Social Science Research 85 (2020) 102373

Contents lists available at ScienceDirect

Social Science Research

journal homepage: http://www.elsevier.com/locate/ssresearch

Unemployment and men's entrance into female-dominated jobs

Jill E. Yavorsky [a,*,1], Janette Dill [b,1]

[a] Department of Sociology, University of North Carolina Charlotte, 476 Fretwell Building, 9201 University City Boulevard, Charlotte, NC 28223, USA

[b] School of Public Health, University of Minnesota, 15-205 Phillips-Wangensteen Building, 420 Delaware St SE, Minneapolis, MN 55455, USA

ARTICLE INFO

Keywords:
Female-dominated jobs
Occupational prestige
Unemployment
Income and wages
Work and occupations

ABSTRACT

Despite the contraction of many male-dominated occupations, men have made limited progress in entering female-dominated jobs. Using monthly employment histories from the SIPP, we examine whether individual economic conditions—such as a period of unemployment—are associated with men subsequently pursuing female-dominated work. Specifically, we ask whether men are more likely to enter female-dominated jobs after unemployment, compared to men who take a new job directly from employment. We find that unemployment significantly increases the odds of men entering female-dominated work among men who make job transitions. By examining changes in occupational prestige as well as wage differences before and after unemployment, we also find that entering a female-dominated job (compared to other job types) may help men mitigate common scarring effects of unemployment such as wage losses and occupational prestige downgrades. Accordingly, this study reveals a critical occupational route that may allow men to remain upwardly mobile after involuntary unemployment.

1. Unemployment and men's entrance into female-dominated jobs

The US labor market has undergone major changes in the types of occupations that are in demand over the last fifty years. Since the 1970s, many jobs and sectors traditionally dominated by men have contracted or disappeared, whereas the demand for jobs traditionally held by women has increased significantly, with these patterns expected to continue in the future (Autor et al., 2006; Autor and Dorn, 2013; Dwyer, 2013; Wright and Dwyer, 2003). In fact, women dominate the majority of industries projected to have the highest job and wage growth over the next decade (Bureau of Labor Statistics, 2017). At the same time, men's labor force participation rate has been declining, particularly among working-class men who work in sectors that have experienced some of the greatest job contractions (Goodman and Mance, 2011; Mishel et al., 2012). If the jobs that women currently dominate represent the future occupational landscape, an imminent question is whether men will enter them.

Stratification scholars have widely documented that men's and women's entry into gender-atypical jobs has been asymmetrical. Whereas women (particularly highly-educated women) have made significant progress entering male-dominated occupations, men have made little progress entering female-dominated occupations (England, 2010; Goldin, 2006). Multiple factors may dissuade men from entering female-dominated occupations, despite that many of these occupations have high job growth and stability. First, female-dominated jobs pay less and offer fewer benefits than comparable male-dominated jobs (Blau and Kahn, 2017; England, 1992;

* Corresponding author.
E-mail address: jyavorsk@uncc.edu (J.E. Yavorsky).
[1] Equal authorship.

https://doi.org/10.1016/j.ssresearch.2019.102373
Received 10 February 2019; Received in revised form 3 October 2019; Accepted 16 October 2019
Available online 18 October 2019
0049-089X/

Levanon et al., 2009). Second, men may face social penalties by entering work that challenges masculine ideals that stress that men should repudiate and distance themselves from feminine-typed activities (Henson and Rogers, 2001; Pullen and Simpson, 2009). Nevertheless, even when female-dominated jobs *do* pay well and have intrinsic rewards associated with them, many men resist entering them. In this study, we examine whether an individual economic condition—unemployment—is associated with an increase of men pursuing female-dominated work, relative to men who transition to a new job directly from employment.

Scholarly attention on men in nontraditional jobs has increased, but research in this area, though important, has largely focused on men's experiences once they're *in* female-dominated work. Specifically, this scholarship has concentrated either on the glass escalator effect—the upward mobility and advantages associated with men working in these jobs (Maume 1999; Price-Glynn and Rakovski, 2012; Smith 2012; Williams 1992)—or on men's personal narratives on working in occupations that are culturally seen as incongruent with their gender (Chusmir, 1990; Henson and Rogers, 2001; Pullen and Simpson, 2009; Wingfield, 2009). Insufficient attention, however, has been devoted to uncovering impetuses that spur some men to enter female-dominated jobs, despite the implications for understanding men's current and future employment prospects.

One potentially life-changing, economic circumstance that could influence men's occupational choices is unemployment. Unemployment is associated with an increased risk of poverty, food insecurity, higher credit card debt, home/mortgage loss (Brand, 2015), as well as a host of psychological disorders such as depression and anxiety (Paul and Moser, 2009). Unemployment may be especially distressing to men because traditional male gender expectations emphasize the importance of employment and financially providing for one's family (Nomaguchi and Johnson, 2016). Existing masculinity and gender theories predict competing hypotheses, however, as to whether unemployment would increase *or* decrease the likelihood of men entering a subsequent female-dominated occupation. On the one hand, unemployment threatens a key avenue by which men derive masculine status, their jobs (Michniewicz et al., 2014), and thus, unemployed men could double-down on their searches to secure a male-dominated, or at the very least mixed-gender, job in order to repair this breach in masculinity. Men may also be willing to risk a longer unemployment period, rather than potentially further compromising their masculine status by taking a female-dominated job. On the other hand, unemployment could act as a "shock" (DiPrete and McManus, 2000; Hacker, 2008) that prompts men to re-assess current viable job options and consider different alternatives than what men would have considered when they were fully employed and had financial security.

Using longitudinal data from the Survey of Income and Program Participation (SIPP) that includes detailed monthly retrospective data collected every four months, we examine whether men are more likely to switch into a female-dominated occupation after a period of unemployment, compared to men who make a job transition while currently employed. We then constrain the sample to *include only unemployed men* and examine changes in occupational prestige as well as wage differences before and after unemployment, depending on the type of job they enter. Notably, in these analyses, men's occupation before their job transition (from unemployment or employment) are all in male-dominated or mixed-gender occupations; thus, we capture the first time that men report entering a female-dominated occupation during the survey period. Because female-dominated jobs tend to pay less than comparable mixed-gender and male-dominated jobs (Blau and Kahn, 2017; England, 1992; Levanon et al., 2009), men's wages may decline (between their pre- and post-unemployment job) if they switch into a female-dominated job after unemployment. However, a contrasting expectation also exists. Unemployed men may specifically seek higher paying or more prestigious female-dominated jobs to offset any status-loss associated with working alongside women (Reskin and Roos, 1990; Skuratowicz and Hunter, 2004). Also, men's previous work histories in male-dominated or mixed-gender fields may enhance their status to new employers (Alksnis et al., 2008), allowing men to access higher level female-dominated jobs than they otherwise could by remaining in mixed-gender or male-dominated occupations.

Our analyses answer two key research questions: 1) Are men more likely to switch into female-dominated jobs after unemployment, compared to men who take a new job directly from employment? 2) For men who were previously employed in a male-dominated or mixed-gender occupation, do any career-enhancing processes occur in which men actually increase their pay or occupational prestige (between their pre- and post-unemployment job) by switching into a female-dominated occupation after unemployment? We define occupational prestige as a social consensus of the "structural order of occupations by their general desirability (Goldthorpe and Hope, 1974)" (Magnusson and Nermo, 2017, 804).

The uneven nature of change in the gender system—the fact that women have embraced masculine-typed activities while men have not done the reverse—remains a stubborn impediment to continued gender progress in the U.S. (England, 2010). It also remains a potential barrier to men's *own* future employment, given the changing labor market emphasis on female-dominated jobs. We contribute to this conversation by uncovering whether men, when faced with a lack of income stream and/or limited employment options (as often the case of unemployed job-seekers), are willing to cross occupational gender boundaries. We focus on whether men are willing to enter jobs that are culturally depicted as incongruent with men and masculinity (i.e., jobs that are clearly female-dominated) because these are the jobs that men have made the least progress integrating into (England, 2010; Levanon et al., 2009). Even small occurrences of men entering female-dominated jobs could represent movement toward desegregating occupations. Indeed, a recent study on men's entrance into nursing highlights how small, but incremental upticks in the proportion of men in this occupational field has led to the pattern by which "men have gone from rarities in the nursing field to having a significant, if minority, presence" (Munnich and Wozniak, 2019, 2). Another important contribution of the current study is that it has the potential to challenge prior research that widely depicts unemployment as generally associated with wage declines and occupational downgrades for men's re-entry jobs. Indeed, a long line of economic research shows that involuntary unemployment is associated with lower wages in both the short- and long-term (Arulampalam, 2001; Jacobson et al., 1993; Ruhm, 1991; Stevens, 1997) and that wage losses are especially large when workers are displaced from typically male-dominated industries (Jacobson et al., 1993). We find that transitioning into female-dominated jobs may actually help some men avoid economic costs typically associated with unemployment. Even if some of the men who enter a female-dominated job use it as a "stopgap" position before moving back to a male-dominated or

mixed-gender job (Torre, 2018), these positions could fill a gap in employment and provide an important income stream for themselves or their families during unemployment. It could also open up men to possibilities of entering another female-dominated job, with perhaps more permanent intentions, in the future. In sum, our study contributes to important literature on work, occupations, and gender and identifies a key economic condition – unemployment – associated with men's entrance into female-dominated jobs.

2. Empirical foundations

Scholars have paid increasing attention to the pronounced rise of female-dominated jobs and the decline of male-dominated jobs, in part, because these patterns provide no signal of slowing down (Autor et al., 2006; Autor and Dorn, 2013; Cortes et al., 2018; Dwyer and Wright, 2012; Wright and Dwyer, 2003). The US labor market has made dramatic shifts to de-emphasizing routine manual skills that have historically characterized many working-class male-dominated jobs, to emphasizing relational-oriented and interpersonal skills, more common in care work or service jobs that women tend to hold (Autor et al., 2006; Dwyer, 2013). Although many of these growing female-dominated jobs are low paying (particularly in the service industry), many are not – such as those in the health or education sector (Dwyer, 2013; Dwyer and Wright, 2012; Holzer and Lerman, 2009). These broader patterns indicate that US workers, particularly men who are employed in many areas in which jobs are shrinking, may need to change careers to better match the needs of the labor market; otherwise, they risk being in precarious jobs for the remainder of their careers, or potentially, left behind by the labor market altogether.

Gender and work scholars have been theoretically grappling with this bigger question—what will it take for men to consider female-oriented work— for over a decade, given that most of the desegregation progress in occupations has been led by women, not men (England, 2010; Goldin, 2006; Roos and Stevens, 2018). The research we do have on why some men enter female-dominated jobs tends to focus on the experiences, beliefs, or sexual or gender orientations of adolescents that later predict men's entrance into female-dominated jobs (Barber, 2008; Hardie, 2015; Ueno et al., 2013). While valuable, this research primarily emphasizes the role men's career interests or aspirations played in their job selection; however, based on men's persistent low representation in female-dominated jobs (Blau et al., 2013), it would appear that relatively few men actively seek or aspire to work in female-dominated jobs. This research also does not consider reasons behind later career changes into female-dominated work that may or may not be tied to their career interests and affinities. Notably, Torre's (2018) recent work on how the sex composition of occupations influences men's career pathways is informative. Using NLSY 1979, she finds that men are significantly less likely than women to transition from a male-dominated or mixed-gender job into a female-dominated job and are more likely to transition out of a female-dominated job once they enter them. However, the predominate attention in this study was on men's *exits* from female-dominated jobs, with little focus on how economic situations, such as unemployment, may matter for men's initial transitions.

Over the past several decades, job loss and periods of unemployment have become more common, and weakened job security has come to characterize the US labor market (Gangl, 2012; Kalleberg, 2009; Kalleberg et al., 2000). In response to the changing precarity of work, many researchers have focused on the career-related consequences, or scarring effects, of unemployment (Arulampalam, 2001; Carrington and Fallick, 2017; Gangl, 2006). A substantial body of work documents that unemployment has long-lasting negative impacts on a worker's career, such as reduced pay and job-quality (i.e., lower authority and benefits) compared to jobs they previously held and compared to workers who were never unemployed (Arulampalam, 2001; Brand, 2015, 2006; Carrington and Fallick, 2017; Cha and Morgan, 2010). Additionally, unemployed workers are more likely to work part-time (Farber, 2017) and experience greater difficulty obtaining callbacks for interviews when their resume indicates an unemployment period, compared to job-seekers who do not have any employment gaps on their resume (Pedulla, 2016). Economic theories that stress human capital models commonly suggest that scarring effects occur because unemployment results in a depreciation of worker's general skills, in addition to a loss of firm-specific skills, which are assumed to be non-transferable to a new firm (Becker, 1962; Oi, 1962; Carrington and Fallick, 2017). Other perspectives stress that scarring consequences result from a stigma that becomes attached to job-seekers who have an unemployment record: employers may view unemployment as a marker of lower worker quality and thus, be less inclined to hire them (Gangl, 2006; Gibbons and Katz, 1991; Oberholzer-Gee, 2008).

Whereas scholars have examined how these negative impacts may vary across different demographic groups and by industries (Cha and Morgan, 2010; Ehlert, 2013; Jacobson et al., 1993; Lassus et al., 2015), research has yet to discern whether wage and occupational status loss typically associated with unemployment operates in the same way when men switch into female-dominated jobs. The current study builds on and extends prior research by directing attention to individual-level conditions that could be associated with men's movement into occupations typically considered incongruent with their gender, with results that show that female-dominated jobs may actually help *off-set* negative career consequences that men generally experience after unemployment.

3. Theoretical foundations

3.1. Masculinity, unemployment, and entry into female-dominated work

The foundational premises of normative masculinity and thus how men attain status in our society stands as a major barrier to men embracing female-dominated work. Although masculinity varies by context, social group, and time period, scholars generally agree that men's jobs are central to their masculine identities and to the social status accorded to them by others (Connell, 2005; Friedman, 2015; Ridgeway, 2011). Also, central to masculine identity and status is that men repetitiously distance themselves from things associated with femininity or women (Schrock and Schwalbe, 2009). Men can, therefore, lose social status by working in a female-dominated job (Henson and Rogers, 2001; Pullen and Simpson, 2009) because they are aligning a key masculine marker, their

job, with women and devalued feminine-typed characteristics that are typically stressed in these occupations (Yavorsky, 2019). Unemployment may further prime men's sensitivities to these cultural devaluation processes because unemployment can cause men to feel emasculated (Demantas and Myers, 2015). In reaction, men may enact compensatory masculinity practices to reduce perceived threats to their masculine identities (Willer et al., 2013); thereby, prompting men to foreclose viable options of pursuing female-dominated work.

On top of social status—though certainly related, there may be economic disincentives for men to enter female-dominated work. Since the mid-to-late 1980s, scholars have demonstrated that female-dominated jobs pay less and offer fewer benefits than male-dominated or mixed-gender jobs (England, 1992; Levanon et al., 2009). Indeed, men's concentration in higher paying male-dominated jobs accounts for a significant portion of the gender wage gap (Blau and Kahn, 2017). Additionally, men's job preferences may dis-align with characteristics more common in female-dominated jobs, like lower work hours and more part-time status—characteristics that also contribute to suppressed wages in these jobs (Usui, 2009). Thus, unemployment may not be enough to spur men to risk both lower wages, fewer work hours, and/or masculine status to enter female-dominated work.

However, other elements surrounding masculinity, related to breadwinning, suggest that unemployment may *increase* men's likelihood to enter female-dominated work, relative to men who transition to a new job directly from employment. Unemployment is considered a breach to the masculine social contract that men maintain full-time employment and provide financial, if not breadwinning, support to their families (Cha and Thébaud, 2009; Michniewicz et al., 2014). As such, being employed and at least earning some wages may outweigh any social status demotions that men may experience by being employed in a female-dominated job.

At the same time, unemployment may act as a "shock" that spurs men to consider job-choices not previously considered. A shock can be described as a jarring event that prompts workers to reevaluate their current employment situation or options (Dill et al., 2013; DiPrete and McManus, 2000; Lee et al., 2008). On the one hand, men could double-down on their searches for male-dominated or mixed-gender work. On the other hand, men who previously worked in male-dominated or mixed-gender fields may experience serious challenges securing jobs in their previously employed areas, compared to men who transition to new jobs while currently employed. For example, information about job leads in their pre-unemployment field may be reduced because they have less access to their pre-unemployment social networks (Calvó-Armengol and Jackson, 2004). In contrast, men who are looking to move to a new job directly from employment likely have their social networks in tact in their current fields. Moreover, unemployed men may face fewer callbacks for interviews than men who are employed and looking for a new job because of the scarring effects of having a period of unemployment, particularly a long period of unemployment, on their resume (Eriksson and Rooth, 2014; Pedulla, 2016). Thus, the shock of unemployment—and the prospect of serious financial distress—may induce men to cast a wider net for job opportunities, including for female-dominated occupational prospects, than they normally would during times of employment. Unemployed men likely realize that having narrowly-defined job searches could lead to more serious consequences such as missed house payments, food insecurity, or credit card debt (McCall, 1970; Mortensen, 1970; Rogerson et al., 2005) than men who are currently employed and have a steady income.

This individual-level shock of unemployment may also prompt men to consider more seriously how macro-level changes in the labor market may impact their careers. Unemployment may serve as a "wake-up call" to men that they are not impervious to the realities of a shifting labor market. For example, men may compare declining job prospects in many male-dominated sectors, particularly lower skilled jobs (e.g., manufacturing and transportation) to the growing job prospects in female-dominated jobs (Autor et al., 2006; Autor and Dorn, 2013; Dwyer, 2013; Wright and Dwyer, 2003). Given these broader patterns, men may perceive female-dominated jobs as a pathway to secure longer-term employment stability. Thus, although both outcomes are possible (men being more *or* less likely to enter female-dominated jobs post-unemployment), we think there is greater theoretical and evidentiary support that unemployment will be associated with increases in men's likelihood to enter female-dominated jobs:

Hypothesis 1. Unemployed men are more likely to transition to a female-dominated job than men who made a job transition while currently employed.

3.2. Wage and occupational prestige premiums: female-dominated jobs and unemployment

Could unemployed men increase their wages and occupational prestige by switching into a female-dominated job, instead of remaining in a male-dominated or mixed-gender job? Given men's (particularly white men's) advantageous token status in female-dominated jobs, employers may be more likely to overlook any gaps in credentials or experience, including unemployment, when men apply to a female-dominated job as compared to a mixed-gender or male-dominated job. Moreover, employers may over-value the experience or credentials that men *do have* since the men in our sample have work histories in male-dominated or mixed-gender jobs and the skills and activities related to these sectors tend to be more highly valued (Alksnis et al., 2008). These factors may be enough to trump any scarring effects of unemployment when men attempt to enter female-dominated jobs.[2]

Men's job preferences also matter for which jobs they seek. Job-seekers rank jobs on a number of different characteristics (including the rewards that jobs offer) and pursue the highest options (Reskin and Roos, 1990). In many cases, men's top-ranked jobs may be male-dominated or mixed-gender jobs because of higher wages (Blau and Kahn, 2017; Macpherson and Hirsch, 1995) and they do not

[2] Notably, men may face discrimination in female-dominated jobs during early hiring processes such as receiving a callback for an initial interview (Yavorsky, 2019). However, this research does not evaluate later hiring processes in which men could be favored or just as likely as women to be offered a job once they make it in the interview pool.

culturally compromise men's masculine identities. However, female-dominated jobs may attract men who would otherwise avoid this type of work if they pay higher wages and have greater occupational prestige than their previous jobs, especially if their previous jobs are not available and the alternative is continued unemployment (Kmec, 2005; Skuratowicz and Hunter, 2004). Thus, men's searches for female-dominated jobs during unemployment may be particularly targeted toward upgraded jobs.

Female-dominated jobs may also attract men in lower quality male-dominated or mixed-gender jobs (e.g., janitorial position or retail salesperson, respectively) where upward mobility might be limited. Indeed, England (2010) argues that individuals are more likely to transgress gendered occupational boundaries if they cannot gain upward mobility in the occupational structure without doing so. Although England discusses how this selection process applies to women, it could also apply to men. If unemployed men cannot secure a job in a male-dominated or mixed-gender job without compromising their wages or occupational prestige, they might consider female-dominated work if it allows them an avenue for upward mobility.

For these reasons, we expect that:

Hypothesis 2. Transitioning to a female-dominated job is associated with a larger percent wage increase between men's pre- and post-unemployment job, compared to men who secure a mixed-gender or male-dominated job after unemployment.

Hypothesis 3. Transitioning to a female-dominated job is associated with a larger increase in occupational prestige between men's pre- and post-unemployment job, compared to men who secure either a mixed-gender or male-dominated job after unemployment.

4. Data and methods

In this analysis, we use data from the 2004 and 2008 panels of the Survey of Income and Program Participation (SIPP), administered by the U.S. Census Bureau. The SIPP universe includes the non-institutionalized resident population living in the United States. Survey respondents were interviewed every four months over the survey panel, and during each interview they were asked to provide monthly retrospective data; each month is an observation. Each panel spans four years and includes 48 months (observations) of data; the 2004 panel covers 2004–2007 and the 2008 panel covers 2008–2013. The strengths of SIPP include its detailed information on individuals including work histories, and its unique identification of respondents' employers.

This study consists of two distinct analytical samples. The first analytical sample, which is used to explore Hypothesis 1, includes observations for men that were between the ages of 23 and 65 *who made an employment transition* at some point during the survey period.[3] A recent employment transition means that men have either changed employers or occupations since their last observation, or they have switched from unemployment in their prior observation to having a job. We include only men who were either in a male-dominated or mixed-gender job (not a female-dominated job) prior to their job transition since we are interested in men's first entry into a female-dominated job during the SIPP survey window.[4] However, it is important to note that men's job prior to unemployment is unknown for a subset of unemployed men in the sample; thus, the gender composition of their job prior to unemployment is also unknown (for a robustness check in this regard, see findings section, "Supplemental Analysis").[5] The first analytic sample includes observations for 22,989 men. Characteristics for this sample are included in Table 1. In a Supplemental Appendix A, we also show the most frequent pre- and post-unemployment occupations held by men that transition to female-dominated occupations (Table A1).

The second analytical sample—which is used to explore Hypothesis 2 and 3 on changes in men's wages and occupational prestige

[3] We have chosen to include individuals between the ages of 23 and 65 because we are interested in individuals who have achieved some independence from their parents and immediate family. For example, in recent Census reports, Vespa (2017) and Vespa, Lewis, & Kreider (Vespa, 2013) report that most young adults in their late teens and early twenties in 2016 and 2012 lived with their parents, suggesting an incomplete transition to adulthood for this age group. We have chosen age 23 as our age threshold because most traditional college students will have graduated by this age and entered the labor market, and those who are not attending college will be moving toward independence from their parents and immediate family at this age.

[4] We are not necessarily measuring "first entry" into a female-dominated profession, but rather only the first entry in the relatively short SIPP window. Thus, respondents could have worked in a female-dominated occupation before the survey period.

[5] Specifically, there is no pre-unemployment job information for 50% of men who were *unemployed* during the survey period; thus, in these cases, we do not know the gender composition of their previous jobs. However, in the remaining 50%, all men report being in mixed-gender or male-dominated jobs pre-unemployment. Notably, this issue only pertains to unemployed men, not men who transitioned to a new job directly from employment—as their job information was more complete. Importantly, we conduct a robustness check (see findings section, "Supplemental Analysis") in which we eliminate respondents whose pre-unemployment sex composition is unknown (where at least a portion of respondents could have been in female-dominated jobs during the survey period) and our results are similar to when we keep this group in our analysis. Lastly, we considered imputing occupational sex compositions for observations that were missing; however, there are serious theoretical reasons against doing so. Men whose occupation is missing prior to unemployment might have been unemployed long-term, so the reason for the missing observation is due to a lack of employment (and thus, a pre-unemployment job observation should not exist), rather than a lack of response.

Table 1
Analytic Sample Descriptives of Full Sample of Men who Made Employment Transitions.

	Transitioned to a female-dominated occupation	Transitioned to a mixed-gender or male-dominated occupation
	Mean or percent	Mean or percent
Employment status in observation prior to transition		
Has job	84%	91%
Involuntary unemployment	14%	9%
Personal demographics		
Age 23-44	70%	66%
Age 45-65	30%	34%
Married	50%	62%
Children under 18	37%	45%
White	66%	69%
Black	14%	10%
Latino	11%	14%
Other minority	9%	7%
Education and work		
High degree or less	8%	26%
Some college or associate's degree	26%	27%
College degree or more	46%	33%
Any school during survey period	21%	14%
Work hours per week	37	41
Region		
Northeast	21%	17%
Midwest	21%	24%
South	31%	36%
West	26%	23%
Other post-transition job characteristics		
Inflation-adjusted hourly wage	$20.87	$24.41
Occupational prestige score	26.0	20.2
N	3042	19,947

Note: Sample includes men who either transitioned directly from another job to a new job and men who transitioned from unemployment to a new job. Mean values are based on observations from *first employment transition* for each respondent in the 2004 and 2008 cohorts of the SIPP. Work hours per week refer to post-transition job.
Source: SIPP.

pre- and post-unemployment—varies from the first analytic sample because they have a different set of parameters. The second analytic sample consists *only of men who have a period of unemployment* and entered into a new job and have wage and occupational prestige data for both of their jobs immediately pre- and post-unemployment.[6] For the second sample, all men previously worked in either a male-dominated or mixed-gender occupation before unemployment (and there are no cases in which participants' job prior to unemployment is unknown); thus, men's entrance into a female-dominated occupation post-unemployment is necessarily a gender-compositional switch from their pre-unemployment occupation. The number of men who have a wage change (pre- and post-unemployment) is 2,425, and the number of men who have a change in occupational prestige (pre- and post-unemployment) is 2558. These two sample sizes are slightly different because of missingness in the wage and occupation data and we think it is important to use all available data for each analysis. Descriptives for the second analytic sample are included in Table 3.

4.1. Measurement

Dependent Variables. The first dependent variable is a binary variable that indicates *entry into a female-dominated occupation (1)* for the first time in the survey among men who made a recent job transition. Men could have transitioned into a female-dominated occupation either directly from employment in a mixed-gender or male-dominated occupation, or from unemployment.[7] The

[6] Our sample of men who have both pre- and post-unemployment observations (which are needed to calculate percent wage change and occupational prestige change) is substantially smaller than the full sample of men who have a period of unemployment. We tested for differences between men who are in our models of percent wage/occupational prestige change as compared to men who have a period of unemployment but lack both pre- and post-unemployment data. There are some significant differences between these groups; men who are included in our models of percent wage/occupational prestige change are slightly older and are marginally more likely to be married and have kids. The most substantial difference between the two groups is that men who are included in our models of wage/occupational prestige change are less likely to have a college degree (20%) as compared to men who have a period of unemployment but do not have pre- and post-unemployment observations (32%). This indicates that the interpretation of our results may be biased towards the experiences of men with lower levels of education.

[7] As mentioned before, a limited number of men could have been employed in a female-dominated job prior to unemployment given that we do not have pre-unemployment job information for all men who were unemployed in the first analytic sample. In cases in which pre-unemployment job is known, all men came from either a mixed-gender or male-dominated job. Again, robustness checks show that our results hold when we remove men who have unknown information on their pre-unemployment job.

reference group (0) indicates entrance into a male-dominated or mixed-gender occupation among men who made a recent job transition. Our use of a binary outcome variable is guided by our core interest in understanding whether certain economic conditions (unemployment in this case) are associated with men entering jobs that are culturally depicted as incongruent with men and masculinity (i.e., female-dominated jobs).[8] Consistent with prior research (Yavorsky et al., 2016), we measure the gender composition of jobs at the occupation-by-industry cell level to account for the intersection of detailed industry and occupation categories. We define an occupation as being female-dominated if 70 percent or greater of the occupational-industry population in the sample is female.[9]

The second dependent variable indicates *change in logged wages*, pre- and post-unemployment. Specifically, change in logged wages is calculated by subtracting the logged hourly wage a person earns in the first observation *prior* to a period of unemployment from the logged hourly wage a person earns in the observation immediately *after* a period of unemployment.[10] Wage data in the SIPP are cleaned and imputed by the U.S. Census Bureau and have been shown to have a high level of accuracy when compared to administrative data records (Abowd and Stinson, 2013). Wages are inflation-adjusted to 2013 dollars.

The third dependent variable is a continuous measure of *change in occupational prestige*, pre- and post-unemployment. The dependent variable is calculated by subtracting the prestige score of an individual's occupation in the observation immediately *prior* to a period of unemployment (pre-unemployment) from the occupational prestige score in the first observation *after* a period of unemployment (post-unemployment).[11] We use the Nakao-Treas prestige score available in the IPUMS-USA database (Ruggles et al., 2017). The Nakao-Treas prestige score is assigned to each occupation using the modified version of the 1990 U.S. Census occupational classification scheme and is based on prestige assessments assigned by Nakao and Treas, using data from the 1989 General Social Survey (Nakao and Treas 1994). Notably, researchers have found that occupational prestige ratings are highly constant across time and place (Hout and DiPrete, 2006), though Lynn and Ellerbach (2017) found some variance by participants' education in how they rank occupations. For this measure, respondents were asked to evaluate "social standing" of occupations in this survey. More specifically, on a cardboard sheet showing a nine-rung ladder of social standing that ranged from "1" being the lowest social standing to "9" being the highest social standing, respondents were asked to sort cards with occupational titles. Nakao and Treas then converted these data into prestige scores, where the prestige score is a weighted average of the ratings received by each occupation, with weights of 0, 12.5, 25.0 … 100, assigned to the respective rating categories. Prestige scores range from 0 to 100.

Independent Variables. For our first analysis where we examine entry into a female-dominated occupation during the survey period, our key independent variable is whether an individual had a *period of involuntary unemployment* in the month immediately before they transitioned to a new job. The variable is lagged by one month in our analysis. Involuntary unemployment indicates that an individual answered that they were temporarily unable to work in the reference month because of: 1) injury, 2) illness, 3) chronic health condition or disability, 4) unable to find work, 5) or on layoff. Although the definition of what constitutes involuntary unemployment can be complex, our classification for this variable follows general guidelines provided by prior literature (see Brand, 2015 for fuller discussion on this issue). See Appendix B for greater detail on percentage distributions for men's reported reasons for unemployment.

For our second and third analyses (logged wage change and occupational prestige change, pre- and post-unemployment), our key independent variable is *whether men transitioned into a female-dominated occupation after a period of unemployment* (1). We also measure

[8] We also considered whether unemployed men are more likely to transition into a job with a higher percentage of women workers than their pre-unemployment job, using a continuous measure for the dependent variable (i.e., percent female). These results (as shown in Appendix Table A4) are similar to our main results that use a categorical measure (female-dominated jobs versus male-dominated jobs or mixed-gender jobs): unemployed men are significantly more likely to transition into a job that has a higher percentage of women in it than men who transition to a new job from employment.

[9] We calculated whether an occupation was a female-dominated occupation-industry using IPUMS-USA data (Ruggles et al., 2017) for the years that correspond to the years in the current study (2004–2013). The reason for using the IPUMS-USA data rather than the SIPP was to draw on a larger sample size per occupation-industry cell in determining if an occupation-industry is female-dominated. We also conducted multiple robustness checks to investigate whether our results hold if we use different cutoffs for female-dominated jobs. For example, we change our threshold from 70% to 75%, 65% and 60% - the latter two of which increase the sample size of the percent of men who enter these jobs. We find that our substantive findings hold, with unemployment continuing to be positively associated with entering female-dominated occupations at all thresholds. We find that the odds of entering a female-dominated occupation after unemployment are lower when the threshold is lower (although still significantly higher than those that are employed), and the odds of entering a female-dominated occupation after unemployment is higher when the threshold is higher (i.e., 75%). These results are in the direction we would expect. As we increase the threshold, unemployment has an increasingly stronger relationship with entry into a female-dominated job.

[10] Hourly wages are inflation-adjusted to 2013 dollars, the last year of data collection. We used the Consumer Price Index (CPI) calculator to adjust wages, available on the Bureau of Labor Statistics website: https://www.bls.gov/data/inflation_calculator.htm. The SIPP includes a measure of both hourly wages (tpyrate1) and monthly earnings (tpmsum1). Where hourly wages were missing, we calculated hourly wages based on monthly earnings (tpmsum1) and the number of reported weeks worked per month (rmwkwjb) and hours per week (ejbhrs1). When hours per week are missing (or marked as "hours vary"), we use the average number of hours across the panel for the individual to calculate hourly wages. We did not top or bottom code wages or smooth wages across months, but we did drop observations where the percent change in wages was above 200% ($n = 81$). These observations were substantial outliers in the distribution of wage change; for context, the median percent wage change in the sample was a zero percent wage change, and those with a greater than 200% wage change were above the 95% percentile.

[11] We decided to measure occupational prestige in changes by score, rather than changes in percent, because we believe this measurement type is more intuitive for interpretation. Regardless, our results hold when we conduct analyses using percent changes in occupational prestige.

if men transitioned to a male-dominated occupation (1), and if men transitioned to a mixed-gender occupation (the reference group, 0).

In all three analyses, we include additional demographic variables such as the *age category* of the individual (age 23–44 = 1, age 45–65 = 0),[12] *marital status* (married = 1, else = 0), and whether the respondent has a *child under the age of 18* (yes = 1, no = 0). We also control for race/ethnicity, including whether an individual identifies as *white [reference], black, Latino, or other minority*. Educational attainment level is included as a categorical variable: *high school graduate or less [reference], some college (but no degree) or an associate's degree*, or *a college degree or more*.

We also control for whether an individual is a *student* at any point during the survey period (1). Although traditional college students are largely excluded because of our age range (23–65), we include men who have participated in school during the survey period because we cannot determine what kind of training they are receiving while they are a student. While some may be in training programs that lead to higher wages (which could explain why transitioning to a female-dominated job post-unemployment might lead to higher wages), past research has shown few—if any—benefits for much sub-baccalaureate training (Chen, 2015; Dar and Gill, 1998; Norton Grubb, 1997). Regardless, we do *not* include any respondents who state that they are unemployed due to being in school. This means that any wage or occupational prestige changes that occurred for men who were involuntarily unemployed likely did not come from increases in their education. Additionally, we control for the *number of hours* an individual works on average each week in their post-transition job and the *region* in which an individual resides (*Northeast [reference], Midwest, South, and West*). Finally, we control for the reference month of the observation, the month within the year of the observation, and the year in which the data were collected. Doing so helps address seam bias (where respondents might be more likely to report transitions or changes in status that occur during the month of an interview compared to those that occur in previous months) and seasonality in employment for particular jobs (e.g., teachers). Notably, we also examined whether the length of an unemployment period made a difference in the likelihood that a man would enter a female-dominated occupation. We found that the inclusion of duration of unemployment, measured as a continuous variable indicating months of unemployment, in our models did not produce meaningfully different results (available upon request). The average length of unemployment is three months.

4.2. Analyses

In this project, we have three analyses. In the first analysis, we use logistic regression, and we examine whether men are more likely to switch into a female-dominated occupation after a period of unemployment, relative to men who transition to a new job directly from employment. Here we use the first analytic sample, which consists of men who have made a recent employment transition and who have never reported being in a female-dominated job prior to their transition during the survey period. We use a cross-sectional model because we include only one observation per individual in the analysis: an individual's first employment transition or transition from unemployment to a job.[13]

We focus on the first transition within this survey period so our findings are representative given that the data are cross-sectional and people who have multiple job transitions could have unmeasured characteristics that could drive the results. In addition to our cross-sectional logistic regression models, we also ran a longitudinal analysis using discrete-time event history models predicting entry in a female-dominated occupation. Our findings from our event history models are consistent with our logistical regression models. Results available on request.

For the next two analyses, we use linear regression and limit the sample to men who transitioned to a job directly from a period of unemployment and have pre- and post-unemployment wage and occupational prestige data.[14] In the second analysis, we examine whether switching into a female-dominated job after unemployment is associated with a greater logged wage change between men's pre- and post-unemployment jobs, compared to men who enter a male-dominated or mixed-gender occupation after unemployment. In the third analysis, we examine whether switching into a female-dominated occupation after unemployment is associated with a greater change in occupational prestige between a man's pre- and post-unemployment job, relative to men who enter a male-dominated or mixed-gender job.[15]

[12] We divide age into two groups (23–44 and 45–65) because we want to be able to directly compare differences between younger adult men (23–44) and middle-age men (45–65). We use age groups typically used by the U.S. Census Bureau. As a sensitivity check, we also include age as a continuous variable with an age-squared term for non-linear age effects in our models, and our results hold.

[13] To examine men's likelihood of entering a female-dominated job, we use the following logistic regression equation: $Y_i = \beta_0 + \beta_1 InvolUnemploy + Z_i + \varepsilon_i$. Y_i is a binary variable and denotes whether a man enters a female-dominated occupation. Z_i denotes the included control variables (personal characteristics, education and work characteristics, and region).

[14] The sample sizes vary between the first analysis and the second and third analyses because the latter two analyses are constrained to only men who report a period of unemployment; whereas the first analytic sample is constrained to those men who have made any employment transition (including transitions from employment). Also, the second and third analyses (percent wage change and change in occupational prestige, respectively) require both pre- and post-unemployment observations, whereas the first analysis does not. We think it is important to use all available data for each analytic sample, which guided our strategy in this regard.

[15] We use the following linear regression equation to estimate percent wage change (Hypothesis 2) and change in occupation prestige (Hypothesis 3): $Y_i = \beta_0 + \beta_1 FemOcc + Z_i + \varepsilon_i$. Y_i denotes percent wage change or change in occupational prestige, and Z_i denotes the included control variables (personal characteristics, education and work characteristics, and region).

5. Findings

5.1. The likelihood of transitioning to a female-dominated occupation

For the descriptive statistics for our first analysis (Table 1), we concentrate on our first analytic sample that includes men who have made an employment transition during the survey period (job to job or unemployment to job). Men who transition to a female-dominated job have a higher rate of involuntary unemployment in the prior observation; 14% of men who transition to a female-dominated job were unemployed in the prior observation as compared to 9% of men who transition to a mixed-gender or male-dominated occupation. Compared to men who transition to a mixed-gender or male-dominated occupation, men who transition to a female-dominated occupation are less likely to be married (50% versus 62%) and have children under age 18 (37% versus 45%), but they are more likely to have higher levels of education. For example, whereas 46% of men who transition to a female-dominated job have a college degree or more, only 33% of men who transition to a mixed-gender or male-dominated job have the same level of education.

Table 1 also shows variation in job characteristics based on men's post-transition job. Men who transition to a female-dominated occupation work fewer hours as compared to men in mixed-gender or male-dominated occupations (37 compared to 41). Men in female-dominated occupations earn on average $20.87 per hour and have an average occupational prestige score of 26 (out of a range of 0–100), while men who transition to a mixed-gender or male-dominated occupations earn $24.41 per hour and have an occupational prestige score of 20.2.

In Table 2, we present results that assess whether unemployment is associated with increases in the odds of entry into a female-dominated occupation (Hypothesis 1). In this analysis, we only include observations for men who are making an employment transition, either from a job to a new job, or from unemployment to a job. The independent variable is unemployment prior to a job transition (reference category = employment prior to a job transition), while the dependent variable is entry into a female-dominated occupation.

As expected by Hypothesis 1, involuntary unemployment is significantly associated with entry into a female-dominated occupation. Men who are involuntarily unemployed are 1.57 times more likely to transition to a female-dominated occupation ($p < .001$) compared to men who made a transition to a new job directly from another job.[16] Men who transition to female-dominated occupations are less likely to be married (OR = 0.78; $p < .001$) or have children under age 18 (OR = 0.85; $p < .001$), while Black men (OR = 1.45; $p < .001$) are more likely to transition to a female-dominated occupation. Men who have some college (OR = 1.32; $p < .001$) or a college degree or higher (OR = 2.12; $p < .001$) are more likely to transition to female-dominated work, as are men who are a student at some point during the survey period (OR = 1.21; $p < .001$). Men who transition to female-dominated occupations work slightly fewer hours (OR = 0.97; $p < .001$).[17]

5.2. Change in wages and occupational prestige change, pre- and post-unemployment

Table 3 includes descriptive statistics for the sample used in our second and third analysis and includes *only men who make a job transition from unemployment and who were previously employed in a mixed-gender or male-dominated job*. Men who switch into a female-dominated occupation after unemployment have a 3.80% wage increase, pre- and post-unemployment, while men who entered a mixed-gender and male-dominated occupation have percent wage changes of −3.19% and 0%, respectively. Men who switch into a female-dominated occupation after unemployment have a 7.78-point prestige change in the Nakao-Treas occupational prestige score (scale of 0–100), pre- and post-unemployment, while men who transition to a mixed-gender and male-dominated occupation have only a 0.78-point and −0.04-point prestige change, respectively.

While descriptive statistics provide suggestive evidence in support of our second and third hypotheses, we now turn to more rigorous models to investigate these expectations further. Specifically, we use linear regression to examine whether unemployed men who switch into a female-dominated job for the first time in the survey period are more likely to experience any career enhancing benefits in terms of wages (Hypothesis 2) or occupational prestige (Hypothesis 3), compared to unemployed men who remain in male-dominated or mixed-gender jobs. Table 4 shows results for the second and third analysis. Whereas we showed odds ratios for our previous analysis (Hypothesis 1), we show coefficients for the following two analyses (Hypothesis 2 and 3) because our wage- and prestige-related dependent variables are both continuous variables.

Specifically, Model 1 shows coefficients of change in logged wages, based on the change in an individual's logged hourly wage immediately prior to unemployment and their logged hourly wage in the observation immediately following unemployment. Results

[16] We ran sensitivity analyses to test if the results are robust when we control for pre-transition work characteristics (occupation, private/public, union membership, salaried) in our models. We find that our results hold. Notably, however, the inclusion of pre-transition work characteristics does increase the R^2 in our models because the pre-transition work characteristics help to partly explain changes in the dependent variables.

[17] The majority of men who transitioned to a female-dominated job post-unemployment are in a female-dominated occupation for at least three months. We also are interested in understanding whether our findings hold when we consider only "serious" transitions in which men stay in their jobs for at least three months, suggesting that the transition is perhaps not simply a temporary one. Thus, we removed the men in our analyses who only temporarily transitioned to a female-dominated occupation (staying for less than three months), and reran our analyses. We, again, find that unemployment significantly increases the likelihood that a man will transition to a female-dominated job, compared to those transitioning from employment (OR = 1.53; $p < .001$).

Table 2
Are Men Who are Involuntarily Unemployed More Likely to Transition to a Female-dominated Occupation than Men Who Transition to a New Job Directly from Employment?

	Entry into female-dominated occupation
	Odds Ratio
Employment status	
Has job in previous month (lagged)	Reference
Involuntary unemployment in previous month (lagged)	1.57***
Personal characteristics	
Age 23-44	1.21***
Age 45-65	Reference
Married	0.78***
Kids under 18	0.85***
White	Reference
Black	1.45***
Latino	0.99
Other minority	1.14
Education and work	
High school degree or less	Reference
Some college	1.32***
College or more	2.12***
Student at some point during survey period	1.21***
Work hours per week	0.97***
Region	
Northeast	Reference
Midwest	0.76***
South	0.71***
West	0.93
Constant	0.31***
Pseudo R^2	0.0636
Obs	22,989

Note: The sample includes men who made an employment transition, either from a job to another job, or from involuntary unemployment to a job. Dummy variables for the interview reference month, yearly month, and year are included but not shown in Table 2. Work hours per week refer to post-transition job.
*p < .05, **p < .01, ***p < .001 (two-tailed tests).
Source: SIPP.

Table 3
Sample descriptives for *Involuntarily Unemployed* men who made job transitions.

	Mixed-gender	Male-dominated	Female-dominated
Percent wage change	−3.19%	0.00%	3.80%
N	595	1700	130
Occupational prestige score change	0.78	−0.04	7.78
N	626	1776	156

Note: Sample constrained to men who had a period of involuntary unemployment; made transitions from unemployment to a new job, and; have wage and occupational prestige data for both of their jobs immediately pre- and post-unemployment. The wage and occupational prestige score change refers to change between their job pre- and post-unemployment. The mean values for the men who transitioned to a female-dominated, mixed-gender, or male-dominated occupation after unemployment include the observation immediately following unemployment. Percent wage change is calculated by subtracting the hourly wage a person earns in the first observation *prior* to a period of unemployment from the hourly wage a person earns in the observation immediately *after* a period of unemployment. The difference in pre- and post-unemployment hourly wages is then divided by the pre-unemployment hourly wage and multiplied by 100. Full descriptive statistics for each group available on request.
Source: SIPP.

indicate that the percentage wage increase between men's pre- and post-unemployment job is 4.0% higher for men who switch into a female-dominated occupation post-unemployment than for men who entered a mixed-gender occupation, but the coefficient is not statistically significant ($b = 0.040$; $p > .05$). When we rotate the reference category, the wage increase between men's pre- and post-unemployment job is 1.8% higher for men who switch into a female-dominated occupation post-unemployment than for men who entered a male-dominated occupation, but the coefficient, again, is not statistically significant (not shown: $b = 0.018$; $p > .05$). Thus, in both cases, while the coefficient is in the expected direction, the difference is not statistically significant. Our findings, therefore, provide only descriptive support for Hypothesis 2.

Model 2 shows coefficients of *occupational prestige change*, pre- and post-unemployment. Consistent with Hypothesis 3, we find that men who switch into a female-dominated occupation after unemployment have significantly greater upward prestige change ($b = 6.812$, $p < .001$), compared to men who enter a mixed-gender occupation after unemployment. We then rotated the reference category to men who enter a male-dominated occupation post-unemployment. We find that compared to these men, men who switch

Table 4
Do Men Who Enter a Female-Dominated Occupation Post-Unemployment have Larger Increases in Change in Logged Wages and Occupational Prestige (Between their Pre- and Post-unemployment Job) than Men Who Enter a Mixed-Gender or Male-Dominated Occupation?

	Model 1	Model 2
	Change in Logged Wages, Pre- to Post-Unemployment	Occupational Prestige Change, Pre- to Post-Unemployment
	Coefficient	Coefficient
Occupational composition		
Mixed-gender occupation	Reference	Reference
Male-dominated occupation	0.022	−0.911
Female-dominated occupation	0.040	6.812***
Personal Characteristics		
Age 23-44	0.059**	1.569
Age 45-65	Reference	Reference
Married	−0.014	0.399
Kids under 18	0.017	−0.923
White	Reference	Reference
Black	0.032	−0.097
Latino	0.072*	0.783
Other minority	0.040	−1.761
Education and work		
High school degree or less	Reference	Reference
Some college	−0.041	−0.648
College or more	−0.023	1.275
Student at some point during survey period	0.027	−1.011
Work hours per week	0.001	−0.002
Region		
Northeast	Reference	Reference
Midwest	−0.037	1.174
South	−0.025	0.130
West	0.018	0.744
Constant	−0.141*	−0.695
Adjusted R^2	0.0090	0.0020
Obs	2425	2558

Note: The sample for Models 1 and 2 include only men who have had a *period of involuntary unemployment*, made a job transition, and whose job prior to unemployment was in either a male-dominated or mixed-gender occupation. Dummy variables for the interview reference month, yearly month, and year are included but not shown in Table 4. Work hours per week refer to post-transition job. The sample sizes for change in logged wages and occupational prestige, pre- and post-unemployment, are slightly different because of missingness in the wage and occupation data.
*p < .05, **p < .01, ***p < .001 (two-tailed tests).
Source: SIPP.

into a female-dominated occupation, again, have greater upward prestige change (not shown: $b = 7.73$, $p < .001$). There are no other significant variables associated with occupational prestige change in Model 2. In summary, we find that switching into a female-dominated job may offer men an avenue for enhancing their occupational prestige after being unemployed.

5.3. Supplemental analysis

In this section, we consider two key robustness checks. First, we examine whether our results hold for Hypothesis 1 when we change the analytic sample and exclude all men whose occupation prior to unemployment is unknown. Second, we examine whether our results for Hypothesis 3 hold when we use a different measure of occupational esteem to assess upward mobility. Both tests strengthen the validity of our main results.

Constraining Analytic Sample for Hypothesis 1 to Men Whose Job Before Unemployment is Known. In our main analyses testing Hypothesis 1, we find supporting evidence that unemployed men are more likely to transition to a female-dominated occupation than men who make a job transition while currently employed. The sample we use in the main analysis includes men who worked in a male-dominated and mixed-gender occupation prior to their job transition during the survey period. It also includes a subset of men whose job prior to unemployment is unknown. Thus, the question remains as to whether men in the unknown group—some whom theoretically could have been previously employed in a female-dominated occupation during the survey period—are driving results that support Hypothesis 1. To assess the robustness of our results, we *exclude* men whose occupation prior to unemployment is unknown and rerun the same analysis. The change in sample only relates to unemployed men because all jobs are known for men who transition directly from employment (whom are all in a male-dominated or mixed-gender occupation pre-transition).

Specifically, this supplemental analysis examines whether unemployment is associated with entry into a female-dominated occupation when we confirm that *all* men in the sample were employed in a mixed-gender or male-dominated occupation immediately prior to a job transition. The findings from this analysis support our original results: we find that involuntary unemployment is significantly associated with entry into a female-dominated occupation (see Appendix C and Table A3 for greater details). Men who are

involuntarily unemployed are 2.32 times more likely to transition to a female-dominated occupation compared to men who make a transition to a new job directly from another job (OR = 2.32, $p < .001$).

Although this robustness check affirms that our results hold when we analyze only men who, for sure, do not have experience in a female-dominated job prior to the transition *during the survey period*, it is unable to rule out the possibility that men who transition to a female-dominated job post-unemployment did not already have previous experience in a female-dominated job *before the SIPP survey window*. Some men who report not working in a female-dominated job immediately prior to a transition could have still worked in a female-dominated job before the survey was recorded. Thus, results could be driven by a subset of men whose previous experience in female-dominated work before the SIPP survey window made them more open to female-dominated jobs post-unemployment.

Changing Measure of Occupational Esteem. In the main findings, we use the Nakao-Treas prestige scale. In the following analysis, we explore whether unemployed men increase their occupational esteem using a different measure, occupational status (Chan and Goldthorpe, 2007). We examine whether men who enter a female-dominated occupation after unemployment are more likely to move up from a *working-class* occupation to a *professional/management* occupation than men who enter a male-dominated or mixed-gender occupation. See Appendix D for further details on this measure. We find that our supplemental results support our prestige-related findings (see Appendix Table A5). Specifically, men who switch into a female-dominated occupation post-unemployment are significantly more likely to increase their occupational status than men who enter a mixed-gender occupation (OR = 2.31, $p < .001$). When we rotate the reference group to male-dominated occupations, we also find that men who switch into a female-dominated occupation post-unemployment are significantly more likely to increase their occupational status than men who enter a male-dominated occupation (not shown: OR = 6.70, $p < .001$). These supplemental results provide further support that entry into female-dominated jobs is an avenue for potential upward mobility after unemployment.

6. Discussion

As the labor market shifts away from male-dominated jobs, growing female-dominated jobs could offer men more secure and stable employment options (for example, see Holzer and Lerman (2007, 2009); and Nelson and Wolf-Powers (2010) on job growth in the U.S. health care sector). Men's willingness to enter these jobs has serious implications for the U.S. workforce being able to meet these labor needs and potentially on men's abilities to contribute to their own and their family's financial well-being. The issue is that despite these long-standing job trends (particularly the decline of *working-class* male-dominated jobs) men have made minimal progress in entering female-dominated jobs (Cotter et al., 2004; England, 2010).

Our findings indicate that it may take a major personal economic event to "shock" men into considering female-dominated jobs as a potential option. Without a major disruption to men's employment and/or financial situation, many men may not consider entering a female-dominated occupation. We argue that involuntary unemployment may act as a jarring event that makes men more conscious of the availability and potential stability of female-dominated jobs and more open to working in them, particularly in the face of possible financial consequences of maintaining narrow job-searches and not securing employment.

Also, men who were involuntarily unemployed might have been incentivized to enter a female-dominated job because of the potential to earn higher wages than what they earned before they became unemployed (at least based on descriptive results). Thus, going into female-dominated jobs may help mitigate the "scarring" costs typically associated with unemployment—providing some men the ability to access higher wage jobs than they may have otherwise been able to access in male-dominated and mixed-gender occupations. However, future research should explore this issue further with larger sample sizes, as our wage-related results did not reach statistical significance (though the coefficients were in the expected direction). Moreover, the prospect of increasing their occupational prestige may also incentivize men to pursue female-dominated work, a bump in prestige that men were less likely to experience if they entered male-dominated or mixed-gender jobs post-unemployment.

Nevertheless, it is important to recognize that some men who transitioned into female-dominated work likely still experienced negative consequences from unemployment, as evident by the average work hours of this group. Men who transitioned to a female-dominated job worked, on average, four fewer hours per week than men who entered a male-dominated or mixed-gender job (37 h vs. 41 h). This average decline in hours could offset any hourly wage advantages that men might experience when entering female-dominated work.

Moreover, our analyses suggest that there might also be selection effects in terms of which men enter female-dominated jobs post-unemployment. Specifically, men who switch into female-dominated occupations post-unemployment have lower wages to begin with (pre-unemployment) than men who enter male-dominated or mixed-gender occupations. Their lower wages in mixed-gender or male-dominated jobs pre-unemployment may be an indicator of lower worker quality (i.e., lower performance or unmeasured skills) and/or a signal that they occupied lower status jobs pre-unemployment. For example, these men may be more likely to enter a female-dominated job if they were in a male-dominated or mixed-gender job pre-unemployment and were not reaping the full wage benefits typically associated with working in these jobs. Indeed, England (2010) argues that women are more likely to cross occupational gender boundaries when they do not see a pathway for upward mobility in a job consistent with their gender; this might also be true for men.

It is also important to further contextualize the increase in occupational prestige that many men experienced. In our sample, most men transitioned from manual working-class jobs to entry-level white-collar female-dominated jobs, which contributed to men's increases in prestige scores. Although white-collar jobs, too, have become more precarious in recent decades, they likely still offer greater security than jobs in working-class male-dominated sectors where industry-wide layoffs are especially common (Goodman and Mance, 2011; Kalleberg, 2009). White-collar jobs also tend to have more upward career pathways, which generally allow workers greater opportunities for promotions than in working-class jobs (Andersson et al., 2005). Thus, even though most men did not jump

multiple rungs in occupational standing, this career change may act as a springboard for long-term upward mobility and career benefits, especially in view of other research that documents advantages that accrue to (white) men once they enter female-dominated jobs (i.e., glass escalator forces) (Smith, 2012). Of course, these potential advantages—advantages that also contribute to gender inequality within these jobs—only accrue if men remain in these jobs. Recent research by Torre (2018) suggests that men may use female-dominated jobs as a "stopgap" position before switching back into a male-dominated or mixed-gender job. Thus, while men's transitions into female-dominated work may give them access to more stable jobs when they are in need, any integration progress may be weakened if men leave these jobs.

Although the study offers many advantages, several limitations are important to note. First, we cannot rule out other explanations (besides unemployment) for why men might enter a female dominated job and any career enhancing benefits associated with doing so. Men who are willing to enter female-dominated jobs might be different in unobserved ways from men who do not. For example, men who transition to a female-dominated job post-unemployment could have had previous experience in a female-dominated job prior to the SIPP window, something we are unable to capture in this study because the survey follows men for only a period of four years. These men may also be more open to job alternatives, more generally, or have better personal or communication skills; or they may have relocated to new labor markets in which female-dominated jobs pay higher wages.

Second, we are unable to assess whether the findings are driven by men previously in jobs with particular occupational characteristics because SIPP does not have comprehensive information for all men's pre-transition jobs. It is important to note, though, that our results hold when we rerun our analyses on the group of men who had complete survey data for their pre-transition job characteristics and include those characteristics in our models.

Third, there may be inaccuracies in the industries and occupations that men report transitioning to and from. Indeed, Isenberg et al. (2013) compared person-reported industry in the American Community Survey (ACS) to employer-reported industry from the Quarterly Census of Employment and Wages (QCEW), and they found overall employers and individuals aligned 75% of the time. This study suggests that at least a portion of the industries (which we used to create our dependent variable, sex composition of occupation-industry) may not align with employer-reported industries. Unfortunately, most longitudinal surveys, that include detailed information on nationally representative sample of workers, like the SIPP, are based on self-reported industries (and occupations). As a robustness test, we constructed the dependent variable to be based on only the sex composition of occupation (rather than occupation-industry) and reran our analyses: we find that our results are the same across all three hypotheses. Nevertheless, since we cannot eliminate this issue of misreporting (which could also be present with respondents' occupation), future research should explore this issue further.

Broadly, this study provides important insights into how men might react to changing economic job situations. Fortunately, it provides a more optimistic viewpoint that at least some men, even if still a minority, are willing to consider alternative options when faced with unemployment. At the same time, this research indicates that the scarring effect of unemployment is perhaps less severe for the men who transition to female-dominated jobs. Future work should investigate whether these patterns hold for different groups of men such as racial minorities or different socioeconomic classes of men. Future research should also explore men's full career trajectories of those who enter female-dominated jobs after unemployment to better understand the broader implications of these patterns. In sum, the current study builds on and extends the findings of prior research that consistently links unemployment with worse job prospects, revealing that female-dominated jobs remain a viable strategy for at least some men to thwart costs typically associated with unemployment.

Appendix

A. Common Jobs Held by Unemployed Men who Transition to Female-dominated Occupations

In Table A1, we show the most frequent pre- and post-unemployment occupations held by men that transition to a female-dominated occupation, based on the first analytic sample. The most commonly held occupations by men (who eventually transition to a female-dominated occupation) prior to unemployment are laborers, janitors and building cleaners, and retail salespersons. After unemployment, the men in our sample who transition to a female-dominated occupation after unemployment are most commonly cashiers, waiters and waitresses, and elementary and middle school teachers, as well as health care workers. They also are commonly employed in white-collar jobs such as general or office or bookkeeping, accounting, and auditing clerks, legal support positions, or human resources specialists.

Importantly, men's transition into some of the top post-unemployment occupations seem to require additional credentials or licenses (e.g., registered nurse, elementary and middle school teacher. Unfortunately, SIPP does not include information on licensure or certifications (e.g., teaching certificate), thus, we are unable to confirm the accuracy of men's reports of entering a new job that requires additional licensure or certification. Even if SIPP did have licensure or certification information, it would be difficult to confirm that men need additional human capital to enter these jobs because there is significant variation in the licensing and school requirements of particular female-dominated jobs, like elementary and middle school teachers. Thus, some men could have transitioned into these jobs without having to increase their training, education, or credentials. Nevertheless, we do check to see if men who transition into jobs like registered nurses and elementary and middle school teachers reported appropriate educational levels, of which, we find that they largely do. That said, in a limited number of cases, there was discrepancy between expected education level and occupation, indicating what likely is error in the occupational code. For example, we found that among men who transition to being a teacher, 85% have a bachelor degree; however, we would expect that all teachers would have a bachelor degree. While SIPP is

considered a very high quality survey focused on people's job histories, this highlights the need for future surveys to take seriously the issue of checking the accuracy of respondent's occupations (and industry), as also highlighted by Isenberg et al. (2013).

Table A1
Pre- And Post-Unemployment Occupations Among Men Who Transition to Female-Dominated Occupations

Mixed-gender or male-dominated pre-unemployment occupations	Freq.	Percent	%≤
Laborers and freight, stock, and material movers, hand	15	4.19	4.19
Janitors and building cleaners	13	3.63	7.82
Retail salespersons	13	3.63	11.45
Driver/sales workers and truck drivers	11	3.07	14.53
Construction laborers	10	2.79	17.32
Grounds maintenance workers	9	2.51	19.83
General and operations managers	8	2.23	22.07
Managers, all other	8	2.23	24.3
Cooks	8	2.23	26.54
Sales representatives, wholesale	7	1.96	28.49
Carpenters	7	1.96	30.45
Shipping, receiving, and traffic clerks	6	1.68	32.12
Postsecondary teachers	5	1.4	33.80
Miscellaneous agricultural workers	5	1.4	35.20
Welding, soldering, and brazing workers	5	1.4	36.59
Female-dominated post-unemployment occupations	Freq.	Percent	%≤
Cashiers	56	6.44	6.44
Waiters and waitresses	50	5.75	12.2
Elementary and middle school teachers	45	5.18	17.38
Personal and home care aides	43	4.95	22.32
Maids and housekeeping cleaners	39	4.49	26.81
Customer service representatives	39	4.49	31.3
Retail salespersons	31	3.57	34.87
Bookkeeping, accounting, and auditing clerks	28	3.22	38.09
Office clerks, general	27	3.11	41.2
Nursing, psychiatric, and home health aides	26	2.99	44.19
Miscellaneous legal support	20	2.3	46.49
Receptionists and information clerks	19	2.19	48.68
Other teachers and instructors	18	2.07	50.75
Human resources, training, and labor relations specialists	14	1.61	52.36
Registered nurses	12	1.38	53.74

Source: SIPP.
Note: Based on data from the first analytic sample. The frequencies for the mixed-gender and male-dominated occupations pre-unemployment are lower than the frequencies of the female-dominated post-unemployment occupations because there were more *unknown* occupations in men's *pre*-unemployment jobs than men's *post*-unemployment jobs. Because we code whether an occupation is female-dominated at the occupation-by-industry cell level, an occupation can be both female-dominated and mixed-gender or male-dominated, depending on the industry. Consequently, retail salesperson appears in both groups above because it is both a mixed-gender or male-dominated pre-unemployment occupation and a female-dominated post-unemployment occupation.

B. Men's Reported Reasons for Unemployment

In Table A2, we report the reasons why men are involuntarily unemployed. For both men who transition to a female-dominated occupation and those who transition to a mixed-gender or male-dominated occupation post-unemployment, the primary cause of unemployment is being unable to find work (57.4% and 50.6%, respectively). Roughly the same percentages of men who transition to a female-dominated occupation report that they were unemployed because they were unable to work because of a chronic health condition or disability (24.5%) as compared to men in mixed-gender or male-domination occupations (26.5%). A greater percentage of men who transitioned to a mixed-gender or male-dominated occupation were unemployed because they were on layoff than men who transitioned to a female-dominated occupation (16.3% versus 12.7%).

Table A2
Reported Reasons Why Men are Involuntarily Unemployed

	Transitioned to a female-dominated occupation		Transitioned to a mixed-gender or male-dominated occupation	
	N	%	N	%
Temporarily unable to work because of an injury	15	3.5%	75	4.3%
Temporarily unable to work because of an illness	8	1.9%	39	2.3%

(*continued on next page*)

Table A2 (*continued*)

	Transitioned to a female-dominated occupation		Transitioned to a mixed-gender or male-dominated occupation	
	N	%	N	%
Unable to work because of a chronic health condition or disability	106	24.5%	457	26.5%
Unable to find work	248	57.4%	874	50.6%
On layoff	555	12.7%	282	16.3%
Total	432	100.0%	1728	100.0%

Source: SIPP.

C. Robustness Analyses for Hypothesis 1

For results shown in Table A3 below, we *exclude* men whose occupation prior to unemployment is unknown and rerun the same analysis that we initially did for Hypothesis 1. The change in sample only relates to unemployed men because all jobs are known for men who transition directly from employment (whom are all in a male-dominated or mixed-gender occupation pre-transition). We find that our results hold: men—who are confirmed as working in a mixed-gender or male-dominated occupation prior to unemployment—are more likely to transition to a female-dominated occupation than men who transition directly from employment (OR = 2.32, $p < .001$).

Table A3
Are Men Who are Unemployed More Likely to Transition to a Female-dominated Occupation than Men Who Transition to a New Job Directly from Employment? (Sample Excludes Any Men Whose Occupation is Unknown Pre-Unemployment)

	Entry into female-dominated occupation
	Odds Ratio
Employment status	
Has job in previous month (lagged)	Reference
Involuntary unemployment in previous month (lagged)	2.32***
Personal characteristics	
Age 23-44	1.22***
Age 45-65	Reference
Married	0.81***
Kids under 18	0.86***
White	Reference
Black	1.40***
Latino	0.96
Other minority	1.08
Education and work	
High school degree or less	Reference
Some college	1.34***
College or more	2.20***
Student at some point during survey period	1.17***
Hours per week	0.97***
Region	
Northeast	Reference
Midwest	0.78***
South	0.73***
West	0.94
Constant	0.27***
Pseudo R^2	0.0628
Obs	21,513

Source: SIPP.
Note: The sample includes men who made an employment transition, either from a job to another job, or from involuntary unemployment to a job. We exclude from our sample men who were unemployed at some point during the survey period, but their occupation prior to unemployment is unknown. Dummy variables for the interview reference month, yearly month, and year are included but not shown in Table A3.
*p < .05, **p < .01, ***p < .001 (two-tailed tests).

As a second robustness check for our first hypothesis, we also changed the dependent variable to a continuous measure (percent female in men's post-transition occupation), and re-ran our analyses (shown in Table A4). We find similar results for our first hypothesis: unemployed men are more likely to transition into a job that has a higher percentage of women in it than men who transition to a new job from employment ($b = 0.22$, $p < .001$).

Table A4
Are Men Who are Unemployed More Likely to Transition to an Occupation with Higher Percent Female than Men Who Transition to a New Job Directly from Employment?

	Entry into female-dominated occupation
	Coef
Employment status	
Has job in previous month (lagged)	Reference
Involuntary unemployment in previous month (lagged)	0.22***
Personal characteristics	
Age 23-44	0.18***
Age 45-65	Reference
Married	−0.17***
Kids under 18	−0.01***
White	Reference
Black	0.26***
Latino	0.25***
Other minority	0.13***
Education and work	
High school degree or less	Reference
Some college	−0.09*
College or more	0.23***
Student at some point during survey period	0.14**
Hours per week	−0.01***
Region	
Northeast	Reference
Midwest	0.08
South	−0.04
West	−0.03
Constant	1.65***
Pseudo R^2	0.044
Obs	22,989

Source: SIPP.
Note: The sample includes men who made an employment transition, either from a job to another job, or from involuntary unemployment to a job. Dummy variables for the interview reference month, yearly month, and year are included but not shown in Table A4. Work hours per week refer to post-transition job.
*p < .05, **p < .01, ***p < .001 (two-tailed tests).

D. Robustness Check for Hypothesis 3: Changing the Measure for Occupational Esteem

As a robustness check, we examine whether our results hold for occupational prestige when we use a different measure for occupational esteem, *occupational status*. To determine occupational status, we use the major occupational categories based on the 2002 U.S. Census occupation codes that are defined by the U.S. Census Bureau (Bureau of Labor Statistics, 2018). The categories include: Management, business, and financial occupations, Professional and related occupations, Sales and related occupations, Office and administrative support occupations, Service occupations, Construction and extraction occupations, Installation, maintenance, and repair occupations, Production occupations, and Transportation and material moving occupations.

Following Chan and Goldthorpe (2007), we define Management, business, and financial occupations, Professional and related occupations, and Office and administrative support occupations as *higher status occupations* as compared to occupations in the other occupational categories. Chan and Goldthorpe (2007, 2004) argue that, in general, occupations that require working with symbols and perhaps people, and especially professional occupations, confer the highest status, while those that require working directly with material things (particularly when coupled with lower educational job requirements) confer the lowest status. At a more detailed level, they argue that managers employed in a more blue-collar milieu in industry or trade tend to rank lower than managers and even routine administrative employees (who work in an entirely while-collar milieu), while occupations that require both working with both people and things – such as many occupations in the now expanding service sector – have typically intermediate rankings. Consistent with Chan and Goldthorpe, the U.S. Census category of "Management, business and finance occupations" only includes managers in white-collar, professional settings. Direct supervisors and managers in blue collar and service settings are categorized in their respective categories (e.g., Production, Installation, Service, etc.). Lastly, we do not designate "Sales and related occupations" as a higher status occupation, despite that some sales positions can be high status and well-compensated. This decision stems from the fact that cashier—which is a clearly defined service occupation and is not a white-collar office or professional occupation—is the most common sales occupation among our sample of men who have a period of unemployment.

The dependent variable in this analysis is a multinomial variable and indicates whether an individual 1) *transitioned to a lower status job* after a period of unemployment, 2) *transitioned to a job that was of the same status* (reference) after a period of unemployment, or 3) *transitioned to a higher status job* after a period of unemployment. In all categories, the post-unemployment occupation status is compared to the individual's pre-unemployment occupational status.

For our analysis of occupational status change pre- and post-unemployment, we use multinomial logistic regression, again using

only the observation immediately following a period of unemployment. The sample is limited to men who had a period of unemployment during the survey period and have both pre- and post-unemployment observations (n = 2970). Also, all men in the sample were in either a mixed-gender or male-dominated occupation prior to unemployment.

Table A5 below presents the results for a multinomial logit model showing the likelihood of changes in occupational status after a period of unemployment. Men who transition to a female-dominated occupation after a period of unemployment are 2.31 times more likely than men who are in a mixed-gender occupation to have improved their occupational status (OR = 2.31, $p < .001$). When we rotate the reference group to male-dominated occupations, we find that men who switch into a female-dominated occupation post-unemployment are significantly more likely to increase their occupational status than men who enter a male-dominated occupation (not shown: OR = 6.70, $p < .001$). These results provide additional evidence that men are more likely to experience an increase in occupational esteem when they transition to a female-dominated occupation post-unemployment, compared to men who make other transitions.

Table A5
Is Entrance into a Female-dominated Occupation Associated with Occupational Status Change, Pre- and Post-unemployment? ("No Change in Occupational Status" is Reference Category)

	Occupational Status Decrease	Occupational Status Increase
	Odds Ratio	Odds Ratio
Occupational composition		
Mixed-gender occupation	Reference	Reference
Male-dominated occupation	0.90	0.33***
Female-dominated occupation	0.77	2.31***
Personal Characteristics		
Age 23-44	1.05	1.17
Age 45-65	Reference	Reference
Married	1.27	0.85
Kids under 18	0.98	1.11
White	Reference	Reference
Black	0.96	0.70
Latino	0.67	1.01
Other minority	0.67	0.94
Education and work		
High school degree or less	Reference	Reference
Some college	1.37	1.79**
College or more	1.78**	2.07***
Student at some point during survey period	1.32	1.13
Hours per week	1.00	1.02
Region		
Northeast	Reference	Reference
Midwest	0.63*	1.01
South	0.67*	1.30
West	0.69	0.96
Constant	0.05***	0.07***
R^2	0.0710	
Obs	2970	

Source: SIPP.
Note: Multinomial logit model of occupational status change includes only men who have had a period of involuntary unemployment and make a job transition. Base outcome is no change in occupational status. Dummy variables for the interview reference month, yearly month, and year are included but not shown in Table A5.
*p < .05, **p < .01, ***p < .001 (two-tailed tests).

References

Abowd, John M., Stinson, Martha H., 2013. Estimating measurement error in annual job earnings: a comparison of survey and administrative data. Rev. Econ. Stat. 95 (5), 1451–1467. https://doi.org/10.1162/REST_a_00352.
Alksnis, Christine, Desmarais, Serge, Curtis, James, 2008. "Workforce segregation and the gender wage gap: is 'women's work valued as highly as 'men's'? J. Appl. Soc. Psychol. 38 (6), 1416–1441. https://doi.org/10.1111/j.1559-1816.2008.00354.x.
Andersson, Fredrik, Holzer, Harry J., Lane, Julia I., 2005. Moving up or Moving on: Who Gets Ahead in the Low-Wage Labor Market? Russell Sage Foundation. http://www.jstor.org/stable/10.7758/9781610440103.
Arulampalam, Wiji, 2001. Is unemployment really scarring? Effects of unemployment experiences on wages. Econ. J. 111 (475), F585–F606. https://doi.org/10.1111/1468-0297.00664.
Autor, David H., Dorn, David, 2013. The growth of low-skill service jobs and the polarization of the US labor market. Am. Econ. Rev. 103 (5), 1553–1597. https://doi.org/10.2307/42920623.
Autor, David H., Katz, Lawrence F., Kearney, Melissa S., 2006. The polarization of the U.S. Labor market. Am. Econ. Rev. 96 (2), 189–194. https://doi.org/10.1257/000282806777212620.

Barber, Kristen, 2008. The well-coiffed man class, race, and heterosexual masculinity in the hair salon. Gend. Soc. 22 (4), 455–476. https://doi.org/10.1177/0891243208321168.
Becker, G.S., 1962. Investment in human capital: A theoretical analysis. J. Polit. Econ. 70 (5), 9–49.
Blau, Francine D., Peter, Brummund, Liu, Albert Yung-Hsu, 2013. "Trends in occupational segregation by gender 1970–2009: adjusting for the impact of changes in the occupational coding system. Demography 50 (2), 471–492. https://doi.org/10.1007/s13524-012-0151-7.
Blau, Francine D., Kahn, Lawrence M., 2017. The gender wage gap: extent, trends, and explanations. J. Econ. Lit. 55 (3), 789–865. https://doi.org/10.1257/jel.20160995.
Brand, Jennie E., 2006. The effects of job displacement on job quality: findings from the Wisconsin longitudinal study. Res. Soc. Stratif. Mobil. 24 (3), 275–298. https://doi.org/10.1016/j.rssm.2006.03.001.
Brand, Jennie E., 2015. The far-reaching impact of job loss and unemployment. Annu. Rev. Sociol. 41 (1), 359–375. https://doi.org/10.1146/annurev-soc-071913-043237.
Bureau of Labor Statistics, 2017. Industries with the Fastest Growing and Most Rapidly Declining Wage and Salary Employment, 2016-2026, vol. 2017. https://www.bls.gov/emp/tables/industries-fast-grow-decline-employment.htm.
Bureau of Labor Statistics, 2018. Databases, tables & calculators by subject: unemployment rate. https://data.bls.gov/timeseries/LNS14000000.
Calvó-Armengol, Antoni, Jackson, Matthew O., 2004. The effects of social networks on employment and inequality. Am. Econ. Rev. 94 (3), 426–454. https://doi.org/10.1257/0002828041464542.
Carrington, William J., Fallick, Bruce, 2017. Why do earnings fall with job displacement? Ind. Relat.: J. Econ. Soc. 56 (4), 688–722. https://doi.org/10.1111/irel.12192.
Cha, Youngjoo, Morgan, Stephen L., 2010. "Structural earnings losses and between-industry mobility of displaced workers, 2003–2008. Soc. Sci. Res. 39 (6), 1137–1152. https://doi.org/10.1016/j.ssresearch.2010.08.002.
Cha, Youngjoo, Thébaud, Sarah, 2009. "Labor markets, breadwinning, and beliefs how economic context shapes men's gender ideology. Gend. Soc. 23 (2), 215–243. https://doi.org/10.1177/0891243208330448.
Chan, Tak Wing, Goldthorpe, John H., 2004. Is there a status order in contemporary British society? Evidence from the occupational structure of friendship. Eur. Sociol. Rev. 20 (5), 383–401. https://doi.org/10.1093/esr/jch033.
Chan, Tak Wing, Goldthorpe, John H., 2007. Class and status: the conceptual distinction and its empirical relevance. Am. Sociol. Rev. 72 (4), 512–532. https://doi.org/10.1177/000312240707200402.
Chen, Victor Tan, 2015. Cut Loose: Jobless and Hopeless in an Unfair Economy. University of California Press.
Chusmir, Leonard H., 1990. Men who make nontraditional career choices. J. Couns. Dev. 69 (1), 11–16. https://doi.org/10.1002/j.1556-6676.1990.tb01446.x.
Connell, R.W., 2005. Masculinities, second ed. University of California Press, Berkeley, CA.
Cortes, Guido, Matias, Jaimovich, Nir, Henry, E., Siu, 2018. The 'End of Men' and Rise of Women in the High-Skilled Labor Market. Working Paper 24274. National Bureau of Economic Research. https://doi.org/10.3386/w24274.
Cotter, David, Hermson, Joan, Vanneman, Reeve, 2004. Gender inequality at work. In: The American People: Census 2000, 107–38. The Russel Sage Foundation, New York, New York.
Dar, Amit, Gill, Indermit S., 1998. Evaluating retraining programs in OECD countries: lessons learned. World Bank Res. Obs. 13 (1), 79–101. https://doi.org/10.1093/wbro/13.1.79.
Demantas, Ilana, Myers, Kristen, 2015. "'Step up and Be a man in a different manner': unemployed men reframing masculinity. Sociol. Q. 56 (4), 640–664. https://doi.org/10.1111/tsq.12099.
Dill, Janette S., Craft Morgan, Jennifer, Marshall, Victor W., 2013. Contingency, employment intentions, and retention of vulnerable low-wage workers: an examination of nursing assistants in nursing homes. Gerontol. 53 (2), 222–234. https://doi.org/10.1093/geront/gns085.
DiPrete, Thomas A., McManus, Patricia A., 2000. Family change, employment transitions, and the welfare state: household income dynamics in the United States and Germany. Am. Sociol. Rev. 65 (3), 343–370. https://doi.org/10.2307/2657461.
Dwyer, Rachel E., 2013. The care economy? Gender, economic restructuring, and job polarization in the U.S. Labor market. Am. Sociol. Rev. 78 (3), 390–416. https://doi.org/10.1177/0003122413487197.
Dwyer, Rachel E., Wright, Erik Olin, 2012. Job growth and job polarization in the United States and europe, 1995–2007. In: Fernández-Macías, Enrique, Hurley, John, Storrie, Donald (Eds.), Transformation of the Employment Structure in the EU and USA, 1995–2007, vols. 52–74. Palgrave Macmillan, UK. https://doi.org/10.1057/9780230369818_4.
Ehlert, Martin, 2013. Job loss among rich and poor in the United States and Germany: who loses more income? Res. Soc. Stratif. Mobil. Soc. Mobil. Inequal. Life Course: Explor. Relevance Context 32 (June), 85–103. https://doi.org/10.1016/j.rssm.2012.11.001.
England, Paula, 1992. Comparable Worth: Theories and Evidence. Aldine Transaction, New Brunswick.
England, Paula, 2010. The gender revolution uneven and stalled. Gend. Soc. 24 (2), 149–166. https://doi.org/10.1177/0891243210361475.
Eriksson, Stefan, Rooth, Dan-Olof, 2014. Do employers use unemployment as a sorting criterion when hiring? Evidence from a field experiment. Am. Econ. Rev. 104 (3), 1014–1039. https://doi.org/10.1257/aer.104.3.1014.
Farber, Henry S., 2017. Employment, hours, and earnings consequences of job loss: US evidence from the displaced workers survey. J. Labor Econ. 35 (S1), S235–S272. https://doi.org/10.1086/692353.
Friedman, Sarah, 2015. "Still a 'stalled revolution'? Work/family experiences, hegemonic masculinity, and moving toward gender equality. Sociol. Compass 9 (2), 140–155. https://doi.org/10.1111/soc4.12238.
Gangl, Markus, 2006. Scar effects of unemployment: an assessment of institutional complementarities. Am. Sociol. Rev. 71 (6), 986–1013. https://doi.org/10.1177/000312240607100606.
Gangl, Markus, 2012. Unemployment Dynamics in the United States and West Germany: Economic Restructuring, Institutions and Labor Market Processes. Springer Science & Business Media.
Gibbons, Robert, Katz, Lawrence F., 1991. Layoffs and lemons. J. Labor Econ. 9 (4), 351–380.
Goldin, Claudia, 2006. "The Quiet Revolution that Transformed Women's Employment, Education, and Family." Working Paper 11953. National Bureau of Economic Research. http://www.nber.org/papers/w11953.
Goldthorpe, John, Hope, Keith, 1974. The social grading of occupations: a new approach and scale. Br. J. Sociol. 138 (4). https://www.researchgate.net/publication/44827259_The_Social_Grading_of_Occupations_A_New_Approach_and_Scale.
Goodman, Christopher, Mance, Steven, 2011. "Employment Loss and the 2007-09 Recession: an Overview." Monthly Labor Report. Bureau of Labor Statistics. https://www.bls.gov/opub/mlr/2011/article/employment-loss-and-the-2007-09-recession-an-overview.htm.
Hacker, Jacob S., 2008. The Great Risk Shift: the New Economic Insecurity and the Decline of the American Dream. Oxford University Press.
Hardie, Jessica Halliday, 2015. Women's work? Predictors of young men's aspirations for entering traditionally female-dominated occupations. Sex. Roles (January), 1–14. https://doi.org/10.1007/s11199-015-0449-1.
Henson, Kevin D., Rogers, Jackie Krasas, 2001. 'Why marcia you've changed!' male clerical temporary workers doing masculinity in a feminized occupation. Gend. Soc. 15 (2), 218–238. https://doi.org/10.1177/089124301015002004.
Holzer, Harry, Lerman, Robert, 2009. The Future of Middle-Skill Jobs." CCF Brief, vol. 41. Brookings Institute. https://www.brookings.edu/research/the-future-of-middle-skill-jobs/.
Holzer, Harry, Lerman, Robert I., 2007. America's Forgotten Middle-Skill Jobs. Workforce Alliance, Washington D.C. https://www.urban.org/research/publication/americas-forgotten-middle-skill-jobs.
Hout, Michael, DiPrete, Thomas A., 2006. What we have learned: RC28's contributions to knowledge about social stratification. Res. Soc. Stratif. Mobil. 24 (1), 1–20. https://doi.org/10.1016/j.rssm.2005.10.001.

Isenberg, Emily, Landivar, Liana Christin, Mezey, Esther, 2013. A Comparison of Person-Reported Industry to Employer-Reported Industry in Survey and Administrative Data." 13–47. Working Papers. Center for Economic Studies, U.S. Census Bureau. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2330403.
Jacobson, Louis S., LaLonde, Robert J., Sullivan, Daniel G., 1993. Earnings losses of displaced workers. Am. Econ. Rev. 83 (4), 685–709.
Kalleberg, Arne L., 2009. Precarious work, insecure workers: employment relations in transition. Am. Sociol. Rev. 74 (1), 1–22. https://doi.org/10.1177/000312240907400101.
Kalleberg, Arne L., Reskin, Barbara F., Hudson, Ken, 2000. Bad jobs in America: standard and nonstandard employment relations and job quality in the United States. Am. Sociol. Rev. 65 (2), 256–278. https://doi.org/10.2307/2657440.
Kmec, Julie A., 2005. Setting occupational sex segregation in motion demand-side explanations of sex traditional employment. Work Occup. 32 (3), 322–354. https://doi.org/10.1177/0730888405277703.
Lassus, Phillips, Lora A., Lopez, Steven, Roscigno, Vincent J., 2015. Aging workers and the experience of job loss. Res. Soc. Stratif. Mobil. 41 (September), 81–91. https://doi.org/10.1016/j.rssm.2015.01.001.
Lee, Tae Heon, Gerhart, Barry, Weller, Ingo, Charlie, O., Trevor, 2008. Understanding voluntary turnover: path-specific job satisfaction effects and the importance of unsolicited job offers. Acad. Manag. J. 51 (4), 651–671. https://doi.org/10.5465/amr.2008.33665124.
Levanon, Asaf, England, Paula, Allison, Paul, 2009. Occupational feminization and pay: assessing causal dynamics using 1950-2000 U.S. Census data. Soc. Forces 88 (2), 865–891. https://doi.org/10.1353/sof.0.0264.
Lynn, Freda B., Ellerbach, George, 2017. A position with a view. Am. Sociol. Rev. 82 (1), 27.
Macpherson, David A., Hirsch, Barry T., 1995. Wages and gender composition: why do women's jobs pay less? J. Labor Econ. 13 (3), 426–471. https://doi.org/10.1086/298381.
Magnusson, Charlotta, Nermo, Magnus, 2017. Gender, parenthood and wage differences: the importance of time-consuming job characteristics. Soc. Indic. Res. 131 (2), 797–816. https://doi.org/10.1007/s11205-016-1271-z.
Maume, David J., 1999. Glass ceilings and glass escalators occupational segregation and race and sex differences in managerial promotions. Work Occup. 26 (4), 483–509. https://doi.org/10.1177/0730888499026004005.
McCall, J.J., 1970. Economics of information and job search. Q. J. Econ. 84 (1), 113–126. https://doi.org/10.2307/1879403.
Michniewicz, Kenneth S., Vandello, Joseph A., Bosson, Jennifer K., 2014. "Men's (Mis)Perceptions of the gender threatening consequences of unemployment. Sex. Roles 70 (3–4), 88–97. https://doi.org/10.1007/s11199-013-0339-3.
Mishel, Lawrence, Bivens, Josh, Gould, Elise, Shierholz, Heidi, 2012. The State of Working America, 12 edition. ILR Press, Ithaca.
Mortensen, Dale T., 1970. Job search, the duration of unemployment, and the phillips curve. Am. Econ. Rev. 60 (5), 847–862.
Munnich, Elizabeth, Wozniak, Abigail, 2019. What Explains the Rising Share of US Men in Registered Nursing? ILR Review. https://doi.org/10.1177/0019793919838775. March, 0019793919838775.
Nakao, Keiko, Treas, Judith, 1994. Updating occupational prestige and socioeconomic scores: how the new measures measure up. Sociol. Methodol. 1–72.
Nelson, Marla, Wolf-Powers, Laura, 2010. Chains and ladders: exploring the opportunities for workforce development and poverty reduction in the hospital sector. Econ. Dev. Q. 24 (1), 33–44. https://doi.org/10.1177/0891242409347721.
Nomaguchi, Kei, Johnson, Wendi, 2016. Parenting stress among low-income and working-class fathers: the role of employment. J. Fam. Issues 37 (11), 1535–1557. https://doi.org/10.1177/0192513X14560642.
Norton Grubb, W., 1997. The returns to education in the sub-baccalaureate labor market, 1984–1990. *Econ. Educ. Rev. Educ. Work Eff. Educ.*: Essays Mem. Charles Scott Benson 16 (3), 231–245. https://doi.org/10.1016/S0272-7757(97)00002-2.
Oberholzer-Gee, Felix, 2008. Nonemployment stigma as rational herding: a field experiment. J. Econ. Behav. Organ. 65 (1), 30–40. https://doi.org/10.1016/j.jebo.2004.05.008.
Oi, W., 1962. Labor as a quasi-fixed factor. J. Polit. Econ. 70 (6), 538–555.
Paul, Karsten I., Moser, Klaus, 2009. Unemployment impairs mental health: meta-analyses. J. Vocat. Behav. 74 (3), 264–282. https://doi.org/10.1016/j.jvb.2009.01.001.
Pedulla, David, 2016. Penalized or protected? Gender and the consequences of non-standard and mismatched employment histories. Am. Sociol. Rev. 81 (2) https://doi.org/10.1177/0003122416630982.
Price-Glynn, Kim, Rakovski, Carter, 2012. Who rides the glass escalator? Gender, race and nationality in the national nursing assistant study. Work Employ. Soc. 26 (5), 699–715. https://doi.org/10.1177/0950017012451634.
Pullen, Alison, Simpson, Ruth, 2009. Managing difference in feminized work: men, otherness and social practice. Hum. Relat. 62 (4), 561–587. https://doi.org/10.1177/0018726708101989.
Reskin, Barbara F., Roos, Patricia A., 1990. Job Queues, Gender Queues: Explaining Women's Inroads into Male Occupations. Temple University Press, Philadelphia.
Ridgeway, Cecilia, 2011. Framed by Gender: How Gender Inequality Persists in the Modern World, first ed. Oxford University Press, USA. New York, NY.
Rogerson, Richard, Shimer, Robert, Wright, Randall, 2005. Search-theoretic models of the labor market: a survey. J. Econ. Lit. 43 (4), 959–988. https://doi.org/10.1257/002205105775362014.
Roos, Patricia A., Stevens, Lindsay M., 2018. Integrating occupations: changing occupational sex segregation in the United States from 2000 to 2014. Demogr. Res. 38, 127–154.
Ruggles, Steven, Genadek, Katie, Goeken, Ronald, Grover, Josiah, Sobek, Matthew, 2017. Integrated Public Use Microdata Series: University of Minnesota, Minneapolis, MN. https://doi.org/10.18128/D010.V7.0, Version 7.0.
Ruhm, Christopher J., 1991. Are workers permanently scarred by job displacements? Am. Econ. Rev. 81 (1), 319–324.
Schrock, Douglas, Schwalbe, Michael, 2009. Men, masculinity, and manhood acts. Annu. Rev. Sociol. 35 (1), 277–295. https://doi.org/10.1146/annurev-soc-070308-115933.
Skuratowicz, Eva, Hunter, Larry W., 2004. "Where do women's jobs come from? Job resegregation in an American bank. Work Occup. 31 (1), 73–110. https://doi.org/10.1177/0730888403259779.
Smith, Ryan A., 2012. Money, benefits, and power a test of the glass ceiling and glass escalator hypotheses. Ann. Am. Acad. Pol. Soc. Sci. 639 (1), 149–172. https://doi.org/10.1177/0002716211422038.
Stevens, Ann Huff, 1997. Persistent effects of job displacement: the importance of multiple job losses. J. Labor Econ. 15 (1), 165–188.
Torre, Margarita, 2018. Stopgappers? The occupational trajectories of men in female-dominated occupations. Work Occup. 45 (3), 283–312. https://doi.org/10.1177/0730888418780433.
Ueno, Koji, Roach, Teresa, Abráham, E., Peña-Talamantes, 2013. Sexual orientation and gender typicality of the occupation in young adulthood. Soc. Forces 92 (1), 81–108.
Usui, Emiko, 2009. Wages, non-wage characteristics, and predominantly male jobs. Labour Econ. 16 (1), 52–63. https://doi.org/10.1016/j.labeco.2008.04.001.
Vespa, Jonathan, 2013. America's Families and Living Arrangements: 2012. U.S. Census Bureau, Washington D.C.. https://www.census.gov/library/publications/2013/demo/p20-570.html
Vespa, Jonathan, 2017. The Changing Economics and Demographics of Young Adulthood: 1975-2016. U.S. Census Bureau, Washington D.C.. https://www.census.gov/library/publications/2017/demo/p20-579.html
Willer, Robb, Rogalin, Christabel L., Conlon, Bridget, Wojnowicz, Michael T., 2013. Overdoing gender: a test of the masculine overcompensation thesis. Am. J. Sociol. 118 (4), 980–1022. https://doi.org/10.1086/668417.
Williams, Christine L., 1992. The glass escalator: hidden advantages for men in the 'female' professions. Soc. Probl. 39 (3), 253–267. https://doi.org/10.2307/3096961.
Wingfield, Adia Harvey, 2009. Racializing the glass escalator reconsidering men's experiences with women's work. Gend. Soc. 23 (1), 5–26. https://doi.org/10.1177/0891243208323054.

Wright, Erik Olin, Dwyer, Rachel E., 2003. The patterns of job expansions in the USA: a comparison of the 1960s and 1990s. Soc. Econ. Rev. 1 (3), 289–325. https://doi.org/10.1093/soceco/1.3.289.

Yavorsky, Jill E., 2019. Uneven patterns of inequality: an audit analysis of hiring-related practices by gendered and classed contexts. Soc. Forces 1–32. https://doi.org/10.1093/sf/soy123.

Yavorsky, Jill E., Cohen, Philip N., Yue, Qian, 2016. Man up, man down: race–ethnicity and the hierarchy of men in female-dominated work. Sociol. Q. 57 (4), 733–758. https://doi.org/10.1111/tsq.12152.