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The Myth of Men's Stable, Continuous Labor Force Attachment: Multitrajectories of U.S. Baby Boomer Men's Employment

Adrianne Frech¹, Jane Lankes², Sarah Damaske³, Adrienne Ohler⁴

¹Ohio University Heritage College of Osteopathic Medicine–Cleveland, Warrensville Heights, OH, USA

²U.S. Department of Agriculture, Grand Forks, ND, USA

³The Pennsylvania State University, University Park, PA, USA

⁴University of Missouri, Columbia, MO, USA

Abstract

Over the past several decades, U.S. men's paid work has transformed from a state of high stability and continuity to a state of increased instability and precarity. Despite this, full-time employment throughout adulthood remains the presumed standard for modern American men. The authors investigated the diversity of men's workforce experiences using the National Longitudinal Survey of Youth "National Longitudinal Survey of Youth - 1979 cohort" and identified six multitrajectories of men's time spent employed, unemployed, and out of the labor force from ages 27 to 49. The authors identified one multitrajectory of steady work, three of increasing unemployment or time out of work, one of increasing steady work, and one of intermittent work. Contrary to conventional assumptions, only 41 percent of men followed a trajectory of continuous, high employment over the duration of their prime earning years. This suggests that most men do not achieve the "ideal worker norm," raising implications for how research and policy conceptualize men's work experiences.

Keywords

men; employment; unemployment; longitudinal; NLSY79

Men's continuous, full-time employment throughout adulthood is a ubiquitous expectation in America—a norm so entrenched that despite changing economic trends, paid work continues to be a defining feature of masculinity (Moen and Roehling 2005; Thébaud 2010). Through the mid-1900s, most American men followed "lockstep lives" in which they entered the workforce immediately after education and continued until retirement (Moen and Roehling 2005). Decades later, despite major shifts in the labor market (Kalleberg

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Corresponding Author: Adrianne Frech, Ohio University Heritage College of Osteopathic Medicine—Cleveland, Department of Social Medicine, 4180 Warrensville Center Road, Warrensville Heights, OH 44122-7024, USA, frecha@ohio.edu.

2009, 2011) and new ways of working and forming families (Damaske 2021; Ridgeway 2009, 2011), steady work remains the assumed norm for the modern American man (Moen, Kojola, and Schaefers 2017). In fact, men's familial and societal obligations remain stubbornly tied to steady paid employment (Thébaud and Pedulla 2016), creating the impression that nonsteady work is a "deviation" from the norm. Although efforts have been made to challenge the "ideal worker norm" of continuous men's employment, such as increasing recognition of men's need for work-life balance and flexibility, the professional, financial, and social consequences of nonsteady work remain substantial (Cooper 2014; Pedulla 2016; Western et al. 2012). Therefore, even as traditional gender norms shift, gender continues to "frame" contemporary life, shaping the life course via dichotomized obligations (Damaske 2021; Ridgeway 2009, 2011).

At the same time, enormous changes in employment relations over the past 50 years threaten men's ability to achieve stability at work (Hollister 2011; Kalleberg 2011). The overall rate of men's labor force participation has decreased since the 1960s (Hipple 2016). Precarious employment has spread from the unskilled, less educated segment of the labor force to almost all sectors of the market, a trend accompanied by growing precarity at the bottom of the labor market via a decline in unionized jobs and an increase in nonstandard work arrangements (Cooper 2014; Kalleberg 2009, 2011). Growth in precarious work has left many men, especially those with structural disadvantages, with more involuntary job losses, greater income volatility, and lower workforce attachment (Aisenbrey and Fasang 2017; Frech and Damaske 2019; Weisshaar and Cabello-Hutt 2020; Western et al. 2012). As a result, many American men face less employment and financial stability than in any other decade in recent history (Center on Budget and Policy Priorities 2021; Federal Reserve Board 2021; Hollister 2011). This suggests two questions: if men expect to continuously work full-time, yet no longer have access to stable work, (1) what longitudinal trends in men's employment do these countervailing forces produce, and (2) which men are most likely to have access to continuous full-time work?

Prior research is limited in its ability to answer these questions, because of the use of repeated cross-sectional data (Autor 2011; Banerjee and Blau 2016; Binder and Bound 2019; Hollister 2011; Winship 2017), the comparison of men's and women's employment (which may obscure differences among men) (Aisenbrey and Fasang 2017; Weisshaar and Cabello-Hutt 2020), and the use of a singular measure of employment, such as income, work hours or weeks worked per year (Banerjee and Blau 2016; Frech and Damaske 2019; Weisshaar and Cabello-Hutt 2020). To address these limitations, we use prospective panel data from the National Longitudinal Survey of Youth 1979 (NLSY79) to identify group-based multitrajectories of time spent employed, unemployed, and out of the labor force for a cohort of U.S. men born between 1957 and 1964 from ages 27 to 49, almost the entirety of their prime working-age years. We draw on a life-course perspective to investigate early-life and early-career predictors of multitrajectory membership, including race/ethnicity, U.S. nativity, poverty, education, health and geographic limits to work, the local labor market, and marital status.

Background

Recent Trends in Men's Work in the United States

Since its peak in 1954, the labor force participation of men ages 25 to 54 has fallen from more than 98 percent to less than 88 percent, with a steady decline from the 1970s onward (Hipple 2016). Secure, well-paying jobs are increasingly less common, while jobs with few benefits and little long-term security are on the rise (Kalleberg 2011), leading to fewer men in the labor market at any given time and overall lower workforce attachment (Coglianese 2018). Studies using repeated cross-sectional data reveal that men's employment is now far less consistent than in previous decades (Hollister 2011; Hollister and Smith 2014; Kalleberg 2009, 2011). Moreover, recent research using the Survey of Income and Program Participation found that men have experienced a significant increase in the likelihood that they will move "in and out" of the labor market, moving not from employment to unemployment but from employment to out of the labor force and then back to employment again (Coglianese 2018).

Understanding men's longitudinal employment trajectories requires a consideration of how, when, and which men leave the labor market. A life course framework suggests that trajectories of employment are "socially constructed and socially sustained," and as such should be understood in the context of labor market conditions, family structure, and the early-life advantages and disadvantages experienced when entering the labor market and maintaining employment (Moen and Sweet 2004:219). A prospective examination of men's employment could capture the potential cumulation of advantage or disadvantage in access to stable steady work across the life course by examining longitudinal patterns of employment, unemployment, and out of labor force experiences as men age as well as their predictors.

Overall, precarious work has risen in every sector of the market (Winship 2017), but the distribution of precarity remains uneven and disproportionately occurs among men who enter the workforce with fewer advantages. Jobs requiring more than a high school diploma, but less than a bachelor's degree, have become more precarious; men previously employed in vocational settings are now increasingly at risk of being "discouraged workers" who stop looking for work because their skill set does not match demand (Sharone 2013). Moreover, many so-called good manufacturing jobs requiring specialized skills have been replaced with automation or outsourced overseas, even as the share of jobs in professional and service sectors have largely stayed constant or increased (Autor 2011; Foote and Ryan 2015). Many men are unemployed for increasingly long periods with no stable jobs to which they can return (Chen 2015). Service-sector positions are also notoriously "bad jobs" with high levels of turnover and unemployment for service workers (Foote and Ryan 2015; Kalleberg 2011). Together, these trends created a fragmented and heterogeneous labor market in which men with less education, work experience, and local labor market opportunities are more likely to face long-term precarity (Autor 2011; Coglianese 2018; Kalleberg 2009; Kalleberg and Vallas 2018).

Out of the Labor Force or Unemployed?

Although it is clear "baby boomer" men in the United States are spending less time in paid employment than previous cohorts (Johnson, Butrica, and Mommaerts 2010), whether, when, and who experiences time out of the labor force rather than unemployment over time remains unclear. Those out of the labor force—men who are neither employed nor seeking work—constitute a growing percentage of adult men and are quite heterogeneous, containing groups with vastly different levels of advantage, such as students, stay-at-home parents, discouraged workers, and individuals with disability benefits (Autor and Duggan 2003; Rothstein 2019; Winship 2017). Moreover, men vary in the timing and duration of their time out of the labor force. Some may do so for a relatively short period of time, displaying high labor force attachment both before and after leaving the labor force (Coglianese 2018), while others may have dropped out of the labor force permanently. Prospective patterns of time spent out of the labor force have not been widely studied, and whether and when those out of labor force return to paid employment and the timing of these transitions may vary significantly.

There is also important heterogeneity among the unemployed (Damaske, Frech, and Wething 2023), suggesting a comprehensive picture of men's employment trajectories must also consider the timing and duration of men's time spent not working and seeking work. Although most unemployed individuals eventually return to paid work (Binder and Bound 2019), they do so with relatively different levels of success and following different periods of time spent unemployed (Aquino, Brand, and Torche 2022; Brand 2015). Although past research suggests unemployment will be more concentrated among less advantaged men, as is the case with those out of the labor force (Binder and Bound 2019; Winship 2017), there is evidence that unemployment risk has expanded to include the highly educated (Brand 2015; Hout, Levanon, and Cumberworth 2011) who may pay a steeper cost for their job loss (Gangl 2006). Others argue that the highly educated may be better equipped to respond to unemployment (Cooper 2014; Damaske 2021). These contradictory findings suggest a longitudinal approach that examines time spent employed, unemployed, and out of the labor force will shed critical light on our understanding of men's access to employment over their lives.

Past Limitations

Limitations in past research may obscure the true range of between-person and within-person variation in U.S. men's work over time. First, previous studies frequently examine changes to men's work using repeated cross-sectional data (Autor 2011; Banerjee and Blau 2016; Binder and Bound 2019; Hollister 2011; Winship 2017). This gives useful insight into population-level trends but cannot speak to individuals' experiences over the life course. Second, of the longitudinal studies focused on work hours or occupational status, most compare men's work to women's (Aisenbrey and Fasang 2017; Weisshaar and Cabello-Hutt 2020), with very few studies focusing solely on men (Rothstein 2019). These studies effectively demonstrate U.S. gender differences in employment (Weisshaar and Cabello-Hutt 2020) and work-family patterns (Aisenbrey and Fasang 2017), but likely minimize within-gender variation. For example, using the NLSY79, Weisshaar and Cabello-Hutt (2020) identified six group-based trajectories of weeks worked per year across ages

22 to 50 and the gender distribution within each trajectory. Of these six groups, one was predominantly experienced by men with two others showing relatively similar proportions of men and women, whereas women were more likely than men to be in the final three groups. Although this provides important insight into the gender gap in steady work, it may mask other less prevalent patterns found predominantly among men.

Third, and most notably, research often employs a singular measure of men's longitudinal employment (e.g., work hours or weeks worked), ignoring distinctions between unemployment and time spent out of the labor force (Banerjee and Blau 2016; Binder and Bound 2019; Weisshaar and Cabello-Hutt 2020). Given that the precarious employment framework emphasizes multiple dimensions of employment precarity—particularly the rise of unemployment risk, the increase of contingent work, and the decline in steady employment—research that focuses on a singular measure may miss important dimensions of precarity (Kalleberg 2009, 2011; Nelson and Smith 1999). Additionally, as men who are unemployed vary significantly in sociodemographic characteristics, local market contexts, and structural limitations from those out of the labor force (Autor and Duggan 2003; Coglianese 2018; Winship 2017), distinguishing between time spent employed, unemployed, and out of the labor force may be key for understanding when and why some men experience precarious employment while others do not. A final limitation is that the common use of work hours or weeks worked as the measure of employment has led prior employment trajectory work to exclude persons or person-year observations in which people report zero weeks worked (Frech and Damaske 2019; Weisshaar and Cabello-Hutt 2020), which likely excludes some of the greatest evidence of precarity. Identifying multidimensional and longitudinal measures of employment variation among men will be key to understanding how men fare in today's fragmented labor market.

The Present Study

We draw on a life-course perspective to guide our focus on men's employment trajectories, as well as to predict which men are likely to have access to steady workforce participation, with little unemployment or time spent out of work. Life-course scholars argue that early advantages and disadvantages early in life cumulate over time, widening disparities between groups (Elder, Kirkpatrick Johnson, and Crosnoe 2003). This perspective informs our study in two ways. First, a life-course perspective leads us to anticipate that men's workforce participation trajectories will be heterogenous and more complex than can be captured by a cross-sectional approach; moreover, this perspective leads us to anticipate men's changing employment can be best understood with a longitudinal lens that emphasizes the timing and transitions into and out of employment, unemployment, and nonemployment. Second, because early experiences of employment and unemployment are strong predictors of continued workforce attachment (or further unemployment), we expect that men who are employed early in life are more likely to continue to enjoy stable work.

A recent methodological innovation can address two primary shortcomings of prior research on men's work: (1) a focus on repeated cross sections of data or short time spans and (2) a focus primarily on measures of continuous employment, such as work hours or weeks worked, with very little attention to multidimensional measures, such as the combination of

time spent employed, unemployed, and out of the labor force. Group-based multitrajectory models (Nagin et al. 2018), an extension of group-based trajectory models (Nagin 2005), use longitudinal data to identify clusters of individuals following similar trajectories of multiple variables measured over time. We use group-based multitrajectories to identify common experiences among U.S. men in a single birth cohort (born from 1957 to 1964) in the time they spend employed, unemployed, and out of the labor force between ages 27 to 49 and to identify predictors of these workforce experiences. We hypothesize that most men will experience a multitrajectory characterized by steady work participation between ages 27 to 49, with most weeks spent employed, and few weeks spent unemployed or out of the labor force. Among the men who do not experience steady work participation, we expect to identify two groups: those experiencing an early workforce exit, with fewer weeks spent employed (Weisshaar and Cabello-Hutt 2020) and increased weeks spent unemployed and out of the labor force at older ages; or those working intermittently, with part of the year employed and part of the year either unemployed or out of the labor force over time (Coglianese 2018; Damaske 2011).

Characteristics such as race, nativity, poverty, education, health, transportation limitations, occupation, marital status, and the presence of children in the household may clarify why some men retain steady employment while others experience greater instability (Cherlin 2014; Frech and Damaske 2019; Kalleberg 2011; Pager and Shepherd 2008). For example, no or inconsistent access to reliable transportation can significantly reduce the ability to consistently commute to work and keep a "good" job, or reduce the number of available jobs to apply for altogether (Bastiaanssen, Johnson, and Lucas 2020). Being Black or Latino, an immigrant, having less than a college education, having poor health, and holding a service-industry job are negatively associated with landing and keeping steady employment (Binder and Bound 2019; De Jong and Madamba 2001; Pager and Shepherd 2008). In contrast, some studies suggest men experience a "boost" in the labor market from marrying and having children, making them more likely to acquire or be promoted in a well-paying and stable job (Cheng 2016; Glauber 2018). Finally, if individuals are unable to build early work experience (as measured by longest job tenure in young adulthood), it may be difficult for them to "catch up" to peers who are able to more immediately establish a steady employment record (Brand 2015; Damaske et al. 2023).

Early labor market conditions, such as the local unemployment rate, percentage of unionized jobs, and rurality of the area (Damaske et al. 2023; Slack and Jensen 2002), may also set individuals on different work pathways, shaping initial and subsequent work experiences. Areas with a greater concentration of jobs, often more urban locations, provide individuals with a greater breadth of employment opportunities following the end of a contract or other job loss, allowing them to maintain more consistent employment over time. Moreover, unionized positions are positively associated with job tenure (Parolin 2020), suggesting workers will fare better in markets with more organized labor. In sum, processes of cumulative advantage and disadvantage, drawn from a life-course perspective, may help predict which men are most likely to enjoy the "ideal worker norm" of stable employment across their working years. Following the identification of group-based multitrajectories of men's workforce participation, we estimate whether these variables are associated with membership in these multitrajectories.

Data and Measures

Data and Sample

The NLSY79 cohort first interviewed a nationally representative sample of 12,686 14- to 21-year-olds in the United States in 1979, with yearly interviews through 1993 and interviews in even-numbered years through the most recently released wave of data for 2020. These data are well suited to answer our research questions because they contain rich information at each interview on respondents' time spent employed, unemployed, and out of the labor force; detailed occupational histories; marriage and fertility histories; and information on the counties where respondents have lived (Bureau of Labor Statistics n.d.). Our analytical sample excludes members of oversampled groups that were not retained by the NLSY79 after the 1984 or 1990 interviews (Bureau of Labor Statistics 2021); respondents who attrited before turning 25, because they provide no data on workforce participation between ages 27 to 49 (Aughinbaugh, Pierret, and Rothstein 2017), and men in active-duty military service which are classified as "out of the labor force" by NLSY79. Our final sample included 4,538 men.

Missing Data

Missing data in our analytical sample comes from three sources: item nonresponse within waves, skipped waves, and attrition. Item nonresponse was relatively low, with predictor variables missing at <10 percent for all variables other than living below the poverty line in 1979, for which 24 percent were missing. Attrition and missed survey waves are more complex, as the NLSY79 allows respondents to exit and reenter the survey over time. Because of this, men varied in how many waves they reported their workforce participation and their ages when workforce data were missing (Aughinbaugh et al. 2017). In our sample, men reported their weeks employed, unemployed, or out of the labor force at 9.7 of 12 possible waves per respondent between the ages of 27 and 49 (see Appendix Table A1). The ages of missing workforce participation data varied, and as shown in Appendix Table A2, most men had no missing workforce participation data or were missing at a single survey wave in their forties. Thus, the most common patterns of survey wave missingness indicated no missing data or a temporary exit from the study rather than permanent attrition.

We imputed missing values for item nonresponse and missed survey waves using the mi impute suite in Stata 16, and averaged results across 20 imputed datasets using the mi estimate commands. Our findings were similar when imputing item nonresponse for predictor variables only. These results are available upon request. Multivariate results using complete case analysis or listwise deletion are not presented as these approaches produce biased results in longitudinal data (Jackson, Engelman, and Bandeen-Roche 2019; Young and Johnson 2015). Overall, results were consistent across the two imputation strategies in the multitrajectories identified and in the predictors of multitrajectories.

Multitrajectory Variables

We began measuring men's work experiences at about 27 years old to control for early work experiences and early-life advantages and disadvantages prior to the measurement of the multitrajectories (Nagin 2005). Employment experiences were tracked beginning in 1984 for

respondents born in 1957, in 1985 for respondents born in 1958, and so on through 1991 for respondents born in 1964. We continued to follow respondents, the oldest of whom were born in 1957 and 1958, until 2006, when they were about 49 years old. Respondents born in 1959 or 1960 were followed until 2008, and so on through 2012, when the youngest respondents born in 1963 and 1964 were approximately 49 years old. Thus, our employment histories capture the period after which most men in this generation completed schooling and before these men entered retirement.

We measured men's workforce participation every two years at or near odd numbered ages between 27 and 49 during calendar years 1984 to 2012, consistent with the biennial nature of the NLSY79 data after 1993. Three time-varying variables are used for identification of men's multitrajectories of workforce participation: (1) the proportion of weeks in the last year spent employed (participating in the paid civilian workforce), (2) the proportion of weeks in the last year spent unemployed (not employed and actively seeking work), and (3) the proportion of weeks in the last year spent out of the labor force (not employed and not seeking work). When there were no data missing, these variables summed to 1. Weeks out of the labor force included time spent as a student, caring for family, disabled, or some other reason for not seeking work (Bureau of Labor Statistics n.d.). At age 27, the most common answer among those out of the labor force was "some other reason." Only 50 men reported they were out of work because they were attending school or in training at age 27.

Explanatory Variables

Variables used to predict membership in a multitrajectory must be measured prior to the earliest time-varying variables included in the trajectory model to preserve causal order between independent and dependent variables. Because of this, all variables used to predict multitrajectory membership were measured prior to age 27 (Nagin 2005), including demographic and early-life characteristics, family and household characteristics at age 25, and the local employment context at age 25. Demographic and early-life variables included race/ethnicity (Latino, Black, non-Latino non-Black), U.S. nativity (1 = non-U.S. native), family of origin socioeconomic status (1 =lived below the poverty line in 1979; 1 =mother did not graduate from high school), cognitive skill (measured in 1980 using the Armed Forces Qualifying Test [AFQT]), educational attainment (measured in years at age 25), work-limiting health conditions at age 25 (1 = has limitation to type or amount of work one can do), transportation barriers to a good job between ages 18 to 25, current or most recent occupation (reference: professional), and longest job tenure in years between ages 22 to 25. Family and household variables at age 25 included marital status (never married, married, or divorced or widowed) and coresidence with children (1 = yes). Finally, the local employment context at age 25 was measured by residence in a rural area, the local unemployment rate, and the percent of workers in the respondent's state with union contracts (Hirsch, Macpherson, and Vroman 2001).

Methods

Multitrajectory models expand upon group-based trajectory models by identifying individuals who share similar trajectories across multiple time-varying measures

simultaneously rather than one time-varying variable (see Nagin et al. 2018 for a detailed explanation and relevant equations). Group-based trajectory models using one time-varying variable have previously been used to describe unemployment experiences over time (Damaske et al. 2023; Frech, Damaske, and Ohler 2022), men's personal income (Frech and Damaske 2019), men's and women's percent of weeks employed (Weisshaar and Cabello-Hutt 2020), and women's weekly work hours (Damaske and Frech 2016) in the NLSY79. A multitrajectory model expands upon these prior studies in its ability to show (for example) one multitrajectory group with high employment, low unemployment, and low levels of time spent out of the labor force over time, and a second multitrajectory group with (for example) declining employment over time, rising levels of unemployment, and rising levels of time out of the labor force at later ages. The goal of multitrajectory modeling is not to identify the "correct" number of groups but rather to identify clusters of individuals sharing common experiences across multiple (and often related) variables measured over time and to draw meaningful comparisons among these groups (Nagin et al. 2018). We used multitrajectory models to identify groups of individuals who followed similar trajectories of weeks employed, weeks unemployed, and weeks out of the labor force across ages 27 to 49. We then examine associations between group membership and our predictors of interest, correcting for the systematic underestimation of the structural parts of the predictive model using the Bolck, Croon, and Hagenaars (BCH) approach (Bolck, Croon, and Hagenaars 2004).

Researchers using group-based trajectory or multitrajectory methods fit models on the basis of quantitative measures of fit as well as substantive concerns and guiding theories. Quantitative fit measures include Bayesian information criterion statistics calculated at the person and person-year levels, where negative values closer to zero indicate better fit, as well as the average probability of correct placement (APP) for each group, where scores greater than 0.70 indicate that individuals are, on average, a good fit for their assigned group (Nagin 2005). We evaluate these measures of model fit when we introduce each multitrajectory. Researchers also take into consideration substantive decisions such as avoiding especially small groups, avoiding the replication of existing groups, and guidance from existing findings and theory (Nagin et al. 2018; Saloniemi et al. 2021). We explain these decisions when we describe our models of best fit in the results.

After selecting a final multitrajectory model, we tested our hypotheses predicting membership in multitrajectories using multinomial logistic regression with a BCH correction (Bolck et al. 2004). Relating latent class membership to external variables through such a structural model leads to a systematic underestimation of parameters, and this bias is amplified as classification error increases (Vermunt 2010). Thus, we implement the BCH approach to address measurement error in classifying trajectory groups using a pseudo–maximum likelihood estimation of the multinomial logistic regression model with classification weights, and estimating variances using a clustered sandwich estimator (Vermunt 2010). To avoid challenges relating to changes in the structural model altering the membership probabilities, we rely on this three-step approach (Bakk and Kuha 2021). All analyses are conducted using Stata 16.

Results

Descriptive Statistics

Descriptive trends in men's work participation over time are shown in Figure 1, which graphs the average proportion of weeks men in the sample spent employed, unemployed, and out of the labor force from ages 27 to 49.

Figure 1 indicates that men's employment experiences are relatively stable over time, with most weeks spent employed across ages 27 to 49, and the remaining weeks roughly evenly split between time spent unemployed or out of labor force. Men were, on average, employed for 83 percent of the year at age 27 (about 43 weeks), and this number increased to 86 percent as men aged into their late 30s and early 40s before declining to 79 percent (about 41 weeks) by age 49. At age 27, men in our sample spent an average of seven percent of the year (approximately 3–4 weeks) unemployed, and this number declined to 4 percent in their late 30s and early 40s before increasing to 6 percent (about three weeks per year) by age 49. The percent of weeks out of the labor force increased with age, with men spending an average of 9 percent of weeks (4–5 weeks per year) out of the workforce at age 27, increasing to 14 percent of weeks (about seven weeks) by age 49. The descriptive statistics for predictors of men's multitrajectories are shown in Table 1.

Multitrajectories of Men's Workforce Participation

To create multitrajectory models, researchers first specify the distribution of each trajectory variable, the polynomial order of each trajectory, and the total number of multitrajectories. All three time-varying trajectory variables used in our multi-trajectory models—proportion of weeks employed in the last year, proportion of weeks unemployed in the last year, and proportion of weeks out of labor force in the last year—were classified as a censored normal distribution with values ranging from zero (0 percent of weeks in the last year employed, unemployed, or out of labor force) to one (100 percent of weeks in the last year spent employed, unemployed, or out of labor force). All trajectories were set to a quadratic form because all linear forms were significant, all quadratic forms were significant, and few cubic forms reached significance (and none altered the findings presented below). From here, the aim was to identify the total number of multitrajectories.

Because multitrajectory models are an extension of group-based trajectory models, we began the process of determining the total number of multitrajectories by comparing measures of model fit for each variable separately, using single-variable group-based trajectory models. We identified five group-based trajectories of the proportion of weeks employed between ages 27 and 49, four group-based trajectories of the proportion of weeks unemployed between ages 27 and 49, and four group-based trajectories of the proportion of weeks out of the labor force between ages 27 and 49. Measures of model fit are available upon request. We used these results to set the minimum number of multi-trajectory groups at four, as four was the minimum number of groups in the models of best fit for the single-variable group-based trajectories (Nagin et al. 2018).

Measures of model fit for multitrajectory models are presented in Table 2, where we compared fit across 4 to 7 multitrajectories of men's workforce participation. As the

number of multitrajectory groups increased, Bayesian information criterion statistics moved closer to zero and APPs remained above the recommended threshold of 0.70, indicating progressively better fit. However, when we reached seven multitrajectories, we encountered a group containing only 18 men—well under 1 percent of the sample—indicating a poorer substantive fit in comparison with the six-group model, which we selected as the model of best fit. The final multitrajectories are shown in Figure 2 and described in Table 3.

Ordered by size, the six graphs in Figure 2 show the six multitrajectories of men's workforce participation from ages 27 to 49. Each multitrajectory includes estimates of the proportion of weeks employed, unemployed, and out of the labor force by age, and the three variables measured separately add to approximately one or 100 percent at each age. Descriptive statistics by multitrajectory group are available in Appendix Table A3. With 41 percent of the sample, the largest multitrajectory group, steady work participation, reflected the strongest labor force attachment among the six groups, with men in this group experiencing nearly all weeks per year employed across all ages and less than five percent of weeks spent unemployed or out of the labor force across ages 27 to 49. The second largest multitrajectory group, increasingly steady work, consisted of 25 percent of men who worked an average of 73 percent of weeks at age 27; the men slowly increased their percent of weeks employed as they aged such that by age 49, 97 percent of weeks were spent employed, nearly 20 years after the steady workers achieved full participation, on average. For this group, weeks spent unemployed or out of the labor force declined with time, with both variables trending closely to one another, each beginning at about 15 percent of weeks at age 27 and declining to less than 3 percent by age 49.

Increasing unemployment and out of labor force (hereafter, increasing UE and OOLF), was the third largest group with 13 percent of the sample, characterized by relatively high workforce participation until about age 40 (80 percent to 90 percent of weeks per year). In their forties, paid employment declined with men reporting an average of 16 percent of weeks unemployed and 21 percent of weeks out of the labor force by age 49. The fourth group included 11 percent of the sample and was characterized by intermittent work, with workers averaging about 50 percent of weeks per year employed from ages 27 to 49, 20 percent to 30 percent of weeks out of the labor force, and 15 percent to 20 percent of weeks unemployed from ages 27 to 49. These men reported their highest levels of employment at age 49 and their highest percent of weeks of out of the labor force around ages 31 to 33.

Early-career exit and midcareer exit were the smallest two groups, 6 percent and 4 percent of men, respectively, and were characterized by their low attachment to the workforce. Early-career exit men worked just under 30 percent to 40 percent of weeks in their late 20s, and increased their percent of weeks out of the labor force as they aged, so that by age 49, fully 85 percent of all weeks per year were spent out of the labor force, and only 6 percent of weeks were spent employed. Unemployment was low and declining across age from 10 percent to 20 percent of weeks unemployed per year in their 20s and early 30s to less than 10 percent of weeks through their 40s. Finally, midcareer exit respondents had mid to high levels of workforce participation throughout their 20s and much of their 30s, and reported working 65 percent to 80 percent of weeks per year until age 40, when the percent of weeks spent out of the labor force increased from about 25 percent to nearly 100 percent between

ages 39 and 49. Unemployment was also relatively low for this group, and remained below 20 percent of weeks at each age, declining from 13 percent of weeks at age 27 to less than 1 percent of weeks by age 49.

Overall, we observed remarkable diversity in men's working lives. Only 41 percent of men embodied the ideal worker norm of low unemployment, low out of work, and a high proportion of weeks worked across most ages (steady work participation). Most men (58 percent) faced more precarious employment trajectories, with one trajectory where men consistently had fewer weeks worked, and more time unemployed and out of the labor market (intermittent work) and three trajectories characterized by labor force exits at different ages (increasing UE and OOLF, early-career exit, midcareer exit). These results did not support our hypothesis that most men would experience steady work participation. We found partial support for our expectation that men who did not experience steady work participation would experience early workforce exits or intermittent work, but we also see the emergence of a new category: increasingly steady work.

Predicting Multitrajectory Membership

Our final analyses, presented in Table 4, predict membership in each multitrajectory, relative to the modal steady work participation multitrajectory, characterized by the highest levels of workforce participation across all ages and the lowest levels of unemployment and time spent out of the labor force. Results are presented as relative risk ratios, with statistically significant values above one indicating higher risk of membership in a multitrajectory relative to steady work participation, and statistically significant values below one indicating lower risk of membership in a multitrajectory relative to steady work participation.

Relative to non-Black, non-Latino men, Black men were more likely to experience increasingly steady, increasing UE and OOLF, intermittent, and early-career exit multitrajectories relative to steady work. Latino men were more likely to experience intermittent or early-career exit multitrajectories. Non-U.S. natives were less likely to experience early-career exit or midcareer exit multitrajectories, but more likely to experience increasing UE and OOLF. Living below the poverty line was positively associated with intermittent and midcareer exit multitrajectories, and a mother who did not graduate from high school increased the risk of midcareer exit. Both higher AFQT scores and higher educational attainment decreased the risk of all multitrajectories relative to steady work, as did longer job tenures in young adulthood. Health limitations to work at age 25 were associated with an increased risk of all experiences except increasing UE and OOLF relative to steady work, and a transportation barrier to a good job in young adulthood increased the risk of all non-steady multitrajectories. The role of occupation varied: relative to professional work, service sector work at age 25 made increasing UE and OOLF and intermittent work across adulthood more likely, while working as operators, fabricators, and laborers increased the risk of all groups other than early-career exit. Precision production, craft, and repair occupations increased the risk of intermittent work and midcareer exit. Those not in the workforce at age 25 had the highest risks of nonsteady work; their increased risk of all multitrajectories other than the increasing UE and OOLF ranged from relative risk ratios of 5.38 (increasingly steady) to 28.2 (early-career exit).

Compared with never-married men at age 25, married men were less likely to experience all multitrajectories relative to steady, while divorce was associated with an increased risk of increasing UE and OOLF and a decreased risk of midcareer exit. Children in the household at age 25 was positively associated with intermittent work but was not associated with other multitrajectories.

The local context at age 25 was also associated with multitrajectories of workforce participation. Living in a rural area was associated with a lower risk of an increasingly steady multitrajectory, while higher area unemployment rates at age 25 increased the risk of increasingly steady work. A higher percent of union work in the respondents' state increased the likelihood of intermittent and early-career exit multitrajectories relative to steady work.

These results supported our assertion that processes of cumulative advantage and disadvantage would contribute to men's long-term trajectories of workforce participation. Men who were less attached to the workforce early in their careers, including those experiencing shorter job tenure or time out of the workforce by age 25, were less likely to experience steady work as they moved through midlife. Manufacturing, labor, and service jobs at age 25 were associated with several nonsteady trajectories, while being married was associated with steady employment. Other variables associated with greater exposure to precarious work, including facing racial or ethnic discrimination, lower educational attainment, or structural disadvantages in local labor markets were also associated with trajectories of higher unemployment and time out of work relative to steady workers.

Discussion

Men's work lives were once characterized as a "lockstep progression" in which men completed their formal education, entered the labor market, and remained in the workforce with stably high workforce attachment until retirement years (Moen and Sweet 2004). Although men continue to face broad cultural norms presuming their steady employment and breadwinning (Thébaud 2010; Thébaud and Pedulla 2016), the rise of precarious work (Kalleberg 2009), the decline of good jobs for middle-skill men (Yavorsky and Dill 2020) and recent recessions (Hipple 2016) have contributed to U.S. men's declining workforce participation. Using group-based multitrajectory models, we identified common patterns across men's time spent employed, unemployed, and out of the workforce from ages 27 to 49. To our knowledge, this study is the first to demonstrate that men's workforce experiences across the life course reflect the tension of these countervailing forces. This novel approach illustrates the importance of a life-course perspective in examining an individual's complete work history, including levels of unemployment and out of labor force alongside weeks spent employed, as all three variables differed across the groups in their timing and duration.

Astonishingly, only 41 percent of younger baby boomer men followed trajectories of steady workforce participation, spending 98 percent of their weeks employed between the ages of 27 to 49. This trajectory is frequently assumed to be characteristic of the vast majority of men's experiences, therefore, this number is staggeringly low given societal expectations about men's continuous labor force attachment (Cooper 2014; Thébaud and Pedulla 2016).

We further find that 25 percent of men experienced increasingly steady work, characterized by early bouts of unemployment and time out of the labor force. Despite rising precarity in American jobs overall in this period (Kalleberg 2009, 2011), this was the only group to grow more attached to the labor market over time, seeming to accumulate advantages at least in terms of weeks spent employed. Increasingly steady men were, on average, less educated, more likely to experience health limitations to work, and lived in areas with higher unemployment rates at age 25 compared with steady worker peers (see Appendix Table A3). However, they were somewhat more advantaged than those experiencing other nonsteady trajectories, suggesting that increasingly steady men's moderate level of advantage allowed them to improve on their circumstances in ways that less advantaged groups did not. Although these men eventually experienced the stable employment enjoyed by those with steady workforce participation, these men took nearly 20 years to reach parity with steady workers; because of this timing difference, we anticipate that, in comparison with steady workers, increasingly steady workers will likely experience substantial losses in their end-of-career wages, retirement savings, and income stability (Western et al. 2012).

Thirteen percent of men experienced increasing unemployment and out of labor force, experiencing a lower percent of paid work weeks and more time spent unemployed and out of labor force rise as they entered their mid to late forties. These men experienced several early-life disadvantages contributing to their midlife precarity, including demographic, occupational, and family-related variables. They did not, however, show any significant associations between the local employment context at age 25 and their employment trajectory. Given that these men were some of the most likely to be operators, fabricators, and laborers at age 25 (see Appendix Table A3), it is possible that their skills became less marketable in a changing labor market. Moreover, once they experienced an initial decline in weeks employed, their employment fell seemingly exponentially; it seems likely that these individuals will continue to face this cumulative disadvantage for the remainder of their careers (Elder et al. 2003).

The remaining 21 percent of the sample experienced much more precarious employment, including trajectories of intermittent workforce participation and early exits from work. Eleven percent of men experienced intermittent work, never showing year-round paid employment but still exhibiting some degree of continuity in their level of labor force attachment over the life course, as their time spent in employment, unemployment, and out of work was relatively constant year to year. Several demographic, occupational, and family disadvantages were positively associated with membership in this trajectory. Notably, this was the only trajectory significantly associated with having children in the household at age 25. A majority of men exhibiting intermittent work were Black (52 percent; see Appendix Table A3), and compared with non-Black non-Latino men, Black men were more than 2.5 times as likely to experience intermittent work than steady work. This suggests racial discrimination may be a significant factor in the "steadily unsteady" work of intermittent employment. Previous literature has documented a rise in men's experience of short-term, temporary periods not in paid employment (Coglianese 2018). Although studies indicate these individuals differ from the unemployed and often return to steady employment later (Coglianese 2018), our results suggest that intermittent workers experience relatively equal time unemployed and out of work; these breaks are a recurring feature of their careers. A

variety of occupations may result in this pattern, including agricultural or construction work (U.S. Department of Labor 2022). Future research should investigate heterogeneity within this multitrajectory.

Six percent of men faced an early-career exit, with both employment and unemployment rates lowering early in their careers. Given that these men were the most likely of any group to report health limitations at age 25, this group is likely to encompass those with chronic or early-onset disabilities, among other men with persistent loose attachment to the labor market. Early-career exiters had the lowest weeks of employment at age 27 of any group, a number that continued to decline over the next decade. Finally, 4 percent of men experienced midcareer exit, leaving work in their late 30s. Yet even in their twenties, the men in this group reported a relatively small proportion of weeks worked, suggesting that they had the most tenuous ties to the paid labor force. This trajectory may encompass men who feel their skill set is being "phased out" of the labor market, such as factory workers or other skilled laborers (Autor 2011; Coglianese 2018; Winship 2017), or men who are discouraged workers who leave the labor market after a considerable amount of time spent underemployed or unemployed (Dooley and Prause 2003; Sharone 2013).

Out of all six trajectories, early-career exit and midcareer exit men experienced some of the greatest early-life disadvantages, with many reporting low family socioeconomic status at their baseline interview, transportation limitations, lower paying occupations, and lower AFQT scores and educational attainment (see Appendix Table A3). This suggests early-life disadvantage set these men on much more precarious trajectories than their steady work counterparts. Whereas weeks out of the labor force accumulated immediately for early-career exit men, midcareer exiters saw a slightly delayed, but far more rapid, increase in time spent out of the labor force. Future work should seek to examine the diversity of paths to early work exits, as well as the effects of social disadvantage on the timing and pace of these paths.

Our findings both support and differ somewhat from other research identifying group-based trajectories of workforce participation in the NLSY79. Most notably, our multitrajectories include three patterns similar to those identified by Weisshaar and Cabello-Hutt (2020) in their analysis of weeks worked among NLSY79 men and women from ages 22 to 50. Like Weisshaar and Cabello-Hutt (2020), we identify groups of men with steady high, late entry, and early exits patterns. Our multitrajectories allow us to identify that the early exit groups typically experience increasing time out of the paid labor force (i.e., they are not unemployed). Additionally, we find that the group Weisshaar and Cabello-Hutt (2020) termed "late entry"—and in our study is increasingly steady—is employed most (but not all) weeks of the year and is as likely to be unemployed as out of the labor force, suggesting these men experience divergent routes to stable paid employment. We also identify intermittent employment patterns which were not identified by Weisshaar and Cabello-Hutt (2020). The difference across these studies is likely due to their different samples and methodologies. Our sample did not include women and may reveal new patterns that are likely not as characteristic of women. Our sample included person-year observations where respondents spent an entire year out of the labor force, allowing us to identify greater precarity among men. In addition, our multi-trajectory approach includes

time spent unemployed and out of the labor force, which likely affects the composition of our multitrajectory groups and their predictors. As such, measuring unemployment and out of the labor force as separate states allows us to establish greater inference about why men are not in full-time employment. By revealing when men are actively seeking employment and when they are not, we are able to more clearly hypothesize about disability, skills being phased out of the market, and seasonal work (early-career exit, midcareer exit, and intermittent work, respectively). Future research should continue to investigate the heterogeneity of workforce experiences and the variables most associated with job security and stability.

Limitations

Our study has several limitations. Group-based trajectory models and multitrajectory models focus on the group as the unit of comparison rather than the individual. This means the workforce experiences we present represent common experiences, but men assigned to these groups may have individual experiences that deviate from the groups to which they are assigned, although our approach does account for the probability an individual assigned to the correct group. We are also unable to adjust for the many experiences that affect men's employment across their careers, including health conditions, family circumstances, and economic shifts that occur after we begin measuring men's employment at age 27. Finally, our findings are less generalizable to the men who were most likely to attrit from the NLSY79 study, including Black men and non-U.S. natives.

Group-based trajectory models and other finite-mixture models have been critiqued in recent years for producing inconsistent results across methods, and for lacking a standardized approach for selecting the best-fitting number of groups (Sijbrandij et al. 2019; van der Nest et al. 2020; Warren et al. 2015). We address these concerns in three ways. First, by using the NLSY79 data, we measure individuals' experiences at closely spaced intervals, which improves the consistency of results. Second, we identify groups that are well specified (i.e., APPs above the 0.70 recommended threshold), indicating that individuals are, on average, a good fit for their assigned group (Nagin 2005). Third, we select the best-fitting number of groups by combining measures of model fit with existing theory and research rather than using model fit alone (Nagin 2005; van der Nest et al. 2020; Warren et al. 2015).

Conclusion

These findings clearly demonstrate that assumptions of the "ideal worker" do not account for structural and other barriers that so many men face at the start of their careers. In fact, our research suggests men experience far more time both out of the labor force and unemployed than the "ideal worker norm" prescribes. Although this norm is deeply intertwined with ideals of masculinity in the United States, it has not resisted the structural changes to paid employment over the past 40 years. With less than half of all men able to work stably across their working years, men's employment precarity appears to be a far more expansive phenomenon than is often understood. Moreover, gendered norms of breadwinning and the pressure on men to provide financially (Frech and Damaske 2019) may encourage less advantaged men to continue to seek steady work, which may keep them in the paid labor

force despite an inability to find a "good job," as with the intermittent workers. In addition to clear social, personal, and health consequences for inconsistent or intermittent work, studies show failure to achieve employment norms can have further social and personal consequences for men, including a toll on mental health and well-being, financial instability, reduced social status, strained personal relationships, and limited access to benefits or protections (Aquino et al. 2022; Dooley and Prause 2003; Frech et al. 2022). Given the prevalence of nonsteady work, public policy should seek to target the modifiable causes of men's lower workforce attachment.

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Biographies

Adrianne Frech is an associate professor of population health in the Department of Social Medicine at Ohio University Heritage College of Osteopathic Medicine—Cleveland. Her research investigates relationships between work, family, gender, and health across the life course.

Jane Lankes is a postdoctoral research fellow at the Grand Forks Human Nutrition Research Center. Her research examines the intersections of family, gender, and well-being, with focuses on motherhood, marriage, and quantitative methods. Her work has been published in *Gender & Society, Population Research & Policy Review*, and *Sociological Theory*.

Sarah Damaske is a professor of sociology and labor and employment relations at Pennsylvania State University. Her research examines the relationships between gender, class, and work and family transitions. She is the author of three books, including *The Tolls of Uncertainty: How Privilege and the Guilt Gap Shape Unemployment in America*.

Adrienne Ohler is an associate extension professor of applied economics at the University of Missouri in the Division of Applied Social Science. Her work rests at the intersection of regulatory economics, energy and health policy, and externalities affecting water quality, natural resource use, and human health.

Appendix

Table A1. Respondents' Number of Missing Waves for Work Participation Variables (n = 4,538).

Number of Waves Missing	n	Percentage	Cumulative Percentage
0	2002	44.1	44.1
1	808	17.8	61.9
2	401	8.8	70.8
3	267	5.9	76.7
4	209	4.6	81.2
5	162	3.6	84.8
6	160	3.5	88.3
7	114	2.5	90.9
8	72	1.6	92.4
9	95	2.1	94.5
10	92	2.0	96.6
11	107	2.4	98.9
12	49	1.1	100

Table A2.

Prevalence of the 10 Most Common Patterns of Missingness for Workforce Participation Variables, Ages 27 to 49.

						A	ge					
	27	29	31	33	35	37	39	41	43	45	47	49
44%												
3%												X
2%											X	
2%									X			
2%	X											
2%								X				
2%										X		X
1%		X	X	X	X	X	X	X	X	X	X	X
1%		X										
1%										X		

 $\it Note$: X = work participation missing at this age.

 Table A3.

 Descriptive Statistics across Men's Multitrajectories of Workforce Participation (n = 4,538).

	Steady Work Participation	Increasingly Steady work	Increasing UE and OOLF	Intermittent Work	Early- Career Exit	Midcareer Exit
	Percentage/ Mean (SD)	Percentage/ Mean (SD)	Percentage/ Mean (SD)	Percentage/ Mean (SD)	Percentage/ Mean (SD)	Percentage/ Mean (SD)
Demographic and early-life variables, age 25						
Latino	18%	21%	20%	20%	23%	24%
Black	20%	29%	33%	52%	54%	37%
Non-Latino, non-Black	62%	50%	47%	28%	23%	39%
Non-U.S. native	7%	9%	10%	7%	4%	6%
Lived below poverty line, 1979	11%	19%	18%	33%	37%	31%
Mother did not graduate from high school	33%	45%	46%	57%	63%	64%
AFQT percentile, 1980	47.37 (31.2)	35.64 (29.7)	32.17 (27.9)	21.67 (22.9)	14.42 (18.0)	20.11 (20.5)
Educational attainment, centered at 12 years	1.24 (2.3)	.39 (2.3)	.29 (2.2)	-0.60 (1.9)	-1.13 (1.90)	-0.67 (1.88)
Health limits work	2%	4%	3%	6%	9%	5%
Transportation limits access to a good job	15%	27%	27%	41%	43%	39%
Occupation						
Professional	18%	10%	9%	4%	3%	4%
Technical or sales	24%	16%	16%	9%	6%	11%
Service	11%	14%	16%	16%	14%	14%
Operators, fabricators, and laborers	26%	34%	37%	35%	29%	44%
Precision production, craft, repairs	19%	20%	19%	18%	11%	21%
Not in workforce	1%	7%	3%	18%	37%	6%
Longest job tenure in years, ages 22–25	2.96 (1.9)	2.21 (1.7)	2.47 (1.8)	1.50 (1.4)	1.12 (1.4)	1.90 (1.6)
Family and household variables, age 25						
Never married	56%	64%	60%	69%	75%	61%
Married	40%	28%	32%	21%	15%	32%

	Steady Work Participation	Increasingly Steady work	Increasing UE and OOLF	Intermittent Work	Early- Career Exit	Midcareer Exit
	Percentage/ Mean (SD)	Percentage/ Mean (SD)	Percentage/ Mean (SD)	Percentage/ Mean (SD)	Percentage/ Mean (SD)	Percentage/ Mean (SD)
Divorced or widowed	5%	8%	8%	10%	10%	6%
Children in household	24%	23%	24%	25%	16%	28%
Local context, age 25						
Lives in rural area	18%	16%	18%	16%	17%	23%
Local unemployment rate	7.79 (3.3)	8.09 (3.5)	7.78 (3.4)	7.90 (3.3)	8.06 (3.5)	8.07 (3.4)
Percent of workers in state with union contracts	18.% (7.6)	18% (7.8)	17% (7.6)	18% (7.8)	18% (7.8)	17% (8.0)
n	1,947	1,079	640	439	249	184

Note: AFQT = Armed Forces Qualifying Test; OOLF = out of labor force; UE = unemployment

References

Aisenbrey Silke, and Fasang Anette. 2017. "The Interplay of Work and Family Trajectories over the Life Course: Germany and the United States in Comparison." American Journal of Sociology 122(5):1448–84.

Aquino Taylor, Brand Jennie E., and Torche Florencia. 2022. "Unequal Effects of Disruptive Events." Sociology Compass 16(4):e12972. [PubMed: 38895138]

Aughinbaugh Alison, Pierret Charles R., and Rothstein Donna S.. 2017. "Attrition and Its Implications in the National Longitudinal Survey of Youth 1979." Washington, DC: Bureau of Labor Statistics.

Autor David H. 2011. "The Polarization of Job Opportunities in the U.S. Labor Market." Community Investments 23(Fall):11–41.

Autor David H., and Duggan Mark G.. 2003. "The Rise in the Disability Rolls and the Decline in Unemployment." Quarterly Journal of Economics 118(1):157–205.

Bakk Zsuzsa, and Kuha Jouni. 2021. "Relating Latent Class Membership to External Variables: An Overview." British Journal of Mathematical and Statistical Psychology 74(2): 340–62. [PubMed: 33200411]

Banerjee Sudipto, and Blau David. 2016. "Employment Trends by Age in the United States: Why Are Older Workers Different?" Journal of Human Resources 51(1):163–99.

Bastiaanssen Jeroen, Johnson Daniel, and Lucas Karen. 2020. "Does Transport Help People to Gain Employment? A Systematic Review and Meta-Analysis of the Empirical Evidence." Transport Reviews 40(5):607–28.

Binder Ariel J., and Bound John. 2019. "The Declining Labor Market Prospects of Less-Educated Men." Journal of Economic Perspectives 33(2):163–90. [PubMed: 33343082]

Bolck Annabel, Croon Marcel, and Hagenaars Jacques. 2004. "Estimating Latent Structure Models with Categorical Variables: One-Step versus Three-Step Estimators." Political Analysis 12(1):3–27.

Brand Jennie E. 2015. "The Far-Reaching Impact of Job Loss and Unemployment." Annual Review of Sociology 41:359–75.

Bureau of Labor Statistics. 2021. "The NLSY79 Sample: An Introduction." Retrieved June 21, 2021. https://www.nlsinfo.org/content/cohorts/nlsy79/intro-to-the-sample/nlsy79-sample-introduction.

Bureau of Labor Statistics. N.d. "NLSY79 Data Overview." Retrieved August 23, 2023. https://www.bls.gov/nls/nlsy79.htm.

- Center on Budget and Policy Priorities. 2021. "Tracking the COVID-19 Recession's Effects on Food, Housing, and Employment Hardships." Washington, DC: Center on Budget and Policy Priorities.
- Chen Victor Tan. 2015. Cut Loose: Jobless and Hopeless in an Unfair Economy. Berkeley: University of California Press.
- Cheng Siwei. 2016. "The Accumulation of (Dis)Advantage: The Intersection of Gender and Race in the Long-Term Wage Effect of Marriage." American Sociological Review 81(1):29–56.
- Cherlin Andrew J. 2014. Labor's Love Lost: The Rise and Fall of the Working-Class Family in America. New York: Russell Sage.
- Coglianese John. 2018. "The Rise of In-and-Outs: Declining Labor Force Participation of Prime Age Men." Retrieved August 23, 2023. http://econweb.umd.edu/~davis/eventpapers./CoglianeseRise.pdf.
- Cooper Marianne. 2014. Cut Adrift: Families in Insecure Times. Berkeley: University of California Press.
- Damaske Sarah. 2011. For the Family? How Class and Gender Shape Women's Work. New York: Oxford University Press.
- Damaske Sarah. 2021. The Tolls of Uncertainty: How Privilege and the Guilt Gap Shape Unemployment in America. Princeton, NJ: Princeton University Press.
- Damaske Sarah, and Frech Adrianne. 2016. "Women's Work Pathways across the Life Course." Demography 53(2):365–91. [PubMed: 27001314]
- Damaske Sarah, Frech Adrianne, and Wething Hilary. 2023. "The Life Course of Unemployment: The Timing and Relative Degree of Risk." Work and Occupations. doi:10.1177/07308884231162949.
- De Jong, Gordon F, and Anna B Madamba. 2001. "A Double Disadvantage? Minority Group, Immigrant Status, and Underemployment in the United States." Social Science Quarterly 82(1):117–30.
- Dooley David, and Prause JoAnn. 2003. The Social Costs of Underemployment: Inadequate Employment as Disguised Unemployment. Cambridge, UK: Cambridge University Press.
- Elder Glen H. Jr., , Johnson Monica Kirkpatrick, and Crosnoe Robert. 2003. "The Emergence and Development of Life Course Theory." Pp. 3–19 in Handbook of the Life Course, edited by Mortimer JT and Shanahan MJ. Boston: Springer.
- Federal Reserve Board. 2021. "Economic Well-Being of U.S. Households in 2020." Washington, DC: Federal Reserve Board.
- Foote Christopher L., and Ryan Richard W. 2015. "Labor Market Polarization over the Business Cycle." NBER Working Paper No. 21030. Cambridge, MA: National Bureau of Economic Research.
- Frech Adrianne, and Damaske Sarah. 2019. "Men's Income Trajectories and Physical and Mental Health at Midlife." American Journal of Sociology 124(5):1372–1412.
- Frech Adrianne, Damaske Sarah, and Ohler Adrienne. 2022. "The Life Course of Unemployment and Midlife Health." Journal of Aging and Health 34(6–8):1081–91. [PubMed: 35521702]
- Gangl Markus. 2006. "Scar Effects of Unemployment: An Assessment of Institutional Complementarities." American Sociological Review 71(6):986–1013.
- Glauber Rebecca. 2018. "Trends in the Motherhood Wage Penalty and Fatherhood Wage Premium for Low, Middle, and High Earners." Demography 55(5):1663–80. [PubMed: 30255427]
- Hipple Steven F. 2016. "Labor Force Participation: What Has Happened since the Peak?" Washington, DC: U.S. Bureau of Labor Statistics.
- Hirsch Barry T., Macpherson David A., and Vroman Wayne G. 2001. "Estimates of Union Density by State." Monthly Labor Review 124(7):51–55.
- Hollister Matissa N. 2011. "Employment Stability in the U.S. Labor Market: Rhetoric Versus Reality." Annual Review of Sociology 37:305–24.
- Hollister Matissa N., and Smith Kristin E.. 2014. "Unmasking the Conflicting Trends in Job Tenure by Gender in the United States, 1983–2008." American Sociological Review 79(1):159–81.

Hout Michael, Levanon Asaf, and Cumberworth Erin. 2011. "Job Loss and Unemployment." Pp. 59–81 in The Great Recession, edited by Grusky DB, Western B, and Wimer C. New York: Russell Sage.

- Jackson Heide, Engelman Michal, and Bandeen-Roche Karen. 2019. "Robust Respondents and Lost Limitations: The Implications of Nonrandom Missingness for the Estimation of Health Trajectories." Journal of Aging and Health 31(4):685–708. [PubMed: 29254422]
- Johnson Richard W., Butrica Barbara A., and Mommaerts Corina. 2010. "Work and Retirement Patterns for the G.I. Generation, Silent Generation, and Early Boomers: Thirty Years of Change." Center for Retirement Research Working Paper 2010–8. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Kalleberg Arne L. 2009. "Precarious Work, Insecure Workers: Employment Relations in Transition." American Sociological Review 74(1):1–22.
- Kalleberg Arne L. 2011. Good Jobs, Bad Jobs: The Rise of Polarized and Precarious Employment Systems in the United States, 1970s to 2000s. New York: Russell Sage.
- Kalleberg Arne L., and Vallas Steven P. 2018. "Probing Precarious Work: Theory, Research, and Politics." Research in the Sociology of Work 31:1–30.
- Moen Phyllis, Kojola Erik, and Schaefers Kate. 2017. "Boomers at Work and in Transition." Minneapolis: University of Minnesota.
- Moen Phyllis, and Roehling Patricia. 2005. The Career Mystique: Cracks in the American Dream. Lanham, MD: Rowman & Littlefield.
- Moen Phyllis, and Sweet Stephen. 2004. "From 'Work–Family' to 'Flexible Careers." Community, Work & Family 7(2):209–26.
- Nagin Daniel S. 2005. Group-Based Modeling of Development. Cambridge, MA: Harvard University Press
- Nagin Daniel S., Jones Bobby L., Passos Valéria Lima, and Tremblay Richard E.. 2018. "Group-Based Multi-trajectory Modeling." Statistical Methods in Medical Research 27(7):2015–23. [PubMed: 29846144]
- Nelson Margaret K., and Joan Smith. 1999. Working Hard and Making Do: Surviving in Small Town America. Berkeley: University of California Press.
- Pager Devah, and Shepherd Hana. 2008. "The Sociology of Discrimination: Racial Discrimination in Employment, Housing, Credit, and Consumer Markets." Annual Review of Sociology 34:181– 209.
- Parolin Zachary. 2020. "Organized Labor and the Employment Trajectories of Workers in Routine Jobs: Evidence from US Panel Data." Washington, DC: Brookings Institution.
- Pedulla David S. 2016. "Penalized or Protected? Gender and the Consequences of Nonstandard and Mismatched Employment Histories." American Sociological Review 81(2):262–89. [PubMed: 27182069]
- Ridgeway Cecilia L. 2009. "Framed before We Know It: How Gender Shapes Social Relations." Gender & Society 23(2):145–60.
- Ridgeway Cecilia L. 2011. Framed by Gender: How Gender Inequality Persists in the Modern World. New York: Oxford University Press.
- Rothstein Donna. 2019. "Men Who Do Not Work during Their Prime Years: What Do the National Longitudinal Surveys of Youth Data Reveal?" Washington, DC: U.S. Bureau of Labor Statistics.
- Saloniemi Antti, Salonen Janne, Nummi Tapio, and Virtanen Pekka. 2021. "The Diversity of Transitions during Early Adulthood in the Finnish Labour Market." Journal of Youth Studies 24(7):851–70.
- Sharone Ofer. 2013. Flawed System/Flawed Self: Job Searching and Unemployment Experiences. Chicago: University of Chicago Press.
- Sijbrandij Jitske, Hoekstra Tialda, Almansa Josué, Reijneveld Sijmen, and Bültmann Ute. 2019. "Identification of Developmental Trajectory Classes: Comparing Three Latent Class Methods Using Simulated and Real Data." Advances in Life Course Research 42:100288. [PubMed: 36732968]
- Slack Tim, and Jensen Leif. 2002. "Race, Ethnicity, and Underemployment in Nonmetropolitan America: A 30-Year Profile." Rural Sociology 67(2):208–33.

Thébaud Sarah. 2010. "Masculinity, Bargaining, and Breadwinning: Understanding Men's Housework in the Cultural Context of Paid Work." Gender & Society 24(3):330–54.

- Thébaud Sarah, and Pedulla David S.. 2016. "Masculinity and the Stalled Revolution: How Gender Ideologies and Norms Shape Young Men's Responses to Work–Family Policies." Gender & Society 30(4):590–617.
- U.S. Department of Labor. 2022. "SeasonalJobs.dol.gov." Retrieved October 26, 2022. https://seasonaljobs.dol.gov.
- van der Nest Gavin, Passos Valéria Lima, Candel Math J.J.M., and van Breukelen Gerard J. P.. 2020. "An Overview of Mixture Modelling for Latent Evolutions in Longitudinal Data: Modelling Approaches, Fit Statistics and Software." Advances in Life Course Research 43:100323. [PubMed: 36726256]
- Vermunt Jeroen K. 2010. "Latent Class Modeling with Covariates: Two Improved Three-Step Approaches." Political Analysis 18(4):450–69.
- Warren John Robert, Luo Liying, Halpern-Manners Andrew, Raymo James M., and Palloni Alberto. 2015. "Do Different Methods for Modeling Age-Graded Trajectories Yield Consistent and Valid Results?" American Journal of Sociology 120(6):1809–56.
- Weisshaar Katherine, and Cabello-Hutt Tania. 2020. "Labor Force Participation over the Life Course: The Long-Term Effects of Employment Trajectories on Wages and the Gendered Payoff to Employment." Demography 57(1):33–60. [PubMed: 31997232]
- Western Bruce, Bloome Deirdre, Sosnaud Benjamin, and Tach Laura. 2012. "Economic Insecurity and Social Stratification." Annual Review of Sociology 38(1):341–59.
- Winship Scott. 2017. "What's behind Declining Male Labor Force Participation: Fewer Good Jobs or Fewer Men Seeking Them?" Arlington, VA: Social Science Research Network.
- Yavorsky Jill E., and Dill Janette. 2020. "Unemployment and Men's Entrance into Female-Dominated Jobs." Social Science Research 85:102373. [PubMed: 31789186]
- Young Rebekah, and Johnson David R.. 2015. "Handling Missing Values in Longitudinal Panel Data With Multiple Imputation." Journal of Marriage and Family 77(1):277–94. [PubMed: 26113748]

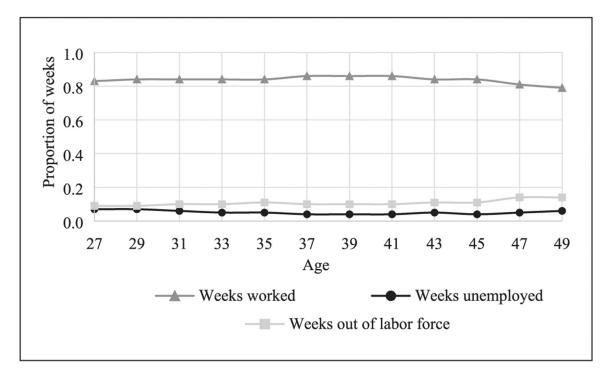


Figure 1. Men's workforce participation from ages 27 to 49 (n = 4,538).

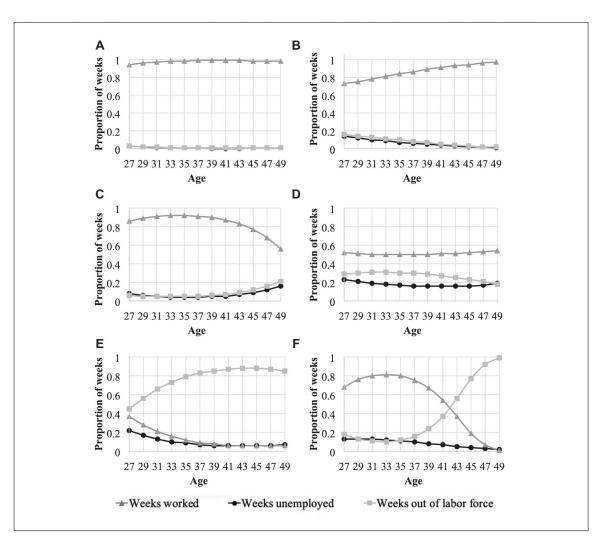


Figure 2. Multitrajectories of men's workforce participation from ages 27 to 49 (n = 4,538). (A) Steady work participation (41 percent), (B) increasingly steady work (25 percent), (C) increasing unemployment and out of labor force (13 percent), (D) intermittent work (11 percent), (E) early-career exit (6 percent), and (F) midcareer exit (4 percent).

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Table 1.

Descriptive Statistics of Predictors of Men's Multitrajectories (n = 4,538).

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	Percentage/Mean (SD)
Early-life advantages and demographics, age 25	
Race/ethnicity	
Latino	20%
Black	30%
Non-Latino, non-Black	51%
Non-U.S. native	7%
Lived below poverty line, 1979	18%
Mother did not graduate from high school	43%
AFQT percentile, 1980	37.75 (30.5)
Educational attainment, centered at 12 years	0.54 (2.34)
Health limits work	3%
Transportation limits access to a good job, ages 18-25	24%
Occupation	
Professional	12%
Technical or sales	18%
Service	13%
Operators, fabricators, laborers, and agriculture	31%
Precision production, craft, repairs	19%
Not in workforce	7%
Longest job tenure in years, ages 22-25	2.42 (1.84)
Family and household, age 25	
Marital status	
Never married	61%
Married	33%
Divorced or widowed	7%
Children in household	23%
Local context, age 25	
Lives in rural area	18%
Local unemployment rate	7.86 (3.38)
Percentage of workers in state with union contracts	20% (8)

Note: Descriptive statistics were calculated using the misum command in Stata 16. AFQT = Armed Forces Qualifying Test.

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Table 2.

Estimates of Model Fit for Multitrajectories of Men's Workforce Participation.

Number of Multitrajectories	BIC (Persons)	BIC (Person-Years)	Lowest Group APP	Average APP	tumber of Multitrajectories BIC (Persons) BIC (Person-Years) Lowest Group APP Average APP Number of Groups with <5% of Sample
4	-80,087.32	-80,012.06	626.	686	0
5	-79,011.73	-78,918.56	.863	.904	0
9	-78,235.40	-78,117.60	.872	.914	1
7	-75.909.74	-76.038.75	.901	926	2

Note: APP = average probability of correct placement to assigned multitrajectory; BIC = Bayesian information criterion. Bolded row indicates model of best fit.

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Table 3.

Characteristics of Six Multitrajectories of Men's Workforce Participation (n = 4,538).

	Percentage APP	APP		Mean Percentage Weeks Employed, Ages Mean Percentage Weeks Unemployed, Ages Mean Percentage Weeks out of Labor Force, 27–49 Ages 27–49	Mean Percentage Weeks out of Labor Force, Ages 27-49
Steady work participation	41	41 .939	86	I	1
Increasingly steady work	25	.876	88	v	L
Increasing UE and OOLF	13	.872	84	7	8
Intermittent work	11	.933	52	18	27
Early-career exit	9	776.	15	10	75
Midcareer exit	4	.948	55	∞	38
Total	100	.914	83	ĸ	11

Note: APP = average probability of correct placement to assigned group-based trajectory; OOLF = out of the labor force; UE = unemployed.

Table 4. Covariate Association with Men's Multitrajectories Using Multinomial Logistic Regression with Bolck, Croon, and Hagenaars Correction (n = 4,538).

	Increasingly Steady	Increasing UE and OOLF	Intermittent Work	Early-Career Exit	Midcareer Exit
Early-life advantages and	1.06	.92	1.53**	2.30 ***	1.09
demographics, age 25 Latino (reference: non-Latino, non-Black)	(.91-1.24)	(.78–1.07)	(1.14–2.03)	(1.62-3.26)	(.81–1.5)
Black	1.19*	1.34***	2.62**	2.34 ***	1.06
	(1.04–1.36)	(1.10–1.64)	(1.93–3.57)	(1.85-2.98)	(.87-1.29)
Non-U.S. native	1.21	1.42**	.73	.23***	.45**
	(.99-1.48)	(1.13–1.79)	(.49-1.08)	(.1147)	(.26–.77)
Lived below poverty line, 1979	1.17	.99	1.38**	1.26	1.33*
	(.98-1.39)	(.78–1.27)	(1.12–1.69)	(.93-1.72)	(1.04–1.71)
Mother did not graduate from high	1.05	1.11	1.05	1.00	1.62***
school	(.92-1.20)	(.93–1.31)	(.89–1.24)	(.72–1.37)	(1.35–1.95)
AFQT percentile, 1980	.996**	.993***	.992**	.97***	.98**
	(.994–.999)	(.990–.995)	(.987–.997)	(.97–.98)	(.98–.98)
Educational attainment	.87***	.89***	.73***	.67***	.79***
	(.8490)	(.84–.95)	(.69–.78)	(.63–.72)	(.74–.83)
Health limits work	1.75 ***	1.37	1.93*	3.10***	2.07 ***
	(1.35–2.28)	(1.00–1.87)	(1.18–3.14)	(2.01–4.80)	(1.53–2.81)
Transportation limits access to a	1.63 ***	1.61***	2.05 ***	1.98 ***	2.11***
good job, ages 18–25	(1.46–1.82)	(1.39–1.86)	(1.63–2.58)	(1.50–2.60)	(1.71–2.60)
Occupation (reference: professional)	.079	1.08	1.17	.87	1.50
Technical or sales	(.87-1.19)	(.82–1.42)	(.83-1.64)	(.51-1.50)	(.73-3.08)
Service	1.18	1.37*	1.90***	1.45	1.82
	(.98-1.42)	(1.01–1.86)	(1.41–2.56)	(.97-2.17)	(.96-3.45)
Operators, fabricators, and	1.44**	1.55 **	1.94***	1.33	2.35*
laborers	(1.19–1.75)	(1.21–1.98)	(1.44–2.62)	(.88-1.99)	(1.27-4.34)
Precision production, craft,	1.20	1.23	1.82**	1.01	1.94*
repairs	(.97-1.49)	(.891–1.71)	(1.24–2.67)	(.60-1.72)	(1.05-3.58)
Not in workforce	5.38 ***	2.04	16.89***	28.20 ***	6.03 ***
	(4.10–7.05)	(.86–4.87)	(10.59–26.94)	(15.52–51.24)	(2.52–14.46)
Longest job tenure in years, ages 22-	.81 ***	.87**	.63 ***	.59***	.71 ***
25	(.77–.85)	(.79–.96)	(.58–.69)	(.53–.66)	(.65–.78)
Family and household, age 25 Married	.60 ***	.78*	.45 ***	.51***	.71*
(reference: never married)	(.53–.68)	(.61–.98)	(.35–.59)	(.38–.68)	(.54–.92)
Divorced or widowed	1.09	1.28*	1.36	1.32	.71*
	(.88–1.33)	(1.01–1.63)	(.99-1.86)	(.95-1.83)	(.51–.98)
Children in household $(1 = yes)$	1.15	.95	1.51**	.95	.955

Increasing UE and OOLF Early-Career Increasingly Intermittent Steady Work **Midcareer Exit** Exit (1.00-1.29)(.76-1.20)(1.19-1.90)(.70-1.29)(.73 - 3.08)Local context, age 25 Lives in rural .83 ** .98 .92 .87 1.19 area (.73 - .94)(.81-1.19)(.74-1.14)(.66-1.13)(.97-1.45)Local unemployment rate 1.03 *** 1.00 1.00 1.01 1.02 (1.02-1.04)(.98-1.03)(.97-1.04)(.97-1.04)(.99-1.05)Percentage of workers in state with 1.01 1.00 .998 1.02 *** 1.03 ** union contracts (.99-1.01)(.991-1.01)(1.01-1.03)(1.01-1.04)(1.00-1.02)Constant 1.05 .64 .32 .35 .22

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(.01-4.7)

Note: The reference category is steady work. Results are averaged across 20 datasets using the mi estimate command in Stata 16 and presented as relative risk ratios. AFQT = Armed Forces Qualifying Test; OOLF = out of labor force; UE = unemployment.

(.03-12.2)

(.02-5.9)

(.02-6.1)

(.05-22.7)

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two-tailed hypothesis tests.

^{*}p < .05,

p < .01, and

^{***} p<.001,