historical Trajectory and Current Rates

The overall trend of LFP among older people was downward for much of the second half of the twentieth century. Since that time, successive cohorts of workers, especially males, have been leaving the labor force at increasingly younger ages, as a result of the timing of Social Security benefits, the growth of the employer-provided defined-benefit pension plan, and an exceptionally solid postwar economic expansion that would allow an increasingly young cohort of workers to afford early retirement and make it a socially desirable choice (Friedberg, 2007). Numerous subsequent generations of Americans experienced high levels of lifetime attachment to the labor force, yet they began reducing their participation or retiring at increasingly younger ages. This trend was followed by almost a decade of stable participation rates, before transitioning into several decades of generally steady annual growth rates starting in the mid-1990s. The greatest absolute percentage-point change was among those aged 65 to 69 (Leonesio *et al.*, 2012).

From 2000 to 2020, employment more than doubled among workers aged 60 and older for both men and women, with the share of employed older men and women increasing from 7.4% to 14.8% and from 6.3% to 14.0%, respectively. Drivers behind this steady rise include labor market tightness and employers' recognition of the value of their older employees, as well as the gradual shift of the Social Security Full Retirement Age (FRA), falling retirement income security and better population health (Aguila *et al.*, 2022).

This multi-decade trend was thrown off balance by the COVID-19 pandemic. The pandemic also pushed into retirement many older workers, who are part of the “Great Retirement” of 2020-2021 (Faria-e-Castro, 2021). The percentage of older workers in the labor force has leveled off in recent years, following a long period of growth for all older workers. Meanwhile, the share of younger workers in the labor force has risen in the aftermath of the COVID-19 pandemic, meaning older workers are no longer an exception to declining participation trends (Cahill *et al.*, 2025). This stabilization is a stage of considerable significance that will require careful attention from researchers and policymakers.

2.2 Disparities by Gender, Race and Socioeconomic Status

The aggregate labor force participation (LFP) trend for adults aged 55 and older conceals significant and persistent disparities by gender, race/ethnicity, and socioeconomic status (Copeland, 2023). Gender differences in older worker LFP have been shaped by long-run historical trends in female labor force attachment, with different generational cohorts of women exhibiting markedly different participation trajectories. Between 2000 and 2020, the decline in labor force participation at younger ages was larger among men than among women; at older ages, by contrast, the increase in participation was more pronounced among women, particularly those in their sixties. This pattern reflects the lower overall participation of women earlier in life, especially during the child-rearing years, which carries forward into older ages (Aguila *et al.*, 2022). However, this gender convergence in older worker LFP could be heading towards an end. There is a shift in the trend for older women's participation in the labor force around 2010, and a smaller shift around the same time for older men; year-on-year changes in the participation rates of older women are now more or less aligned with those of older men, a consequence of the trends of the post-World War II era (Cahill *et al.*, 2025). Policymakers interested in promoting continued work later in life for older workers should, accordingly, reconsider gender issues in new ways.

Racial and ethnic differences in older worker LFP are also important and less studied in the empirical literature. There are meaningfully different timing decisions for retirement across racial groups due to occupational segregation, the life course accumulation of wealth, and differential access to health insurance and employer-sponsored retirement plans (Johnson & Gosselin, 2018). Black and Hispanic older workers are overrepresented in physically strenuous and low-paying jobs with little pension coverage, putting them at higher risk of both working longer into older age and of not being able to work long-term because of physical challenges (Bound *et al.*, 2015). These are structural inequities which are not captured in the existing aggregate LFP statistics and are not thoroughly examined in the existing literature.

Education is a particularly strong intervening factor for LFP choices at older ages. Older workers with higher education are more likely to participate in the labor force than those without higher education, in part because of their better wages, financial security, health, cognitively stimulating work experiences, and work in areas less subject to physical strain and technological obsolescence (Munnell *et al.*, 2014). The necessity to work phenomenon is a distinct and politically important population whose labor market experiences are quite different from those of high-skill, high-income workers, with their needs being poorly addressed by the policy architecture in historical times (Ghilarducci *et al.*, 2016).

3 BARRIERS TO LABOR FORCE PARTICIPATION

The participation gains documented above have not been evenly available, and the reasons lie primarily in constraints that operate independently of workers' willingness to remain employed. This section looks at five such barriers: age discrimination in hiring and retention, health restrictions and physically demanding jobs, skills obsolescence and uneven access to the digital world, caregiving duties, and institutional characteristics of benefit and program design. These barriers are treated separately here for analytical purposes, but not independently, because they occur in the same populations and their tendency to multiply is central to the distributional argument developed later in this review. These barriers, their underlying mechanisms, and the populations they most affect are summarized in Table 1.

3.1 Age Discrimination and Structural Criticism

Age discrimination is one of the most widespread and empirically proven obstacles to older worker LFP and one of the most challenging to quantify and prosecute (Brownell & Kelly, 2012). Enacted in 1967, the Age Discrimination in Employment Act (ADEA) prohibits age-based discrimination against workers aged 40 and older across all terms and conditions of employment, including hiring, firing, pay, job assignment, promotion, layoff, training, and benefits (Lipnic,

2017). Yet after nearly six decades in force, its effectiveness remains contested, particularly at the hiring stage, where the protections it affords appear considerably weaker than those governing retention.

The most methodologically rigorous evidence of age discrimination in hiring comes from audit or correspondence studies, in which matched pairs of applications, differing only in implied age, are submitted to real job postings and outcomes compared (Burn *et al.*, 2019). These studies have consistently found lower callback rates for older applicants than for younger ones with equivalent qualifications. This experimental evidence is not isolated; a paired-applicant phone study found that the older applicant received less favorable responses in a substantial proportion of cases (Rothenberg & Gardner, 2011).

The structural constraints of the ADEA have already been well reported. There is ample evidence of age discrimination, especially in hiring, that can impede policymakers' efforts to encourage or induce older people to work longer (Neumark *et al.*, 2019). Critically, compared to other ADEA-related charges, terminations were much more likely to result in a dispute than were hiring disputes; this may reflect the fact that there are fewer cases of hiring discrimination or that workers are less likely to pursue hiring discrimination cases because they are more difficult to prove (Neumark, 2022). Empirical evidence and the process of enforcing the ADEA indicate that the ADEA currently is more likely to protect against age discrimination in retention than in hiring (Neumark, 2022). This is a major imbalance: older workers who lose their jobs experience discrimination both when they re-enter the workforce and because the law is not suited to that.

Structural ageism is not just about overt discrimination and the role it plays in employers' perceptions of the competence and adaptability of older workers. Ageism is reflected in attitudes, unspoken and overt bias, stereotypic beliefs, and emotional prejudices (all psychological precursors to discrimination). In a meta-analysis of 418 nonlaboratory empirical studies of six widely held stereotypes of older workers, the only one that was supported was the stereotype that older workers are less motivated to engage in training or development (Ng & Feldman, 2012). Important finding: most common negative stereotypes about older worker competency are empirically unjustifiable, and these remain to influence employment decisions in ways that are not fully addressed by the law. The growth of algorithmic and AI-driven recruitment adds a further, largely unregulated dimension. Screening tools trained on historical hiring data can encode age proxies, that is, graduation dates, career length, technology keywords, and reproduce or amplify existing discriminatory patterns at scale, a risk the Equal Employment Opportunity Commission (EEOC) has begun to flag but not yet meaningfully constrained (Neumark, 2022; Equal Employment Opportunity Commission, 2022).

3.2 Health, Disability and Physical Demand

Among older adults in their late fifties and early sixties, health status is one of the strongest influences on labor force exits, a time when retirement is most common (Coile, 2016). The connection between labor force participation and health is bi-directional and complex: poor health leads to exiting the labor market and exiting the labor market can also have a negative impact on health, due to the loss of social engagement, routine, and occupational identity (Calvo *et al.*, 2013). A methodological challenge in this literature is the difficulty of disentangling these pathways, especially with cross-sectional studies that are ill-suited for this task.

The role of health as a LFP barrier has become ever more policy-relevant in the backdrop of the continuous rise of the Social Security Full Retirement Age (FRA). Gradual increases to the Social Security full retirement age from 65 to 67 were justified by improvements in the health of the older population and a general shift toward less physically demanding work. These two trends, however, have been studied largely in isolation, leaving open the question of whether the workers now expected to remain employed to receive full benefits actually possess the health and job characteristics that make doing so feasible (Andrasfay, 2021). Workers in different occupational groups did not experience this job-health mismatch equally there was a systematic structural disadvantage for workers in blue-collar, physically demanding occupations compared with the policy assumption behind FRA increases for service occupations (Andrasfay, 2021).

This concern is echoed in the evidence about what people are retiring from. Approximately 40 percent of workers do not work until they are formally retired because of poor health, the need to care for others, or a lack of employment or other factors. The message is clear: there is a significant minority of older workers who aren't finding that they can simply work longer in order to retire better, as many retirement policy reforms are based on (Kingson & Morrissey, 2012). Access to Social Security Disability Insurance (SSDI) provides an additional wrinkle. For many workers who leave the labor force prior to retirement because of poor health, SSDI is a bridge, serving as a sign and symptom of the weakness of the existing policy response to health-related labor force exit (Autor & Duggan, 2006; Burkhauser *et al.*, 2016).

Despite the growing burden of depression and other mental health conditions among older adults, mental health remains relatively understudied as an independent determinant of labor force exit compared with physical health and disability (Elshaikh *et al.*, 2023). Depression and anxiety, which are major problems of aging, can diminish work ability, negatively impact job performance, and diminish the perceived utility of work beyond retirement age in ways that are different from physical health impairments (Lu *et al.*, 2023). The mental health barrier as a separate older worker LFP barrier is an important gap in literature, as is the evidence on the impact of discrimination on it.

3.3 Skills Obsolescence and the Digital Divide

Technological change poses a dual challenge to older workers' labor force participation (Adeniyi, 2025). It can render existing skills obsolete while simultaneously increasing the demand for digital competencies that many older workers have had fewer opportunities to acquire. Human capital theory predicts that workers invest in skill acquisition when expected benefits exceed costs. For older workers, however, shorter remaining career horizons reduce the expected returns to retraining (Fang *et al.*, 2021), while employers may be less willing to invest in employees perceived to be approaching retirement (Caliendo *et al.*, 2023).

Economic skills obsolescence refers to the declining relevance of workers' existing skills as technological and organizational changes alter workplace demands (Messioui & van Vuuren, 2025). As job requirements evolve, workers may no longer possess the competencies needed to maintain adequate performance and must update their skills to remain employable. In practice, this process frequently manifests as digital skill deficits and difficulties adapting to technology-driven changes in work tasks (Yamashita *et al.*, 2023). Older workers participate in training considerably less often than younger workers and may face additional barriers to acquiring digital competencies because many began their careers before widespread computerization (Hudomiet & Willis, 2021; Lössbroek & Radl, 2018). The automation dimension of this challenge is particularly important for workers employed in routine-task occupations. Rapid technological change disproportionately affects occupations involving routine activities, such as sales and food preparation, which face higher risks of automation than occupations requiring analytical, creative, or specialized skills. Older workers may be especially vulnerable because skill obsolescence and lower digital proficiency can hinder adaptation to changing workplace requirements (Yamashita *et al.*, 2023). The consequences of these changes are not evenly distributed. The growing demand for cognitive, technical, and digital skills has disproportionately affected lower-skilled workers (Almeida *et al.*, 2017). Occupations such as clerical work, manufacturing, and basic customer service are particularly susceptible to automation (Manyika *et al.*, 2017). In addition, lower-skilled workers are more likely to hold physically demanding jobs, experience poorer health, and encounter greater barriers to retraining and occupational mobility (Bechichi *et al.*, 2019). By contrast, highly skilled older workers often occupy positions that rely on problem-solving, creativity, and specialized expertise, characteristics that are less susceptible to automation (Lassébie & Quintini, 2022).

3.4 Caregiving Burden and Family Structure

Caregiving is an important but under-researched and underappreciated obstacle to older worker Labor Force Participation (LFP). The middle-aged group of adults aged 55-64 has a special demographic role in the care environment; that is, they are taking care of their aging parents and grandparents and are also in the process of aging themselves. The work and caregiving dynamic is a growing concern as the U.S. population ages. By 2030, nearly a quarter of Americans will be 65 years and older, and more than 61% of caregivers who provide unpaid care to a loved one are employed (Matz, 2025).

The impacts of care work on the labor market are not gender neutral. The burden of caregiving falls largely on women, and this burden affects them throughout their lives in ways that exacerbate their differences in earnings, pension accumulation, and career continuity (Lilly *et al.*, 2010). The research always demonstrates that labor force exits, tied to caregiving responsibilities, decrease social security benefits, lower retirement savings, and increase long-term economic insecurity, especially for women with less than a history of high-wage work (Butrica & Karamcheva, 2018).

The absence of job flexibility is an important contributing factor. Caregivers who seek leave options such as reduced hours, schedule flexibility, or working remotely often find that their employers cannot or will not provide them with these options, especially in service and blue-collar jobs (Swanberg *et al.*, 2014). Thus, the relationship between caregiving responsibilities and rigid work arrangements is a policy-relevant intersection, and relatively specific policy changes (such as flexible work schedules, remote work opportunities, caregiver leave) may yield measurable benefits for LFP.

3.5 Institutional and Benefit Structural-Barriers

A set of institutional and benefits-structure factors creates an implicit labor force exit that operate independently of individual health and caregiving demands. The health insurance lock-in effect may be particularly important among workers approaching Medicare eligibility, as access to employer-sponsored health insurance can influence retirement

decisions and encourage continued employment until alternative coverage becomes available. At the same time, this coverage gap provides a strong financial disincentive to voluntarily exit the workforce and subjects the unemployed or those who choose to work part-time to a financial penalty, as the lack of employer-sponsored coverage could make part-time work financially impossible (French & Jones, 2011).

Also, older workers have limited access to formal career counseling, retraining, and job placement services in the workforce development system. The Senior Community Service Employment Program (SCSEP) and the older worker provisions of the Workforce Innovation and Opportunity Act (WIOA) were created just for this reason, but the level of funding, geographic access, and impact on need relative to that of other programs is limited (Abraham & Houseman, 2020).

Table 1: Structural Barriers to Labor Force Participation among U.S. Adults Aged 55 and Older

Authors	Barrier	Primary Mechanism	Evidence base	Most Affected
Neumark et al. (2019); Burn et al. (2019); Ng and Feldman (2012)	Age discrimination	Reduced callback rates at hiring; ADEA protections weaker at hiring than at termination; stereotypes largely unsupported empirically	Strong; based on audit and correspondence studies and meta-analytic evidence	Job seekers and labor market re-entrants rather than incumbent workers; older women
Coile (2016); Andrasfay (2021)	Health status and physical job demand	Health limitations precipitate labor force exits before the full retirement age; the health and employment relationship is bidirectional; increases in the full retirement age presuppose health improvements that have not been uniformly distributed	Moderate to strong, although reliance on cross-sectional designs constrains causal inference	Workers in physically demanding occupations; adults with lower educational attainment
Adeniyi (2025); Arbogast et al. (2018)	Skills obsolescence and the digital divide	Technological change devalues existing skills while increasing demand for digital competencies; a shortened time horizon to retirement reduces the expected returns to retraining investment	Moderate; theoretically well specified but with a comparatively limited empirical base	Workers in routine task occupations; those without access to employer provided training
Lilly et al. (2010); Swanberg et al. (2014)	Caregiving responsibilities	Concurrent care obligations to aging parents and grandchildren; labor market effects are not gender neutral; inflexible scheduling prevents the combination of paid work and care provision	Moderate; the gender gradient is well established, whereas evidence on care intensity remains limited	Women; workers in service and blue collar occupations lacking schedule flexibility
French & Jones (2011); Abraham & Houseman (2020)	Institutional and benefit structure design	Health insurance lock in among workers approaching Medicare eligibility; loss of employer sponsored coverage penalizes reduced hours work; workforce development programs are underfunded and unevenly implemented	Moderate; lock in effects are well documented, but program level effects remain under evaluated	Workers aged 55 to 64 who are not yet Medicare eligible; those seeking reduced hours arrangement

4 FINANCIAL AND NON-FINANCIAL INCENTIVES FOR CONTINUED EMPLOYMENT

U.S. policy has concentrated overwhelmingly on financial levers, and this section begins there, with the shift from defined-benefit to defined-contribution pensions and its consequences for retirement-savings adequacy. It then turns to two areas that receive considerably less policy attention: employer-level practices such as flexible scheduling and phased retirement, and the non-financial motivations, including purpose, social connection, and identity, that sustain

employment independently of income. Setting these three categories alongside one another prepares the central question of this review: whether incentives can be acted upon by the workers who most need them.

4.1 The Erosion of Defined-Benefit Pensions and Savings Adequacy

Defined-contribution plans have replaced defined-benefit plans to the near exclusion over the last four decades, which has dramatically reshaped the retirement income environment, including the financial considerations that drive decisions about leaving the workforce at older ages. Defined-benefit systems typically reward workers for staying until the plan's early-retirement age and then penalize them for staying beyond it: once age and years-of-service thresholds are met, the additional pension wealth earned from another year of work falls sharply, so continued employment amounts to an implicit pay cut (Quinn & Cahill, 2016). Because defined-contribution wealth accrues with contributions and investment returns rather than service thresholds, the move away from defined-benefit plans has largely removed this structural push toward early exit. In its place, however, a different and arguably more consequential problem has emerged: the inadequate accumulation of retirement savings.

The implications for distribution are very large. Lower-income workers, especially women and minority workers who have had irregular work experience, often find that they have a very small portion of defined-contribution assets to support a secure retirement, while high-income workers with steady employment and access to employer matching contributions have been able to build up these assets (Munnell et al., 2018; Ghilarducci *et al.*, 2016). The SECURE 2.0 Act of 2022 introduced several relevant improvements such as higher catch-up contribution limits, a later age for required minimum distributions, and expanded access to employer-sponsored plans for long-term part-time workers which together create a modest set of new incentives for continued workforce participation (Joint Committee on Taxation, 2022).

4.2 Employer-Level Incentives: Flexibility, Phased Retirement, and Knowledge Retention

Employer practices are an important, but rarely discussed factor in the incentive system for older workers. The flexibility of flexible scheduling, reduced hours, remote work, and formalized phased retirement options can make a real difference by lengthening productive working lives for those who might otherwise be out of the workforce altogether (Billett *et al.*, 2011).

There has been increasing interest in studying and implementing phased retirement as a move to a reduced working status, either in the same or another company, before full retirement from the labor market. Older workers are opting for 'phased retirement' moving from full-time to part-time working status and eventually retiring at a later age; research has examined whether such a transition is financially and psychologically advantageous to middle-aged and older workers. The results are informative: research shows that 66.8% of respondents continued to work full-time, 15.2% took immediate retirement, and 12.7% opted for phased retirement, which is financially and psychologically rewarding (Choi & Smith, 2019). The total household financial wealth of those taking phased retirement is significantly greater than that of those taking immediate retirement, and those taking phased retirement have fewer depressive symptoms (Choi & Smith, 2019). The results align with the larger body of evidence indicating that phased retirement is linked to improved health, financial security, and subjective well-being compared to full retirement. However, formal phased retirement programs are uncommon in the U.S. private sector; most phased retirement are informal or take the form of a bridge program with a different employer (Hutchens, 2010; Moen et al., 2017).

4.3 Non-Financial and Psychosocial Motivators

A literature of growing empirical depth establishes that there are a wide range of reasons for people to stay on the job beyond the economic need or policy push. The subjective value of the bundle of non-financial goods from work can be as high as or higher than the income from continued employment (Wang & Shi, 2014). Another aspect of LFP that is driven mainly by intrinsic rather than financial motivation is the notion of encore careers which is meaningful work that is carried out after the main career (Freedman, 2011). Consistent with this, findings from the Health and Retirement Study (HRS) data shows that at any age, older workers who report high satisfaction with their work, high sense of purpose and high social engagement at work are significantly less likely to fully retire than are those who report low satisfaction, low sense of purpose and low social engagement (Yemiscigil *et al.* 2021; Christodoulou, 2025). The results of these findings clearly have implications for employers' strategy: employers that foster meaningful work, autonomy, and social connection for older workers could reap productivity and retention gains that outweigh investment in age-inclusive workplace design.

The psychosocial dimension of work motivation is closely intertwined with health. Good health facilitates continued labor force participation, while meaningful and supportive employment can promote physical and psychological well-being, thereby extending productive working lives and creating a potentially reinforcing cycle between health and labor force engagement (Burdorf *et al.*, 2023). This virtuous cycle, however, does not exist for everyone: it is characterized by

workers who start out in good health, have less physically strenuous jobs and have more autonomy. These characteristics are systematically distributed in an unequal way across the older worker population.

5 POLICY LANDSCAPE: RESPONSES, GAPS, AND EVIDENCE OF EFFECTIVENESS

The U.S. policy response to population aging has expanded across several domains, but its instruments vary widely in demonstrated effectiveness, and the strongest evidence points to precisely the areas that have received the least policy attention. Existing measures can be grouped by how well the evidence supports them.

Anti-discrimination law shows clear asymmetry in effectiveness. The Age Discrimination in Employment Act (ADEA) has measurably reduced discrimination in terminations and layoffs, but field-experimental evidence indicates it does little to curb discrimination at the hiring stage, where the burden of proof is higher and violations are harder to detect (Neumark, 2022). Its protective effect is therefore concentrated on those already employed, offering little to older workers seeking to re-enter the labor market.

Workforce-development programs have a weaker evidence base, not because the model fails, but because implementation is too thin to test. Programs such as Senior Community Service Employment Program (SCSEP) and the older-worker provisions of Workforce Innovation and Opportunity Act (WIOA) are constrained by low participation, uneven local delivery, and chronic underfunding, which limits both their reach and the ability to evaluate their effects (Lichtenstein, 2020). The gap here is one of scale and evaluation rather than design.

Retirement-savings policy has advanced most concretely, but its benefits are distributionally narrow. SECURE 2.0 extends catch-up contributions and improves plan access for long-term part-time workers, yet by operating through employer-sponsored plans, it reaches primarily those already securely attached to the formal labor market, not the intermittently employed, lower-income workers whose retirement security is most precarious (U.S. Government Accountability Office, 2023).

The measures with the most promising evidence remain the least institutionalized. Flexible scheduling, phased retirement, age-inclusive training, and digital upskilling are each associated with longer working lives, but adoption is voluntary and uneven, concentrated in the higher-skill occupations whose workers already face the fewest barriers. This is the central gap in the U.S. response: the interventions best supported by evidence are precisely those left to employer discretion rather than public policy (Cahill et al., 2014). International experience reinforces the point — sustained gains in older-worker employment tend to come from coordinated strategies linking pension reform with lifelong learning, workplace flexibility, and active labor-market policy, rather than from raising statutory retirement ages alone (Burdorf et al., 2023).

6 DISCUSSION

Two conclusions emerge from the evidence reviewed above. This section draws those threads together. It first weighs barriers against incentives directly, arguing that the U.S. framework has over-invested in financial inducements relative to the structural conditions that determine whether such inducements can be acted upon, with consequences that fall unevenly across the older workforce. It then identifies where the evidence base remains thin and what future research would need to establish.

The evidence examined in this paper indicates that the existing policy framework for older adults' labor force participation (LFP) is more focused on financial incentives, including the financial incentives associated with Social Security, than on structural constraints that limit the ability of older economically vulnerable individuals to continue to work. The incentives to continue working are significant with delayed retirement benefits and the Social Security full retirement age, but they rely on a worker's health, capabilities and job opportunities to continue working. This interpretation aligns with recent evidence showing that the use of financial incentives without support for the labor market and workplace is not enough to ensure longer working lives (Lai et al., 2025). For many older adults, poor health, physically demanding work, caregiving duties, or persistent age-based exclusion make it effectively impossible to keep working long enough to claim these rewards, however generous the financial inducement (Bonnaud et al., 2011). The binding constraint, in other words, is often not the size of the incentive but the structural capacity to respond to it.

This imbalance implies a strong distributional impact. The need for continuing income from the job comes with the highest price for those who are most vulnerable to multiple reinforcing disadvantages, from which policies designed to promote later retirement may be most beneficial. These disadvantages compound along skill lines. Lower-skilled workers are more likely to hold physically demanding jobs, to have fewer retraining opportunities, and to face greater difficulty moving into less strenuous work as they age. Higher-skilled workers, by contrast, are generally better positioned to adapt to technological change and to remain in occupations that draw on cognitive, creative, and

specialized skills, work that is far more sustainable into later life (Larsen et al., 2019). The results are consistent with emerging studies that suggests that inequalities in health, education and employment opportunities begin to build over the life course and lead to increased inequality in employment outcomes in the later life cycle (Wahrendorf et al., 2020; Suggest et al., 2021). Policies focused on financial incentives, therefore, are likely to have an uneven impact unless financial and other policy measures are implemented to lower structural impediments to ongoing employment.

Our findings also highlight the considerable population within the 55-and-older age group. There are significant variations in health, financial resources, education, occupational status, caregiving responsibilities, and retirement plans among those aged 55 and above, which correspond to great differences in their ability to stay in the labor force. Policies that consider older people as a homogeneous group, therefore, risk favoring older people who have more resources, are in better health, and have more flexible work, with relatively less benefit for older people who are more likely to be in multiple structural disadvantages. There is also international evidence that extending the working life is best when supported by policies encouraging healthy ageing and lifelong learning, workplace flexibility and age-inclusive employment practices, in addition to pension reform (Burdorf et al., 2023).

Collectively, the various studies reviewed have shown that pension reforms and financial measures are not enough to extend working lives. To increase older adults' participation in the labor market, coordinated policy strategies must tackle issues of health and age discrimination, as well as skills and workplace flexibility and economic security. These coordinated approaches will likely enhance employment opportunities; not only by helping to increase overall participation in the labor force, but also by ensuring equitable job prospects for older workers of all backgrounds.

6.1 Gaps in Evidence and Future directions

Although there has been significant progress in the knowledge and understanding of the participation rates of older people in the labor market, there are still several important gaps in the evidence. Many of the existing studies fail to represent socially and economically vulnerable groups, such as low-income families, racial or ethnic minorities, immigrants and people who are working in precarious jobs, making results of these studies less generalizable and limiting evidence for developing equitable policies. Intersectional research is needed to understand how socio-economic status, disability, gender, and race interact to influence the labor force participation trajectory, instead of analyzing each one individually. Further, the fast-changing technology and changing employment structure provide emerging research priorities. It is important to be better informed about the effect of artificial intelligence, automation and digital transformation on employment, reskilling and re-entry of older workers. In order to provide policy guidance to ensure productive and equitable employment in an aging society, there is a need for longitudinal studies to inform policy on the relationship between technological change, healthier lives, and financial security.

7 CONCLUSION

Population aging is changing the U.S. labor market altogether and driving up the importance of participation of adults 55 years and older to the economy, for both security and growth. This review shows that, besides monetary reward, structural factors such as health, age discrimination, and caregiving and skills obsolescence are also important factors that affect continued employment in later life. Therefore, labor force participation policies that focus mainly on pension reforms and/or financial incentives will not lead to an equitable improvement in labor force participation unless these barriers are also tackled. There is a need for coordinated policies to support longer working lives, through health promotion and lifelong learning, workplace flexibility and age-inclusive employment, as well as retirement income. Ensuring the opportunities for older adults willing and able to work is crucial for securing their own retirement and enhancing the resilience of the workforce and long-term economic productivity as the population continues to age.

STATEMENTS ON COMPLIANCE WITH ETHICAL STANDARDS

Disclosure of conflict of interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

REFERENCES

- [1] Abraham, K. G., & Houseman, S. N. (2020). Policies to improve workforce services for older Americans. Upjohn Research (W.E. Upjohn Institute for Employment Research). <https://www.brookings.edu/wp-content/uploads/2020/11/ES-11.19.20-Abraham-Houseman.pdf>
- [2] Adeniyi, J. I. (2025). Technological change and an aging workforce: investigating the career experiences of older workers (Doctoral dissertation, Memorial University of Newfoundland).

- [3] Aguila, E., Berg, P. B., & Fiske, S. (2022). Understanding the Aging Workforce: Defining a Research Agenda. In *Academy of Management Proceedings* (Vol. 2022, No. 1, p. 17761). Briarcliff Manor, NY 10510: Academy of Management.
- [4] Almeida, R. K., Corseuil, C. H. L., & Poole, J. (2017). The Impact of Digital Technologies on Worker Tasks: Do Labor Policies Matter? <https://www.ssrn.com/abstract=3123622>
- [5] Andrasfay, T. (2021). Mismatch between Physical Health and Job Demands among Older Workers by Full Retirement Age. *Innovation in Aging*, 5(Suppl 1), 905.
- [6] Arbogast, A., Cummins, P., & McGrew, K. (2018). Older Workers and Digitalization: Opportunities and Challenges for Lifelong Learning. *Innovation in Aging*. https://academic.oup.com/innovateage/article/2/suppl_1/398/5171185
- [7] Bechichi, N., Jamet, S., Kenedi, G., & Grundke, R. (2019). Occupational mobility, skills and training needs. *OECD Science, Technology and Industry Policy Papers*. https://www.oecd.org/en/publications/occupational-mobility-skills-and-training-needs_30a12738-en.html
- [8] Billett, S., Dymock, D., Johnson, G., & Martin, G. (2011). Overcoming the paradox of employers' views about older workers. *The International Journal of Human Resource Management*, 22(06), 1248-1261.
- [9] Bonnaud, S., Descatha, A., Zins, M., Buyck, J.-F., & Ankri, J. (2011). Is There Any Additional Psychological and/or Physical Job Constraint Associated With Informal Caregiving Status? Findings From the GAZEL Cohort Study. *Journal of Occupational and Environmental Medicine*. <https://journals.lww.com/00043764-201108000-00001>
- [10] Bound, J., Geronimus, A. T., Rodriguez, J. M., & Waidmann, T. A. (2015). Measuring recent apparent declines in longevity: The role of increasing educational attainment. *Health Affairs*, 34(12), 2167–2173. <https://doi.org/10.1377/hlthaff.2015.0481>
- [11] Brownell, P., & Kelly, J. J. (Eds.). (2012). *Ageism and mistreatment of older workers: Current reality, future solutions*. Springer Science & Business Media.
- [12] Burdorf, A., Fernandes, R. C., & Robroek, S. J. (2023). Health and inclusive labour force participation. *The Lancet*, 402(10410), 1382-1392.
- [13] Burkhauser, R. V., Daly, M. C., McVicar, D., & Wilkins, R. (2014). Disability benefit growth and disability reform in the US: lessons from other OECD nations. *IZA Journal of Labor Policy*, 3(1), 4.
- [14] Burn, I., Button, P., Corella, L. F. M., & Neumark, D. (2019). Older workers need not apply? Ageist language in job ads and age discrimination in hiring (No. w26552). National Bureau of Economic Research.
- [15] Butrica, B. A., & Karamcheva, N. S. (2018). Is rising household debt affecting retirement decisions? *Social Security Bulletin*, 78(3), 1–21.
- [16] Cahill, K. E., Giandrea, M. D., & Quinn, J. F. (2014). The impact of hours flexibility on career employment, bridge jobs, and the timing of retirement. U.S. Bureau of Labor Statistics, *Economic Working Paper WP-472*.
- [17] Cahill, K. E., Giandrea, M. D., & Quinn, J. F. (2017). To What Extent is Gradual Retirement a Product of Financial Necessity. *Work Aging and Retirement*. <https://academic.oup.com/workar/article-lookup/doi/10.1093/workar/waw027>
- [18] Cahill, K., Giandrea, M., & Quinn, J. (2025). Have We Reached a Steady State Between Older Male and Female Labor Force Participation Rates?. *Innovation in Aging*, 9(Supplement_2), igaf122-1435.
- [19] Caliendo, M., Cobb-Clark, D. A., Pfeifer, H., Uhlendorff, A., & Wehner, C. (2023). Managers' Risk Preferences and Firm Training Investments. *European Economic Review*. <https://www.ssrn.com/abstract=4114587>
- [20] Calvo, E., Sarkisian, N., & Tamborini, C. R. (2013). Causal effects of retirement timing on subjective physical and emotional health. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 68(1), 73-84.
- [21] Choi, S., & Smith, G. (2019). Phased retirement in older American workers. *Innovation in Aging*, 3(Suppl 1), S126.
- [22] Christodoulou, C. (2025). Exploring potential benefits of social participation for work and life outcomes: Drawing on the Health and Retirement Study. *Research Square*, rs-3.
- [23] Coile, C. C. (2016). Economic determinants of workers' retirement decisions. *A Collection of Reviews on Savings and Wealth Accumulation*, 271-296.
- [24] Copeland, C. (2023). Trends in Labor Force Participation and Employment. *EBRI Issue Brief*, (584).
- [25] Elshaikh, U., Sheik, R., Saeed, R. K. M., Chivese, T., & Alsayed Hassan, D. (2023). Barriers and facilitators of older adults for professional mental health help-seeking: a systematic review. *BMC geriatrics*, 23(1), 516.

- [26] Equal Employment Opportunity Commission (EEOC). (2022). Artificial intelligence and algorithmic fairness initiative. U.S. EEOC.
- [27] Equal Employment Opportunity Commission (2017). Age Discrimination. U.S. Equal Employment Opportunity Commission. <https://www.eeoc.gov/age-discrimination>
- [28] Ervin, D. M., Faulk, G. K., & Smolira, J. C. (2009). The impact of asset allocation, savings, and retirement horizons, savings rates, and social security income in retirement planning: A Monte Carlo analysis. *Financial Services Review*, 18(4), 313.
- [29] Fang, T., Gunderson, M., & Lee, B. (2021). Can older workers be retrained? Canadian evidence from worker-firm linked data. *Relations Industrielles*. <http://id.erudit.org/iderudit/1083608ar>
- [30] Freedman, M. (2011). *The big shift: Navigating the new stage beyond midlife*. Public Affairs.
- [31] French, E., & Jones, J. B. (2011). The effects of health insurance and self-insurance on retirement behavior. *Econometrica*, 79(3), 693–732. <https://doi.org/10.3982/ECTA7560>
- [32] Friedberg, L. (2007). *The recent trend towards later retirement*. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- [33] Ghilarducci, T. (2016). *Innovations in Protecting the Old: Mostly Social Insurance and Some Assets* (No. 2016-05). Schwartz Center for Economic Policy Analysis (SCEPA), The New School.
- [34] Hudomiet, P., & Willis, R. J. (2021). Computerization, Obsolescence and the Length of Working Life. National Bureau of Economic Research. <https://linkinghub.elsevier.com/retrieve/pii/S0927537121000403>
- [35] Hutchens, R. (2010). Worker characteristics, job characteristics, and opportunities for phased retirement. *Labour Economics*, 17(6), 1010–1021.
- [36] İmrohoroglu, S., & Kitao, S. (2010). Social Security, Benefit Claiming, and Labor Force Participation: A Quantitative General Equilibrium Approach. *RePEc: Research Papers in Economics*. <http://www.ssrn.com/abstract=1586971>
- [37] Johnson, R. W., & Gosselin, P. (2018). How secure is employment at older ages. Urban Institute. Retrieved January, 16, 2020.
- [38] Joint Committee on Taxation. (2022). Technical explanation of the SECURE 2.0 Act of 2022. JCX-60-22.
- [39] Kachan, D., Fleming, L. E., Christ, S. L., Muennig, P., Prado, G., Tannenbaum, S. L., Yang, X., Caban-Martinez, A. J., & Lee, D. (2015). Health Status of Older US Workers and Nonworkers, National Health Interview Survey, 1997–2011. Preventing Chronic Disease. http://www.cdc.gov/pcd/issues/2015/15_0040.htm
- [40] Kashin, K., King, G., & Soneji, S. (2015). Systematic Bias and Nontransparency in US Social Security Administration Forecasts. *The Journal of Economic Perspectives*. <https://pubs.aeaweb.org/doi/10.1257/jep.29.2.239>
- [41] Kingson, E., & Morrissey, M. (2012). Can Workers Offset Social Security Cuts by Working Longer?. EPI.
- [42] Lai, J., Eales, J., Lariviere, M., Boger, J., & Fast, J. (2025). Barriers and facilitators of older workers' abilities to obtain and maintain employment: A scoping review. *Journal of Aging Research*, 2025(1), 5609589.
- [43] Larsen, M. A., et al. (2019). Strong labour market inequality of opportunities at the workplace for supporting a long and healthy work-life: The Senior Working Life study. *International Journal of Environmental Research and Public Health*, 16(18), 3370
- [44] Lassébie, J., & Quintini, G. (2022). What skills and abilities can automation technologies replicate and what does it mean for workers? OECD Social Employment and Migration Working Papers. https://www.oecd-ilibrary.org/employment/what-skills-and-abilities-can-automation-technologies-replicate-and-what-does-it-mean-for-workers_646aad77-en
- [45] Leonesio, M. V., Bridges, B., Gesumaria, R., & Del Bene, L. (2012). The increasing labor force participation of older workers and its effect on the income of the aged. *Social security bulletin*, 72(1), 59–77.
- [46] Lichtenstein, R. (2020). Workforce development programs for older workers: Gaps and opportunities. AARP Public Policy Institute
- [47] Lilly, M. B., Laporte, A., & Coyte, P. C. (2010). Labor market work and home care's unpaid caregivers: A systematic review of labor force participation rates, predictors of labor market withdrawal, and hours of work. *Milbank Quarterly*, 88(3), 322–365. <https://doi.org/10.1111/j.1468-0009.2010.00598.x>
- [48] Lössbroek, J., & Radl, J. (2018). Teaching older workers new tricks: workplace practices and gender training differences in nine European countries. *Ageing and Society*. https://www.cambridge.org/core/product/identifier/S0144686X1800079X/type/journal_article

- [49] Lu, L., Shen, H., Tan, L., Huang, Q., Chen, Q., Liang, M., ... & Zhou, Y. (2023). Prevalence and factors associated with anxiety and depression among community-dwelling older adults in Hunan, China: a cross-sectional study. *BMC psychiatry*, 23(1), 107.
- [50] Lipnic, V. A. (2018). The state of age discrimination and older workers in the U.S. 50 years after the Age Discrimination in Employment Act (ADEA). U.S. Equal Employment Opportunity Commission.
- [51] Lusardi, A., Mitchell, O. S., & Oggero, N. (2019). Debt and Financial Vulnerability on the Verge of Retirement. *Journal of Money Credit and Banking*. <https://onlinelibrary.wiley.com/doi/10.1111/jmcb.12671>
- [52] Machin, S. (2016). Rising Wage Inequality, Real Wage Stagnation and Unions. *Research in Labor Economics*. <https://www.emerald.com/insight/content/doi/10.1108/S0147-912120160000043017/full/html>
- [53] Maestas, N., Mullen, K. J., & Powell, D. (2016). The Effect of Population Aging on Economic Growth, the Labor Force, and Productivity. National Bureau of Economic Research. <http://www.nber.org/papers/w22452.pdf>
- [54] Maestas, N., Mullen, K. J., & Powell, D. (2023). The effect of population aging on economic growth, the labor force, and productivity. *American Economic Journal: Macroeconomics*, 15(2), 306-332.
- [55] Maimaris, W., Hogan, H., & Lock, K. (2010). The Impact of Working beyond Traditional Retirement Ages on Mental Health: Implications for Public Health and Welfare Policy. *Public Health Reviews*. <http://publichealthreviews.biomedcentral.com/articles/10.1007/BF03391615>
- [56] Manyika, J., Chui, M., Miremadi, M., Bughin, J., George, K., Willmott, P., & Dewhurst, M. (2017). A future that works: automation, employment, and productivity. <https://openalex.org/works/cba95e87-c7bf-40f9-8b97-eb7d1765204f>
- [57] Matz, C. (2025). Aging, Work, and Care: Typologies of Older Employed Caregivers and Their Well-Being. *Innovation in Aging*, 9(Supplement_2), igaf122-1074.
- [58] Messioui, A., & van Vuuren, T. (2025). The effects of sickness absence on job insecurity via skills obsolescence: A longitudinal study. *Scandinavian Journal of Work and Organizational Psychology*, 10(1).
- [59] Moen, P., Kojola, E., & Schaefer, K. (2017). Organizational change around an older workforce. *The Gerontologist*, 57(5), 847-856.
- [60] Munnell, A. H., Hou, W., & Sanzenbacher, G. T. (2018). National retirement risk index shows modest improvement in 2016. Center for Retirement Research at Boston College.
- [61] Munnell, A. H., Rutledge, M. S., & Webb, A. (2014). Are retirees falling short? Reconciling the conflicting evidence. *Reimagining Pensions. The Next 40 Years*, 11, 36.
- [62] Neumark, D. (2022). Strengthen age discrimination protections to help confront the challenge of population aging. Brookings Institution.
- [63] Neumark, D., Burn, I., & Button, P. (2017). Age Discrimination and Hiring of Older Workers. FRB SF Weekly Letter. <https://ideas.repec.org/a/fip/fedfel/00121.html>
- [64] Neumark, D., Burn, I., & Button, P. (2019). Is it harder for older workers to find jobs? New and improved evidence from a field experiment. *Journal of Political Economy*, 127(2), 922-970.
- [65] Ng, T. W. H., & Feldman, D. C. (2012). Evaluating six common stereotypes about older workers with meta-analytical data. *Personnel Psychology*, 65(4), 821-858. <https://doi.org/10.1111/peps.12003>
- [66] Quinn, J. F., & Cahill, K. (2018). Challenges and Opportunities of Living and Working Longer. Oxford University Press eBooks. <https://academic.oup.com/book/5390/chapter/148204997>
- [67] Quinn, J. F., & Cahill, K. E. (2016). The new world of retirement income security in America. *American Psychologist*. <https://doi.apa.org/doi/10.1037/a0040276>
- [68] Rothenberg, J. Z., & Gardner, D. S. (2011). Protecting older workers: The failure of the Age Discrimination in Employment Act of 1967. *Journal of Sociology & Social Welfare*, 38(1), 9–30.
- [69] Sewdas, R., Wind, A. de, Zwaan, L. G. L. van der, Borg, W. van der, Steenbeek, R., Beek, A. J. van der, & Boot, C. R. L. (2017). Why older workers work beyond the retirement age: a qualitative study. *BMC Public Health*. <http://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-017-4675-z>
- [70] Stopforth, S., Bécares, L., Nazroo, J., & Kapadia, D. (2021). A life course approach to understanding ethnic health inequalities in later life. <https://www.taylorfrancis.com/books/9780429470059/chapters/10.4324/9780429470059-38>
- [71] Sullivan, M. (2017). Aging Labor Force Lowers U.S. Economic Growth. *Bulletin for International Taxation*. <https://www.ibfd.org/doi/2e94190>

- [72] Swanberg, J. E., Kantonowitz, E., & Mendiondo, M. (2014). Family caregiving as an employment barrier: The experiences of older working women. *Journal of Women & Aging*, 26(2), 165–182. <https://doi.org/10.1080/08952841.2014.888218>
- [73] Toossi, M. (2016). BLS Spotlight on Statistics: A Look at The Future Of The U.S. Labor Force To 2060. eCommons (Cornell University). <https://hdl.handle.net/1813/78333>
- [74] U.S. Census Bureau. (2025, June 26). Older adults outnumber children in 11 states and nearly half of U.S. counties. <https://www.census.gov/newsroom/press-releases/2025/older-adults-outnumber-children.html>
- [75] U.S. Government Accountability Office. (2023). Older workers: Retirement account disparities have increased by income and persisted by race over time (GAO-23-105342)
- [76] Wahrendorf, M., Hoven, H., Deindl, C., Lunau, T., & Zaninotto, P. (2020). Adverse employment histories, later health functioning and national labor market policies: European findings based on life history data from SHARE and ELSA. *The Journals of Gerontology Series B*. https://academic.oup.com/psychsocgerontology/article/76/Supplement_1/S27/5823927
- [77] Wang, M., & Shi, J. (2014). Psychological research on retirement. *Annual review of psychology*, 65, 209-233.
- [78] Yamashita, T., Narine, D., Chidebe, R. C. W., Cummins, P., Kramer, J. W., & Karam, R. (2023). Digital Skills, Stem Occupation, and Job Automation Risk among the Older Workers in the US. *Innovation in Aging*. https://academic.oup.com/innovateage/article/7/Supplement_1/663/7489244
- [79] Yemiscigil, A., Powdthavee, N., & Whillans, A. V. (2021). The effects of retirement on sense of purpose in life: Crisis or opportunity?. *Psychological science*, 32(11), 1856-1864.