

Penalized or Protected?
The Consequences of Non-Standard Employment Histories for Male and Female Workers*

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ABSTRACT

Millions of workers are currently employed in positions that deviate from the full-time, standard employment relationship. Little is known, however, about how histories of non-standard employment – part-time work, temporary agency employment, and skills underemployment – shape workers’ future labor market opportunities. Drawing on original field- and survey-experimental data, this article examines three interrelated questions: 1) What are the consequences of having a non-standard employment history for workers’ future labor market opportunities?; 2) Given the gendered history of non-standard employment in the United States, do the consequences of these labor market positions differ for male and female workers?; and 3) What mechanisms account for the consequences of having a non-standard employment history? Results from the field experiment demonstrate that a history of non-standard employment is as scarring for workers as a year of unemployment. However, the consequences of non-standard employment vary in important ways by whether the worker was employed in a part-time position, in a temporary agency, or in a job below his or her skill level as well as by the gender of the worker. The survey experiment provides evidence that employers’ perceptions of workers’ human capital, competence, and commitment mediate the consequences of non-standard employment histories for job applicants’ hiring outcomes. Together, these findings shed light on the gendered consequences of changing employment relations for the distribution of labor market opportunities in the “new economy,” with important implications for workers’ economic security and career trajectories.

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Millions of workers are currently employed in positions that deviate from the full-time, standard employment relationship (Kalleberg 2000; Smith 1997; Tilly 1992; Bureau of Labor Statistics 2005; Bureau of Labor Statistics 2013b). Working in part-time positions, through temporary help agencies, and at jobs below their skill level have become common experiences for American workers. At the same time, the consequences of these non-traditional types of employment may be more consequential than ever. Employers are increasingly filling vacancies with job candidates from the external labor market (Cappelli 2001; Hollister 2011; DiPrete et al. 2002), candidates about whom they have less direct information than if they were promoting workers from within their organizations. This aspect of the “new economy” means that workers’ employment histories and experiences, including histories of non-standard employment, are increasingly important in the hiring process. However, limited research has examined how these two trends – the rise of non-standard employment relations and the decline of internal labor markets – intersect with one another in shaping workers’ labor market opportunities.

To address this limitation of existing research and extend the sociological understanding of the consequences of non-standard employment, this article addresses three inter-related questions. First, what are the consequences of having a history of non-standard employment for workers’ future labor market opportunities? Second, do these consequences vary for male and female workers? And, finally, what mechanisms can assist in explaining the consequences of having a non-standard employment history?

Non-standard employment – part-time work, temporary agency employment, or working in a job below one’s skill level – could affect workers’ future labor market opportunities in

multiple ways. These types of positions may serve a protective force against the negative effects of long-term unemployment (Ruhm 1991), limiting the penalties workers with non-standard histories face compared to individuals who remain in full-time, standard jobs. If this is the case, as some policy experts and popular wisdom suggests (see Yu 2012; Stafford 2012), then there may be an important role for non-standard employment in promoting opportunity for workers in the “new economy.” Alternatively, the penalties associated with histories of non-standard employment may be similar to those of long-term unemployment, limiting workers’ abilities to obtain employment in the future. If employers screen out workers with non-standard employment histories in favor of workers with standard, full-time histories, then concerns arise about the labor market becoming segmented into jobs that provide mobility opportunities and those that are “dead ends” (Kalleberg et al. 2000).

The consequences of non-standard employment may also vary in meaningful ways by the gender of the worker. Part-time work and temporary agency employment arose in the U.S. economy as heavily feminized types of work (Kalleberg 2000; Hatton 2011) and may be considered an indication that a female worker is on the “mommy track” (Williams 2001). Thus, non-standard employment could serve as a proxy for a worker’s parenthood status, resulting in a “motherhood penalty” and greater disadvantage for women than men (Correll et al. 2007). However, it is also possible that employers have incorporated into their understanding of female labor force participation that women may have a spell of non-standard work or unemployment, limiting its influence on women’s hiring outcomes. For men, though, a history of non-standard work could send a strong signal that he was unable to find a full-time, standard job and therefore raise concerns about him as a potential employee. This could lead to more severe penalties for

men than women. Thus, the protective or penalizing nature of non-standard employment is likely to vary by a worker's gender, but those differences could go in either direction.

While these issues are integral to understanding processes of labor market stratification and gender inequality in the “new economy,” existing data sources have made it difficult for researchers to examine the ways that workers' histories of non-standard employment shape their future labor market outcomes. Few data sets track workers over time while simultaneously capturing detailed information about their non-standard employment experiences. And, the ability to control for the relevant factors that lead workers in to (and out of) non-standard employment is limited, leaving concerns about biases in the estimates that have been generated by research using observational data (see Addison, Cotti, and Surfield 2009; Addison and Surfield 2009; Booth; Francesconi, and Frank 2002).

To gain traction on this set of issues and to alleviate concerns about bias due to selection and omitted variables, this article analyzes original data from two experiments: 1) a field experiment examining actual hiring decisions in five major U.S. labor markets; and 2) a survey experiment conducted with hiring decision-makers at U.S.-based firms. The primary manipulations in both experiments were the most recent work histories that were presented on the applicants' resumes. The resumes were randomly assigned twelve months of recent employment experience consisting of a full-time job, a part-time job, employment through a temporary help agency, a job below the applicant's skill level, or a spell of unemployment. The experiment also manipulated the gender (male vs. female) of the worker using gendered names. The data generated by these experiments provide causal estimates of the effect of non-standard employment histories for workers' future labor market outcomes and how these consequences vary by gender. Together, these data shed new light on the consequences of changing labor

market institutions while probing whether the gendered nature of non-standard employment translates into distinct consequences for male and female job applicants.

The article proceeds as follows. First, I define and provide background information about non-standard work in the United States. The article then builds on the unemployment scarring literature and research on the “ideal worker” to generate hypotheses about the whether non-standard work histories buffer or scar workers as they move through the labor market and how these consequences may differ by gender. I then present the findings from the field experiment, followed by the findings from the survey experiment. Finally, I discuss the results and then address the implications of the findings for understanding processes of labor market stratification and gender inequality in the “new economy.”

THE RISE OF NON-STANDARD EMPLOYMENT RELATIONS

While definitions vary, there are three elements that are central to most conceptualizations of non-standard employment: 1) work that is *not* performed full-time; 2) work that is *not* expected to continue indefinitely; and 3) work that is *not* performed at the legal employer’s place of business, nor under the legal employer’s direction (Kalleberg 2000). An employment relationship that encompasses any of these aspects can be considered non-standard employment. Thus, part-time work and employment through a temporary help agency are clearly forms of non-standard employment. Additionally, jobs that are well beneath a worker’s skill level and experience can also be deemed non-standard. This employment arrangement – often referred to as skills underemployment – is typically pursued by workers as a short-term option while they attempt to find a job that matches their skill level and experience. Thus, there is limited expectation of continued employment.

Non-standard employment has become a cornerstone of the “new economy.” While no single force explains the rise in non-standard employment, researchers have identified multiple factors that are implicated in this process. Global economic integration has increased competition for U.S. firms, creating incentives for companies to outsource work to lower-wage countries and implement more flexible, non-standard employment relations for their U.S. employees (Kalleberg 2009). Legal changes in the United States have also paved the way for employers to alter their relationships with their employees and increase their use of non-standard labor (Gonos 1997; Autor 2003). Additionally, changes in key labor market institutions, such as the decline in the power of organized labor (Morris and Western 1999; Clawson and Clawson 1999), have likely enabled the emergence of more non-standard positions in the U.S. labor market. Some researchers have also suggested that workers’ changing preferences for more flexible schedules and working conditions have played a role in the rise of certain forms of non-standard employment, such as part-time and temporary work (for a summary of this literature, see Ofstead 1999). Regardless of the cause, part-time work, temporary employment, and working in positions for which they are overqualified have become common experiences for workers in the United States.

Part-time employment is generally defined as working less than 35 hours per week and is the most prevalent form of non-standard work. Nearly 20% of the U.S. workforce is employed in part-time positions (Bureau of Labor Statistics 2013a; Kalleberg 2000). Compared with full-time workers, part-time workers tend to receive lower pay and fewer fringe benefits (Kalleberg 2000; Kalleberg et al. 2000). However, there is significant variation in the pay and benefits of part-time work (Tilly 1992; Kalleberg 2000). Since 1970, the growth in part-time work has been concentrated among “involuntary” or “secondary” part-time work (i.e., part-time positions where

people would rather be working full-time). Involuntary part-time workers make up approximately a quarter of the part-time worker population. Kalleberg (2000) argues that this dynamic suggests a movement from part-time work being a way for workers – mainly female workers – to obtain flexibility to a strategy used by employers to achieve lower costs and increased flexibility. While gender differences in part-time employment are addressed more fully below, it is important to note that, although the gender gap in part-time work has declined over time, there remain significant gender differences in participation in part-time work. Currently, approximately 60% of part-time workers in the United States are women (Bureau of Labor Statistics 2013a).

Temporary help agency employment captures those workers who are on the payroll of one firm (the “temp agency”), but who perform their tasks on a temporary basis at a separate firm. While temporary workers are used in all occupational categories, they are most heavily concentrated in office and administrative support occupations and production occupations (Bureau of Labor Statistics 2005). Employment through temporary help agencies (THA) has risen dramatically over the past 30 years. Between 1979 and the late 1990s, the THA sector grew at an annual rate of over 11%, which was over five times more rapid than the growth in nonfarm employment (Kalleberg 2000; Autor 2003). Since then, the level of THA employment has remained relatively stable at these higher levels. Importantly, a majority of workers (roughly 60%) work in THA positions involuntarily. And, while women tended to dominate THA employment as the sector developed after World War II (Hatton 2011), THA workers are now roughly half male and half female (Bureau of Labor Statistics 2005).

Finally, this article examines the consequences of skills underemployment, or worker over-qualification. Skills underemployment describes workers who are employed in jobs for

which they have excessive skills or experience (Erdogan and Bauer 2011). There is less research on skills underemployment than part-time or temporary work, in part due to the challenges with operationalizing the construct using secondary data. However, there is evidence that workers who are skills underemployed receive lower pay than individuals with similar skills and experience, but that they receive higher pay than the workers in the jobs that they are performing (McGuinness 2006; Wilkins and Wooden 2011). One key difference between skills underemployment and the other types of non-standard work histories that are examined in this article is that skills underemployment does not have a history of being heavily feminized.

PENALIZED OR PROTECTED?

While social scientists have examined in great depth the forces behind the rise of non-standard employment relations in the United States and the consequences of non-standard employment for workers currently in those position (Autor 2003; Kalleberg et al. 2000; Kalleberg 2011), limited scholarship examines how histories of non-standard employment shape workers' *future* labor market opportunities. On the one hand, non-standard employment histories may insulate workers from the scarring consequences of long-term unemployment, playing a positive role in shaping workers' opportunities. Alternatively, histories of part-time work, temporary employment, or skills underemployment may limit workers' abilities to obtain future employment compared to workers with full-time, standard employment histories.

At their core, these issues are about the demand side of the job matching process, examining how employers perceive workers with non-standard employment histories and, ultimately, which job applicants employers choose to hire. While there is a voluminous literature on how employers make hiring decisions (for example, see Oyer and Schaefer 2011; Rivera

2012; Moss and Tilly 2001), I develop and extend theoretical insights from research on unemployment scarring (Ruhm 1991; Gangl 2006) and scholarship on the “ideal worker” construct (Correll et al. 2007; Turco 2010) to understand how non-standard employment histories may shape the job applicant screening process.

Penalties and Non-Standard Employment

The literature on the scarring effects of unemployment, which examines if and how histories of unemployment affect workers’ future earnings and employment opportunities (Ruhm 1991; Gangl 2006), is particularly useful in understanding why and how workers’ histories of non-standard employment may negatively affect their hiring outcomes compared to workers who remain in full-time, standard positions. Sociologists and economists have articulated two primary mechanisms through which unemployment may negatively influence workers as they move through the labor market: a human capital or “hard skills” pathway and a negative signaling pathway, which focuses on underlying aspects of the worker’s character rather than their human capital.

The first proposed mechanism linking a history of unemployment with hiring outcomes is a human capital or “hard skills” pathway. Human capital theory suggests that: “an unemployment spell not only precludes the accumulation of work experience but may also bring the deterioration of general skills” (Arulampalam, Gregg, and Gregory 2001, p. F577; see also Becker 1964). Thus, unemployment histories are hypothesized to scar workers because they lead to the erosion of human capital – both general and occupation-specific – and preclude the accumulation of new skills. Regardless of whether this accurately reflects the consequences of unemployment for workers’ human capital, if employers *perceive* unemployment to negatively

affect a worker's human capital, then workers with histories of unemployment may be penalized at the hiring interface.

Just as a history of being unemployed may lead employers to perceive workers as having lower levels of human capital, a similar process may occur for workers who end up in non-standard employment positions. For example, workers in part-time jobs are at their place of employment for fewer hours. Thus, this could suggest to future employers that their human capital has not developed at comparable rates to workers employed full-time, raising concerns about part-time workers compared to full-time workers. Future employers could also see employment through temporary employment agencies as leading to lower levels of human capital for workers. Even if a worker is performing temporary work in his or her occupation of choice, he or she will be moving between different employers and therefore may be perceived as having developed skills at a lower rate than a worker in a full-time, standard position at a single employer (Nollen 1996; Polivka 1996). Concerns about lower levels of human capital are also likely for workers who move in to jobs beneath their skill level, almost by definition. These workers are not performing tasks that utilize their occupation-specific skills and therefore will likely be seen by future employers as having lower levels of human capital and less relevant experience.

A second pathway articulated in the literature on unemployment scarring is that a history of unemployment may serve as a signal to future employers about unobserved, negative worker attributes that are distinct from their human capital (Eriksson and Rooth 2014). At the hiring interface, employers are often faced with dozens, or even hundreds, of applications for a single vacancy. And, obtaining information about the quality of a worker from a job application can be

difficult. Thus, employers may perceive a history of unemployment on a resume as an observable signal that there is something unobservable and negative about the worker.

Similar to a history of unemployment, a history of non-standard employment may send signals about unobservable worker characteristics to future employers. While suggesting that the content of the signal sent by a history of unemployment may have something to do with a worker's productivity, the unemployment scarring literature remains relatively silent on this issue (Arulampalam, Gregg, and Gregory 2001). Therefore, to gain traction on the underlying content of the signal that may be sent by histories of non-standard employment, I turn to sociological scholarship about cultural conceptions of the "ideal worker" (Turco 2010; Correll et al. 2007; Davies and Frink 2014). While the contours of what it means to be an "ideal worker" vary with time and place, certain aspects remain relatively consistent. The "ideal worker" is generally highly competent, committed to his or her full-time job, free from the competing demands of family life, and has an unblemished employment history. Summarizing this notion, Correll et al. (2007) write: "According to this 'ideal worker' belief, the best worker is the 'committed' worker who demonstrates intensive effort on the job through actions that appear to sacrifice all other concerns for work" (p. 1306). In a similar vein, Davies and Frink (2014) argue: "The ideal worker is one who is devoted single-mindedly to the good of the employer, and is not subject to personal distractions from family or other responsibilities" (p. 20). Limited research has examined the ways that changing labor market institutions – specifically the rise of non-standard employment – render the attainment of the "ideal worker" status nearly impossible for a large share of the workforce. But, the very nature of non-standard work may violate prescriptive norms about what an "ideal worker" should be – competent and committed. Thus, employers

may perceive workers with histories of non-standard employment as lacking competence and/or commitment when compared to workers with full-time, standard histories of employment.

Competence – the first dimension of the “ideal worker” construct – differs from human capital in that it is centered on a worker’s general ability, rather than his or her specific occupational knowledge and work experience. Concerns about a worker’s competence are likely to be strongest if a potential employer perceives a job applicant’s history of non-standard employment as *involuntary* – working in a non-standard position, but wanting to be in a full-time, standard position (Tilly 1992; Kalleberg 2000). For example, while involuntary part-time employment is quite common, it may suggest to an employer that the worker doesn’t have the competence to obtain and maintain a full-time job. Competence may also be a strong signal sent by workers with histories of temporary employment. Boyce et al. (2007) argue: “Stereotypical conceptions of temporary workers revolve around low skills, a lack of intelligence, a weak work ethic, and general inferiority” (p.7) (see also Martella 1991; Parker 1994; Rogers 2000; Williams 2001). While there is less research and theorizing about skills underemployment, this type of non-standard employment is generally conceived of as being undesirable and involuntary for the worker. Thus, the inability of a worker to maintain a job at their level of skill and experience may send a negative competence signal to future employers.

A history of non-standard employment may also violate the commitment aspect of the “ideal worker” construct. Even though survey data suggests that there are few systematic differences between the reported commitment levels of full-time and non-standard workers, particularly part-time workers (Kalleberg 1995), employers may perceive non-standard workers as less committed. A negative commitment signal is likely to be strongest if a future employer perceives the move into non-standard employment as *voluntary*. For example, workers often

utilize part-time employment as a strategy to balance the competing demands of work and family life (Williams 2001), which would be considered voluntarily working part-time. Decisions about voluntarily moving into part-time employment are often heavily gendered decisions and, thus, the consequences of part-time work may also be different for men and women. This issue will be discussed in detail below. In terms of temporary agency employment, the nature of temporary work – moving from organization to organization – may raise concerns for employers about the commitment temporary workers have to their careers and the organizations for which they work. Finally, it is unclear what signal a history of skills underemployment would send to future employers. The involuntary nature of most skills underemployment may limit its signal about a worker's commitment with employers mainly seeing skills underemployment as providing information about a worker's human capital or competence.

The above perspectives suggest that workers with histories of non-standard employment are likely going to face penalties at the hiring interface compared to workers with full-time standard histories. These consequences could be due to employers' perceptions of applicants' human capital as well as signals sent by histories of non-standard work about an applicant's competence or commitment.

The Protective Force of Non-Standard Employment

While non-standard employment histories may limit workers' future labor market opportunities compared to workers with full-time, standard histories, it is also possible that non-standard employment provides workers with an advantage over long-term unemployment. Current workforce development policies in the United States are predicated on this idea. "Work first" policy initiatives, for example, prioritize moving workers from joblessness into any job,

regardless of the job's match for the worker's education or experience (see Autor and Houseman 2010). Additionally, the media often takes the stance that workers are better off working in any job rather than remaining unemployed. For example, a recent newspaper article, entitled "Underemployment is Better than Unemployment," poses the question: Should you take a job beneath your skill level? The article concludes by arguing: "... doing something – anything – is better than having an extended blank on your resume" (Stafford 2012). Following policy prescriptions and this line of popular thought in the media, one would expect workers with histories of non-standard employment to fare better than workers with histories of unemployment when being evaluated during the job application process. However, research to date has not been able to support or reject this claim.

The public policy and media positions in this area, though, are not without theoretical grounding. Following the arguments of the human capital pathway, workers with non-standard employment histories should fare better at the hiring interface than unemployed workers who – by definition – have not been working (Becker 1964). Compared to workers with histories of long-term unemployment, employers are likely to perceive workers with histories of part-time work, temporary agency employment, and skills underemployment as keeping their skills and human capital more updated (for a discussion of this issue, see Yu 2012). This benefit over long-term unemployment is likely particularly strong if the worker is performing part-time or temporary employment in his or her desired occupation. For skills underemployment, which is outside of a worker's occupation, it is unclear whether future employers would see this work as maintaining a worker's human capital compared to unemployment.

The signaling pathway also opens the possibility that histories of non-standard employment could improve workers' future hiring outcomes compared to workers with histories

of long-term unemployment. Taking any job, rather than remaining unemployed, may correspond more closely to employers' conceptions of the competence and commitment dimensions of the "ideal worker." A worker who is able to get a job – even if it is non-standard – may signal to a future employer that he or she is more competent than a worker who has been unable to find work for long period of time. The commitment signal may be particularly strong for workers with a history of non-standard employment compared to workers with histories of long-term unemployment. Workers who take a part-time position, temporary job, or job below their skill level may signal to future employers that they are willing to do "whatever it takes" to remain employed, even if they have to take a job that is not the most desirable (i.e., non-standard). Additionally, most temporary workers (roughly 60%) want to transition into full-time, permanent work (Kalleberg 2000). Because of their desire to transition into full-time employment, some, but not all, research has found that temporary workers are at least as committed as permanent workers (Smith 1998; see also De Cuyper et al. 2011). Similarly, employers may think that hiring a worker out of a position of skills underemployment would increase that worker's level of commitment because he or she would be grateful to have moved on to a better employment opportunity. Thus, employers may perceive workers with non-standard employment histories, particularly temporary agency employment and skills underemployment, as more committed than workers with histories of long-term unemployment and potentially as committed as full-time, standard workers.

Empirical Grounding

While the empirical literature on the effects of unemployment histories consistently finds negative consequences for workers' future employment outcomes (Ruhm 1991; Arulampalam et

al. 2001; Gangl 2006; Gregg 2001; Eriksson and Rooth 2014; Kroft et al. 2012), the limited empirical literature on the consequences of non-standard employment is mixed. Addison and Surfield (2009) find that jobless individuals who obtain nonstandard employment (of multiple kinds) are more likely to be employed than the jobless who continue to search for work – both one month and one year later – and have similar employment continuity to full-time, permanent employees. This finding suggests that non-standard employment, at least temporary employment, may serve to buffer workers against the negative effects of unemployment. Mavromaras, Sloane, and Wei (2013) use panel data from Australia and find that workers with histories of skills underemployment are more likely to be unemployed in the future compared to workers with employment histories that match their skill level, suggesting a scarring effect for histories of skills underemployment. Some research has also documented negative associations between histories of part-time and temporary employment and workers' future earnings, compared to workers who remained in full-time employment (Ferber and Waldfogel 1998). The limited and varied empirical findings in this literature as well as the use of observational data leave open important questions about the causal nature of the association between non-standard work and future employment outcomes and whether they serve to buffer or scar workers as they move through the labor market.

THE GENDERED CONSEQUENCES OF NON-STANDARD EMPLOYMENT

While significant progress toward gender equality was made over the last half of the 20th Century, recent evidence suggests that some of that movement has stalled in recent years (England 2010; Gerson 2010). In the world of work, women are still underrepresented in executive positions (Leahey 2012) and receive lower wages, on average, than men (White House

2014). While multiple explanations likely contribute to persistent gender labor market inequalities, occupational sex segregation (England 2005), the increasing demands for long hours in particular occupations (Cha 2010; Goldin 2014), and workplace policies predicated on a masculine notion of the “ideal worker” (Acker 1990; Jacobs and Gerson 2004; Williams 2001) play key roles in perpetuating gender stratification. This last mechanism, the gendered construction of the “ideal worker,” is directly implicated in understanding how the consequences of non-standard employment histories may differ for male and female workers.

While the “ideal worker” construct appears gender neutral at first glance, demands outside of the workplace such as childcare and household work often fall disproportionately on women. These competing demands for many women likely intersect with unsupportive workplace and social policies in the United States that make it more challenging for women than men to live up to the “ideal worker” standard (Acker 1990; Kelly et al. 2010; Gornick and Meyers 2003; 2009; O’Connor, Orloff and Shaver 1999). As Davies and Frink (2014) contend: “This ideal [worker] is most readily approximated by White, middle-class men because this group is the most likely to have a stay-at-home spouse who provides backstage support” (p. 20). Even if women are able to balance work and family demands, employers are likely more concerned about this set of issues for women than they are for men.

While the “ideal worker” construct takes on an implicitly masculine form, part-time work and temporary employment arose in the United States as highly feminized positions in the labor market (Williams 2001; Hatton 2011). Part-time jobs have historically been viewed as part of the “mommy track” (Williams 2001) – an employment option for women attempting to balance the “competing devotions” of work and family life (Blair-Loy 2003). Experimental research has also demonstrated that when participants were asked to explain why a target in a vignette was in a

part-time job, their responses differed by the gender of target. Female targets were assumed to be in part-time positions to deal with domestic and family duties, whereas male targets were assumed to be in part-time positions because they could not find a full-time job (Eagly and Steffen 1986). Similarly, temporary agency employment developed as a form of women's work (Rogers 2000; Vosko 2000). Hatton (2011) argues that as the THA industry began to emerge after World War II, industry leaders, such as Kelly Services, were intentional about defining temporary jobs as "women's jobs" to avoid confrontations with organized labor. The THA sector likely would have received significant resistance if labor unions thought that "temps" would be competing for jobs with their (largely male) unionized workforce. Thus, the THA industry arose and persisted until the 1980s as a predominantly feminized classification of work (Hatton 2011). Importantly, though, there is now approximate gender parity in the THA sector (Bureau of Labor Statistics 2005).

How might the gendered consequences of the "ideal worker" construct intersect with the gendered histories of part-time and temporary work during the job application process? On the one hand, women may be penalized more heavily than men for having a history of non-standard employment, or a spell of unemployment, because employers may read these employment histories as an indication that the female applicant is on the "mommy track" and is not fully committed to her work. Previous research has found that mothers are penalized at the hiring interface, but fathers are not (Correll et al. 2007). This finding suggests that there is an additional disadvantage faced by women who are perceived to violate the role of the "ideal worker."

On the other hand, employers may have already incorporated in to their evaluations of female applicants that women's employment histories are more likely to include non-standard employment, or even employment gaps. Thus, a female worker's history of part-time or

temporary work may provide employers with limited new information about a woman's compliance with the "ideal worker" standard. For men, however, part-time or temporary work or employment gaps may trigger employers' concerns about whether there is something deficient about him. Additionally, men with part-time and temporary employment histories may be seen as violating standard "breadwinning" models of masculinity. Summarizing this perspective, Cha (2010) writes: "Whereas men who quit work or go part-time are viewed negatively because they are expected to financially support their families, women's quitting or reducing work hours is often viewed as a practical strategy for reconciling work and family" (p. 306). And, significant research documents the ways that violating gender stereotypes can result in social and economic sanctions (i.e., "backlash effects") (Rudman 1998; Rudman and Phelan 2008; Moss-Racusin, Phelan, and Rudman 2010). These perspectives suggest that men will be more heavily penalized than women for histories of non-standard employment as well as unemployment at the hiring interface.

There is some preliminary empirical support for the aforementioned line of thought. For example, researchers have found that temporary work is associated with long-term penalties in the United States and the United Kingdom for men, but not for women (Addison, Cotti, and Surfield 2009; Booth, Francesconi, and Frank 2002). In Canada, there is some evidence that women are more likely than men to exit temporary jobs for full-time employment, suggesting that temporary work is less scarring for female workers (Fuller 2011). And, in the United States, histories of part-time work are associated with lower future earnings for men and women, but the negative effects are stronger for men (Ferber and Waldfogel 1998). Experimental research has also found that men are penalized more heavily than women for taking a leave of absence or needing to leave work for family reasons (Allen and Russell 1999; Butler and Skattebo 2004).

While taking time away from work is different from having a history of non-standard employment, it may trigger similarly gendered responses from employers.

The signals sent by histories of non-standard employment are also likely to vary by the gender of the worker. Employers are likely to perceive women's histories of part-time and temporary work, although not necessarily skills underemployment, as voluntary. Whether moving into non-standard employment is actually voluntary for women – or the result of various forms of constraint – is a much-debated topic in the literature (see Stone 2007; Cha 2010). However, following the theoretical argument articulated above, the voluntary movement into non-standard employment is likely to send signals about a worker's commitment, rather than his or her competence. Therefore, it may be expected that the relationship between non-standard employment and women's labor market outcomes, at least for part-time employment and temporary work, will be primarily accounted for by perceived commitment. For men, however, employers are likely to perceive non-standard employment histories as involuntary, thus sending stronger signals about competence than commitment. Together, existing theoretical perspectives indicate that the effect of non-standard employment histories will vary by the gender of the worker. Although, whether men or women will face more severe penalties remains unclear.

METHODOLOGICAL CONSIDERATIONS

The aforementioned empirical studies on the consequences of non-standard employment histories rely on observational data (Addison, Cotti, and Surfield 2009; Addison and Surfield 2009; Booth, Francesconi, and Frank 2002; Ferber and Waldfogel 1998; Mavromaras, Sloane, and Wei 2013), leaving open the possibility that workers' selection into non-standard employment, employers' demand-side preferences, or some other unobservable worker or

employer characteristics are driving the associations that are found. To my knowledge, only one U.S.-based study has attempted to deal with these endogeneity concerns by using a quasi-experimental research design. Autor and Houseman (2010) address the problem of selection bias by exploiting the random assignment of people in Detroit's welfare-to-work program to different types of job placements (i.e., a temporary help agency placement vs. no job placement). They find that, after correcting for selection bias, temporary help agency employment does *not* improve the future employment outcomes or earnings of the welfare recipients in the study, compared to receiving no job placement. However, when they analyze their data *without* correcting for selection bias, it appears as if temporary help agency employment is *positively* related to employment and earnings, compared to receiving no job placement. Overall, these results indicate that the causal effect of non-standard work histories (at least temporary employment) may actually be no better than unemployment. While the generalizability of the Autor and Housemen (2010) study beyond the low-skilled welfare population in Detroit is unknown, their findings clearly suggest that selection bias makes identifying the causal effects of non-standard work difficult using observational data. Given this challenge, experimental research designs that remove concerns about selection bias and bias due to omitted variables – on both the supply and demand sides of the labor market – are vital to furthering our understanding of the consequences of non-standard employment histories (Pager 2007; Pager et al. 2009).

To address the methodological issues in existing research, I implemented complementary field and survey experiments to examine the effects of non-standard employment for male and female workers' labor market opportunities. In the analysis, I first utilize data from the field experiment, where fictitious job applications were sent to apply for real job openings, to examine how non-standard employment histories and gender affect hiring outcomes in the actual labor

market. The field experiment, however, only provides information about whether an employer responds in a positive fashion to the job application. It does not provide any details about the signals that histories of non-standard employment may send to future employers. For this fine-grained information, I analyze data from the survey experiment, which used the same experimental manipulations as the field experiment and collected information on hiring decision-makers' perceptions of job applicants' human capital, competence, and commitment. Thus, the survey experiment enables an analysis of what mechanisms assist in accounting for the consequences of non-standard employment histories. When employers are taking surveys, however, they are not making real hiring decisions or evaluating real job applicants and, thus, there may be aspects of the actual hiring process that are not fully present in the survey-experimental context. Together, though, these methods provide a comprehensive lens into the ways that non-standard employment histories intersect with gender to shape workers' experiences at the hiring interface while addressing the methodological concerns that have plagued previous research in this area. I proceed first with the field experiment and then move on to the survey experiment.

THE FIELD EXPERIMENT

What are the consequences of non-standard employment histories for workers as they apply for jobs in the future? And, how do these effects differ by the gender of the worker? To examine these questions, I analyze original data from a field experiment where I submitted 2,420 applications to 1,210 job openings between November of 2012 and June of 2013.¹ After sending

¹ The experiment was fielded during the recovery from the "Great Recession," which may influence the external validity of the empirical findings. However, conducting the experiment in a time of economic recovery likely means that the effects that are detected are conservative. In times of economic distress, more individuals are pushed in to

each application, I tracked the “callbacks” (i.e., positive employer responses), defined in detail below, received by each application. The overall callback rate for the field experiment was 7.4%, which is consistent with similar previous studies (Correll et al. 2007; Bertrand and Mullainathan 2004).

There were two primary axes of variation in the field experiment. First, the experiment varied the most recent employment experience on the applicant’s resume. Each resume was randomly assigned 12 months² of recent work experience that was a full-time job, a part-time job, a job through a temporary employment agency, a job below an individual’s skill level, or a spell of unemployment.³ The second axis of variation in the experiment was the gender of the applicant, which was signaled using gendered names.⁴ The male names were Jon Murphy and Matthew Stevens and the female names were Katherine Murphy and Emily Stevens. A resume and a cover letter were included with each job application. Each cover letter was crafted with similar language, while also accurately reflecting the work history presented on the resume. The cover letter for each experimental condition remained consistent across employers, except that each cover letter was personalized with the employer’s name and the job title for the open position. Since two resumes were submitted for each job opening, I constructed two separate resume templates that were similar in content, but aesthetically distinct. Each resume indicated that the applicant graduated from one of two large, public universities in the Midwest with similar rankings by U.S. News and World Report. After graduating from college, each resume

non-standard employment and employers are more likely to perceive these histories as being outside of the worker’s control. Thus, the estimates of the effects of non-standard work presented below are likely conservative.

² A “treatment” period of 12 month was selected because of the need to keep the duration of the treatment equal

³ Unemployment was signaled through dates that the applicant did not have a job. The formal definition of unemployment is that an individual does not have work *and* is looking for work. The second component of the definition is not formally signaled, although the jobless individual is clearly looking for work at the time that the application is submitted. To the employer, however, unemployment and simple joblessness are indistinguishable and, thus, I refer the condition with a spell of joblessness as the “unemployment” condition.

⁴ The field experiment also included a set of African American racialized names, which are not included in the analyses for this article. They are examined in the following article.

indicated that the applicant had a first job that lasted for just under two years. Each applicant then had a second job that lasted for nearly four and half years. Then, all applicants transitioned in to a new job, which is where the experimental manipulations were implemented. The standard, full-time resumes were pre-tested before using them in the experiment and they received similar ratings on key dimensions of perceived human capital and experience. For examples of the experimental treatments used in the field experiment, see Appendix A.

Applications were submitted to four different job types that varied in the level of skill they required: sales, accounting/bookkeeping, project management/management, and administrative/clerical job types. The resumes submitted for each job type had an employment history with relevant experience for that occupation. The applications were submitted to job openings in five major U.S. labor markets – New York City, Atlanta, Chicago, Los Angeles, and Boston – to add geographic diversity to the analysis. The employment histories for each applicant were geographically specific to the labor market in which the applicant was applying. For example, the resumes that were submitted in Chicago had employment histories with real employers in Chicago. Each resume also included a local phone number and a local address. Each phone number had its own voice mailbox and a unique gender-specific voice recording where employers could leave messages for the applicant. The applicants' street addresses were located a few blocks away from each other in each city. The addresses were real, but the apartment numbers were fictitious.

The sample of job openings for the experiment was drawn from one of the leading national on-line job posting websites and therefore represents a broad cross-section of job openings. Using a national job posting website ensured some level of consistency in the jobs being posted across labor markets. To collect the job openings that met the search criteria for the

experiment, I worked with a computer programmer to design a computer script that executed the needed searches. Each search was for a particular job type (e.g., administrative assistant), within a 20-mile radius of each city, that was posted over the previous 30 days, and that could be applied for directly through the job posting website.⁵ After collecting the job openings that matched these requirements, duplicate postings from the same employer were removed (i.e., keeping only one job opening for employers who were hiring for more than one position) to reduce the likelihood that employers would perceive the resumes as fictitious.

After the final set of job openings was selected for a given job type in a given city, I randomly assigned each job opening to a demographic category (male or female) and to applications with two different employment histories. However, the randomization ensured that each employer received at least one application with either the full-time or unemployment treatments. Two applications were sent to each employer, separated by one day. The names at the top of the resumes, the formats of the resumes, and the order of the resumes were randomized and counterbalanced to ensure that these aspects of the job application would not be correlated with the treatment.

The primary outcome variable for the field experiment was whether the applicant received a positive response or “callback” from the employer via phone or e-mail. Responses were coded as callbacks if the employer requested an interview with the applicant or if the employer asked the applicant to contact them to discuss the position in more depth. Auto-

⁵ In a few cases, I limited the search to jobs posted for fewer than 30 days. In these cases, the computer script would not run for the full 30-day search period, but worked for these shorter amounts of time. The level of education included in the search criteria was also different across occupations. For accounting and sales jobs, the education level was limited to jobs requiring an Associates or Bachelors degree. For the project manager/manager openings, the search was limited to jobs requiring a Bachelors degree, due to the large number of openings in this category for most cities. Finally, I did not limit the administrative assistant searches by education because many employers did not specify any education level requirement for this job type. Additionally, some job openings required completing intensive applications on the employers’ website, which the IRB protocol did not cover and which often required essay questions that would have made it more difficult to ensure that differences in answers were not responsible for driving the differences in “callbacks.” Thus, applications were not submitted for these job openings.

generated responses and simple requests for more information were not coded as positive responses.⁶

Field Experiment Results

I present the main field-experimental results as bar graphs with the “callback” rate for each employment history category. For statistical tests, I use *z*-tests for differences in proportions and present results for two-tailed statistical tests throughout. The results are nearly identical when I use logistic regression models with standard errors clustered at the level of the job opening (results presented in Appendix B). The first bar in Figure 1 demonstrates that applicants with a full-time history received positive responses from employers 10.4% of the time. The next bar presents the callback rate for all non-standard employment histories combined in to one aggregate category (part-time work, temporary agency employment, and skills underemployment). The four right-most bars present callback rates disaggregated by employment history. A *z*-test for differences in proportions shows that workers with a full-time, standard employment history were more likely than workers with a history of non-standard work to receive a callback from an employer (10.4% vs. 6.8%; $|z| = 2.62, p < .01$). There is no discernable difference, however, between the negative consequences of non-standard employment histories and having a history of unemployment (6.8% vs. 5.9%; $|z| = .73, p = .47$). The differences between the full-time and part-time histories and the full-time and temporary agency histories are not statistically significant. However, the differences between full-time employment and skills underemployment (10.4% vs. 5.0%; $|z| = 2.91, p < .01$) and between full-time employment and unemployment (10.4% vs. 5.9%; $|z| = 3.04, p < .01$) are statistically significant. Importantly, none of the non-standard employment history callback rates are

⁶ The empirical results are similar when requests for more information are included as positive responses.

statistically significantly different from the callback rate in the unemployment history category. This finding provides compelling evidence non-standard employment does not protect workers from the scarring effects of long-term unemployment.

[Figure 1 About Here]

The consequences of non-standard work, however, may differ by the gender of the worker. In Figure 2, I disaggregate the previous figure by the gender of the job applicant. I begin by examining the consequences of non-standard employment histories for men and then turn to the consequences for women. I then compare the callback rates for men and women *within* each employment history category. Male job applicants received a 10.4% callback rate in the full-time condition. In all of the other conditions (All Non-Standard Employment: 10.4% vs. 5.5%; $|z| = 2.61, p < .01$; Part-Time: 10.4% vs. 4.8%; $|z| = 2.18, p < .05$; Skills Underemployment: 10.4% vs. 4.7%; $|z| = 2.07, p < .05$; Unemployment: 10.4% vs. 4.2%; $|z| = 3.11, p < .01$), with the exception of temporary agency employment (10.4% vs. 7.1%; $|z| = 1.21, p = .23$), male job applicants received a statistically significant lower callback rate than in the full-time condition. The results also indicate that, for men, none of the non-standard work categories received statistically significantly higher callback rates than the unemployment condition. Thus, there is strong evidence that histories of non-standard employment scar male job applicants, compared to full-time employment histories, and do not serve as a protective force against the negative consequences of unemployment.

[Figure 2 About Here]

The callback rates across non-standard work histories appear quite different for women. Skills underemployment is the only employment category where female job applicants received a callback rate that was statistically significantly lower than the full-time condition (10.4% vs.

5.2%; $|z| = 2.05, p < .05$). In general, the callback rates are slightly lower in the other non-standard employment history categories, including the unemployment category, but these differences are not statistically significantly different from having a full-time history. Of particular interest is that there is no reduction at all in the callback rate for women with histories of part-time work (10.4% vs. 10.9%). Overall, there seem to be limited negative consequences of non-standard employment histories and histories of unemployment for female job applicants.

Finally, I compare the callback rates for male and female job applicants in each employment history category. In the full-time work history condition, male and female job applicants received the same response rate from employers; 10.4% for men and 10.4% for women. While female applicants with non-standard employment histories (8.0%) appear to receive a higher callback rate than male applicants with non-standard employment histories (5.5%), this difference is not statistically meaningful at conventional levels ($|z| = 1.58, p = .11$). The next cluster of columns examines the positive responses for resumes with the part-time employment history. Here, there is a statistically significant gender difference. Men with a part-time history received positive responses 4.8% of the time, compared with a 10.9% positive response rate for women with part-time histories ($|z| = 2.14, p < .05$).⁷ Men and women with temporary employment histories had similar callback rates of 7.1% and 8.3%, respectively ($|z| = 0.42, p = .68$). Both the male and female applicants with a skills underemployment history also received callbacks from employers at similar rates (4.7% for men and 5.2% for women; $|z| = 0.23, p = .82$). However, a marginally significant gender difference emerges for histories of unemployment. For applicants with histories of unemployment, men received positive responses 4.2% of the time, compared with 7.5% for women ($|z| = 1.89, p = .059$).

⁷ There is also a positive and statistically significant interaction between having a part-time history and being a female applicant in a logistic regression model predicting callbacks. This finding is presented in Model 8 of Table B1.

The results from the field experiment demonstrate that workers with a history of non-standard employment are penalized at the hiring interface compared to workers with full-time employment histories. In fact, a history of non-standard work is just as scarring as a history of unemployment. However, there is important variation in the consequences of non-standard employment, both by type of non-standard employment as well as by gender. While male applicants with histories of part-time employment, skill underemployment, and unemployment are penalized at the hiring interface, female applicants are only negatively impacted if they have histories of skills underemployment. The results also indicate that female job applicants with histories of part-time employment and unemployment fare better than their male counterparts at the hiring interface. The field-experimental findings, however, are not able to provide insight into the mechanisms underlying the consequences of non-standard employment histories for male and female workers. For that task, I turn next to the results from the survey experiment.

THE SURVEY EXPERIMENT

While the field-experimental results provide compelling evidence about the effects of non-standard employment in the actual labor market and how they differ by gender, those data are unable to examine the reasons why non-standard employment histories shape employers' evaluations of job applicants. Thus, to complement the field experiment, I conducted an Internet-based survey experiment with individuals in U.S. firms who make hiring decisions for their companies. The primary goal of the survey experiment is to replicate the main findings from the field experiment and then to examine whether employers' perceptions of applicants' human capital, competence, and commitment assist in explaining the consequences of non-standard employment histories for male and female job applicants.

The survey experiment was conducted between December 6, 2012 and January 4, 2013. Most hiring studies that use experimental methods are conducted on undergraduate or graduate students (e.g., Correll et al. 2007). The survey experiment presented here therefore advances research methodology in this area by surveying individuals who make actual hiring decisions. While not based on a random probability sample of hiring decision-makers, the respondents represent a broad array of industries, regions, and firm sizes. Any potential limits on generalizability, however, do not impact the ability to generate internally valid, causal estimates of the effects of interest from the survey-experimental data. Descriptive statistics about the sample are presented in Table 1. Roughly half (52.9%) of the respondents are male, 74.6% are white, the vast majority have at least a college degree, the median income is \$67,500, and the median age is just over 40 years old. While it is not possible to obtain national estimates of the demographic characteristics of individuals who make hiring decisions at U.S.-based firms, it is possible to obtain estimates of firm-level characteristics in the United States such as size and industry. Thus, the lower panel of Table 1 presents the distribution of the firm sizes and industries of respondents in the sample compared to national estimates. While respondents come from a broad cross-section of firm sizes and industries, larger firms are over-represented in the sample. And, while the sample under-represents firms in the agriculture, mining, and construction and professional and business services sectors, the education and health, financial and information, and manufacturing sectors are over-represented (U.S. Census Bureau 2008).

[Table 1 About Here]

To reach the sample of hiring decision-makers, I collaborated with Qualtrics, a survey research company. Electronic invitations to participate in the survey were sent to 49,930 potential respondents. Of those individuals, 11,920 (24%) responded to the invitation to

participate in the survey, which is in line with response rates for organizational surveys (Baruch and Holtom 2008). After answering the necessary screening questions, 1,816 (15%) of those respondents were qualified to participate in the survey.⁸ Qualified respondents were then randomly assigned to two different groups – one for the analyses presented here and one for a separate study. Thus, the final sample for the below analyses contains 903 respondents who are hiring decision-makers at their company and that fall in to one of the following occupational groups: human resources manager, human resources associate/assistant, business executive, mid-level manager, or business owner.

Once a respondent was qualified to participate in the survey, he or she was asked to review and evaluate two experimentally manipulated resumes for an open accounting clerk position at his or her company. The accounting position was selected because non-standard work is common in the accounting profession and most companies have somebody who performs an accounting or bookkeeping role. It also parallels the accounting/bookkeeping category of jobs applied to in the field experiment discussed above. The two axes of variation on the resumes in the survey experiment were the same as in the field experiment. The most recent employment history of the applicant (full-time, part-time, temporary agency, skills underemployment, or unemployment) was varied along one axis and the gender of the applicant, using the same names as in the field experiment, was manipulated along the other axis.⁹ Each respondent was randomly assigned to review either two male resumes or two female resumes that had different employment histories (although, every respondent was presented with at least one full-time or

⁸ Respondents were screened based on three criteria: 1) providing informed consent; 2) responding “yes” to the following question: “As part of your job, do you make decisions regarding whether or not to hire job applicants?”; and 3) meeting one of five broad job type criteria: human resources manager, human resources associate/assistant, business executive, mid-level manager, or business owner.

⁹ Before implementing the survey experiment, a number of individuals with human resources experience took the survey in my presence and discussed their rationale for evaluating the resumes in particular ways. None of these individuals indicated that they knew what the survey was about before being told.

one unemployed resume). Thus, the gender manipulation was “between subjects,” which reduces concerns about social desirability bias by making it less likely that the respondent would identify gender as a key issue interest, and the employment history manipulation was “within subjects.” The format and order of the resumes as well as the names at the top of the resumes were randomized and counter-balanced.

Variable Construction

After reviewing each resume, respondents were asked to evaluate the applicant. To parallel the outcome variable in the field experiment, respondents were asked on a five-point scale: “How likely would you be to recommend that your company interview this applicant?” Responses to this item were then converted into a dichotomized variable with the “very likely” category equal to “1” and the other categories equal to “0”; 27.3% of job applicants were “very likely” to be recommended for interviews. Coding the “interview likelihood” variable in this way makes sense theoretically because only the applicants who attained the “very likely” category on the “interview likelihood” measure in the survey context would have been likely to receive callbacks in the field-experimental context. Thus, the dichotomous measure in the survey experiment most closely parallels the outcome measure in the field experiment.

To allow for an examination of the different mechanisms that may account for the consequences of non-standard employment histories, respondents were asked to evaluate the applicant on a host of measures that capture perceptions of the applicant’s human capital, competence, and commitment. The human capital measure was generated by combining three survey items. First, I include respondents’ answers to items where they were asked, on a seven-point scale ranging from “strongly disagree” to “strongly agree,” to respond to the statements:

“The applicant has adequate accounting experience” and “The applicant has relevant work experience.” Additionally, I include respondents’ answers to the question: “Compared to similar employees who already work at your company, how much relevant experience in accounting and bookkeeping does this applicant have?” The five categories of responses ranged from “Much less experience” to “Much more experience.” The Chronbach’s alpha for this three-item scale was 0.78. The scale is standardized for use in the analyses presented below.

Next, four items were combined to capture respondents’ perceptions of the applicants’ competence. Respondents were asked: “On a scale from one to seven, how strongly do you agree or disagree with the following statements about this applicant?” Responses ranged from “strongly disagree” to “strongly agree.” The statements used to create the competence measure were: “the applicant is competent,” “the applicant is productive,” and “the applicant is skilled.” Additionally, the competence scale included the following item where respondents were given five response categories ranging from “Much more quickly” to “Much less quickly”: “Compared to similar employees who already work at your company, how quickly do you think this applicant would learn how to perform new tasks?” These four items combined with a Chronbach’s alpha of 0.82 and the standardized scale is used throughout.

Finally, four items were used to create the perceived commitment scale. Using the same seven-point scale as was used for the competence measure, respondents were asked to respond to the statement: “the applicant is committed.” Then, on a five-point scale ranging from “Much more committed” to “Much less committed,” respondents were asked: “Compared to similar employees who already work at your company, how committed do you think this applicant would be to their job if they were hired?” Also on a five-point scale, ranging from “very likely” to “not at all likely,” respondents were asked: “If your company needed to ask this applicant to

work extra hours, how likely is it that this applicant would meet that request?” Finally, respondents were asked: “If this applicant were to be hired at your company, how long do you think that they would stay?” The five response categories ranged from “Less than 1 year” to “More than 4 years.” These four items combined with a Chronbach’s alpha of 0.72 and the scale used in the analyses is standardized.

The key explanatory variables for the analysis are the different employment histories on the resume that the respondent reviewed – full-time, part-time, temporary agency, skills underemployment, or unemployment – and the gender of the applicant. All models include controls for the order that the resumes were reviewed, the name at the top of the resume, and the format of the resume.¹¹ Listwise deletion is used to deal with missing data and only respondents who provided interview recommendations for both applicants that they reviewed are kept in the analytic sample.¹² All analyses adjust for the fact that respondents evaluated two resumes by clustering the standard errors by respondent.

Interview Likelihood

The first analyses examine whether non-standard work histories affect employers’ responses about whether they would be “very likely” to recommend that their company interview the applicant. In essence, this analysis seeks to determine whether the main findings from the field experiment replicate in the survey-experimental context. Since the interview likelihood variable is binary, logistic regression models are used in the analyses and standard errors are clustered at the level of the respondent. Given the gender differences in the effects of non-standard employment histories found in the field experiment, I first examine the consequences of non-

¹¹ Results are similar when these controls are not included.

¹² There were 13 respondents who only provided an interview recommendation for one of the two applicants that they reviewed.

standard employment histories separately for male and female job applicants. Then, I test whether gender differences *within* each employment history category are statistically significant. Model 1 in Table 2 examines the consequences of non-standard employment histories for male applicants. The results demonstrate that men with histories of part-time employment, skills underemployment, and unemployment are heavily penalized in terms of their interview likelihood. For example, male applicants with histories of part-time work have 40% lower odds ($\exp(-0.518) = 0.595$) of being “very likely” to be recommended for an interview compared to male workers with full-time, standard employment histories. There is also a marginally significant negative effect of temporary agency employment for men ($p < .10$). Wald tests indicate that none of the non-standard work categories are statistically significantly different from unemployment. Thus, the consequences of non-standard employment for male applicants in the survey experiment are very similar to those found in the field experiment.

[Table 2 About Here]

Next, Model 2 in Table 2 examines the consequences of non-standard employment histories for female job applicants. The only non-standard employment category where female job applicants are statistically significantly penalized is the skills underemployment category. The scarring consequence of unemployment for women is marginally statistically significant ($p < .10$). There are no discernable differences in the interview recommendations for women with histories of part-time work or temporary employment and a history of full-time employment. There are also no statistically significant differences between having a history of non-standard employment and having a history of unemployment. Again, the findings for female applicants in the survey experiment are aligned closely with the results presented in the field experiment.

Importantly, the results presented in Table 2 do not test for differences in the interview recommendation likelihood for male and female job applicants *within* each employment category. This is where the results diverge between the field and survey experiments. While the field experiment found that female job applicants received higher callback rates than male applicants in the part-time work and unemployment history categories, this is not the case in the survey-experimental context. There are no statistically significant differences in being “very likely” to be recommended for an interview between male and female applicants *within* employment history categories in the survey experiment.

While the gendered patterns of the consequences of non-standard employment are comparable between the survey and field experiments when the data is subset by applicant gender, the gender differences themselves are less pronounced and less statistically reliable in the survey context. Why might this discrepancy exist? While it is difficult to address this issue empirically, the difference may be related to social desirability biases that arise in the survey context (Schuman et al. 1997; Heerwig and McCabe 2009). The hiring decision-makers in the survey experiment are likely well aware of social norms against biased gender evaluations, especially in employment. The survey context may prime their desire to comply with social norms (and legal regulations) around gender equality and these concerns may reduce gender biases in the survey-experimental context. Since strong social norms about screening job applicants based on their employment histories do not exist, however, it is unlikely that social desirability bias would enter into employers’ evaluations of job applicants with non-standard employment histories or histories of unemployment. This is consistent with the empirical findings that non-standard work histories are generally scarring for men in both the survey- and field-experimental contexts.

There is also empirical evidence that social categories, such as race and gender, are more likely to be used as heuristic devices when time is scarce (Fiske 1998). In the field experiment, hiring managers are likely screening hundreds of applicants in a short time period, making gender stereotypes more likely to be activated than in the survey context where the respondents had as much time as they wanted to review two resumes. Finally, the survey experiment asked respondents to review resumes for one job type – an accounting clerk position – whereas the field experiment examined four occupational groups, which included but were not limited to accounting and bookkeeping positions. Thus, it is possible that differences in the job types under investigation may contribute to the different gender findings in the field and survey experiments.

The Mediating Effects of Perceived Human Capital, Competence, and Commitment

The next set of analyses utilizes the binary “interview likelihood” findings to examine whether employers’ perceptions of job applicants’ human capital, competence, and commitment can account for the reduced interview likelihood for applicants with histories of non-standard employment. The binary, rather than ordinal, measure is used here given how closely those findings parallel the findings from the field experiment. Importantly, since the gender differences *within* each non-standard employment category are not statistically significant, it is unfortunately not possible to test for the mechanisms underlying gender differences in the consequences of non-standard employment.

To examine whether hiring decision-makers’ perceptions of applicants’ human capital, competence, and commitment can account for the consequences of non-standard employment histories, I utilize the average causal mediation analysis framework proposed by Imai, Keele, and

Tingley (2010).¹³ Table 3 presents the average mediation effect of perceived human capital (panel 3a), perceived competence (panel 3b), and perceived commitment (panel 3c), separately for male and female applicants, for the interview recommendation likelihood of each type of non-standard employment and unemployment. Also presented in Table 3 is the proportion of the total effect of each employment history that is mediated by each perception of the job applicant.

Panel 3a in Table 3 examines whether employers' perceptions of an applicant's human capital can account for the consequences of having a non-standard employment history. The results indicate that employers' perceptions of an applicant's human capital explain a significant proportion of the penalty faced by both male and female workers with histories of skills underemployment and unemployment. In fact, hiring decision-makers' perceptions of male applicants' human capital is estimated to account for 63% of the negative effect of skills underemployment on male job applicants' interview likelihood. However, perceived human capital does not explain the penalties faced by male workers with histories of part-time work or temporary agency employment. No mediation analysis results are presented for female applicants with histories of part-time or temporary agency employment because female applicants did not face any penalties for those types of employment histories.

Next, Panel 3b demonstrates the mediating effect of perceived competence on the consequences of non-standard employment histories. The results indicate that perceptions of competence play an important role in mediating the effects of temporary agency employment and skills underemployment for male workers. Importantly, though, perceptions of competence do not account for the negative effect that a part-time work history or unemployment history has for male applicants. The results also demonstrate that hiring managers' perceptions of female

¹³ Each analysis was conducted using 1,500 simulations.

applicants' competence are important in explaining the effect of histories of both skills underemployment and unemployment.

[Table 3 About Here]

Finally, in Panel 3c, I examine the mediating effects of perceived commitment. Perceptions of commitment play an important role in mediating the negative effects of part-time work histories for male applicants, explaining 40% of the effect. Perceived commitment also explains a significant portion of the consequences of skills underemployment for male applicants, but does not mediate the effects of temporary agency employment or unemployment. Panel 3c also demonstrates that female applicants are penalized for unemployment histories, in part, because of employers' perceptions of their commitment.

These findings indicate that different mechanisms explain the scarring consequences of different types of non-standard employment. Part-time work appears to be scarring for men because it reduces employers' perceptions of job applicants' level of commitment. Meanwhile, temporary agency employment appears to be scarring for men largely because it influences employers' perceptions of an applicant's competence. However, skills underemployment sends multiple negative signals to future employers about male applicants, leading to concerns about human capital, competence, and commitment. For female applicants, there were no negative consequences of part-time work and temporary agency employment on their interview likelihood and, therefore, these types of employment histories are not investigated in the mediation analysis. However, the mediation analysis reveals that female applicants with histories of skills underemployment are penalized due to perceptions of lower levels of human capital and competence, but not perceptions of commitment. And, the marginally statistically significant, negative effect of unemployment is penalizing for women because of negative signals sent across

the board. Together, these results provide compelling evidence that the underlying reasons why non-standard employment histories are scarring for workers, particularly male workers, are highly varied depending on the type of employment history on a worker's resume.

DISCUSSION AND CONCLUSION

The dramatic rise in non-standard employment relationships over the past four decades has been coupled with employers' increased reliance on the external labor market to fill vacancies. Thus, workers' employment histories have arguably taken on a more important role in the hiring process. Yet, limited research has examined how non-standard employment histories shape workers' abilities to obtain future employment. Employers may perceive workers with non-standard employment histories as having lower levels of human capital or being less competent or committed, penalizing them compared to workers with full-time employment histories. At the same time, however, any job may be better than no job in the eyes of future employers. Therefore, it is also possible that non-standard work may buffer workers against the scarring consequences of long-term unemployment.

The set of theoretical issues explored in this article has been difficult to empirically examine with existing data sources. To address these limitations, the analyses presented above draw on original data from a field experiment and a complementary survey experiment. The field experiment provides compelling evidence that having a history of non-standard employment is highly scarring for workers compared to having a full-time employment history. And, the scars of non-standard work are indistinguishable from the scars of unemployment, indicating that non-standard employment generally does not protect workers from the negative effects of long-term unemployment. However, there is also important variation in these consequences by the type of

non-standard employment history as well as by the gender of the worker. The field experiment demonstrates that, for men, histories of part-time employment, skills underemployment, and unemployment are severely penalizing in terms of the likelihood of receiving a callback from an employer. However, for women, the only employment history that appears to lead to penalties is skills underemployment. There is limited evidence that female applicants with histories of part-time work, temporary employment, and unemployment were penalized at the hiring interface. Importantly, the field experiment also finds strong evidence that a part-time employment history is more scarring for men than women and provides some evidence that women with unemployment histories fare better than men with unemployment histories.

The survey-experimental component of the research opens up the “black box” of the field experiment to explore whether employers’ perceptions of job applicants’ human capital, competence, and commitment can explain the consequences of non-standard employment histories. Consistent with the theoretical predications articulated at the beginning of the article, temporary agency employment appears to be scarring for male workers because of perceived competence. However, part-time work leads to penalties for male workers because it raises concerns about their level of commitment. This is unexpected given that employers would likely perceive male applicants with a part-time history as involuntarily in that position. Thus, men with part-time histories would be expected to trigger employers’ concerns about competence. It is possible, however, that the commitment signal that is being picked up in the data is partially a reflection of employers’ concerns about male workers with part-time histories being feminine or lacking the appropriate level of masculinity. In this case, levels of “commitment” indicate something about whether a worker is perceived as “masculine” enough by the employer. While this interpretation is certainly speculative, future research would be well served to examine this

possibility in more depth. For male workers, skills underemployment is heavily scarring and the penalty can be attributed to a combination of human capital, competence, and commitment concerns. For female applicants in the survey experiment, they only faced penalties for histories of skills underemployment (and unemployment). The penalty of skills underemployment can be attributed to employers' perceptions of female applicants as having less human capital and less competence, but not employers' perceptions of their commitment. Thus, there are highly variable reasons for why different types of non-standard employment lead to penalties for workers as they move through the labor market.

While making important contributions, this article is not without limitations. First, the discrepancy between the findings in the field experiment and the survey experiment with regards to gender differences in the effects of non-standard employment histories leave open important questions. While gendered patterns emerge in the survey experiment, the differences by gender are not statistically reliable. As discussed above, these differences between the two experiments may be due to social desirability bias around issues of gender equality, time pressure differences in the survey and field experiments, and/or differences in the occupations for which applications were being reviewed. This limitation of the current research, however, opens up two fruitful avenues for future research. First, it leaves open important theoretical questions about the intersection of gender and the consequences of non-standard employment. Specifically, what mechanisms account for the gender differences in the consequences of part-time work and unemployment? Methodologically, understanding why there is a discrepancy in the moderating effects of gender in the survey and field experiments could prove useful in developing more sound survey-experimental methods. Research probing how, when, and why demographic characteristics (such as gender) produce evidence of bias and discrimination in survey

experiments could assist future research in this area. This discrepancy also generates interesting questions about how different respondent samples may be more or less susceptible to biases in survey experiments. Previous survey and lab studies that have conducted employment experiments using student samples have found moderating effects of the worker's gender (Correll et al. 2007; Castilla and Benard 2010). However, the sample for the survey experiment in this article consisted of actual hiring decision-makers and the gender differences that emerge are relatively muted. Research disentangling why these discrepancies exist would assist in moving forward survey-experimental methodologies.

Notwithstanding these limitations, the findings presented above have meaningful implications for sociological scholarship on the changing nature of employment in the United States. Both experiments provide evidence that non-standard employment histories can be penalizing at the hiring interface. This finding encourages a shift from research to date that has focused primarily on the consequences of non-standard employment for workers' earnings, benefits, autonomy, and control while they are working in the non-standard position. More research is needed to understand how non-standard employment may have lasting consequences for workers' economic and social trajectories.

The gender differences in the scarring effects of part-time work and unemployment also contribute to sociological theories of gender inequality at work. These findings suggest that employers have already incorporated certain types of non-standard employment and even employment gaps in to their understandings of female labor force participation. Men, however, are expected to maintain full-time, standard, and "primary breadwinner" employment trajectories. These gender differences contribute to new insights to the gendered construction of the "ideal worker." While women face many barriers to attaining the "ideal worker" status in

employers' eyes, it appears that they are able to maintain a level of favorability among future employers even if they have a history of non-standard work or unemployment. This is not the case for men. A history of non-standard work – particularly part-time work – violates what it means for men to be an “ideal worker.” This is possibly because non-standard work violates prescriptive gender stereotypes, resulting in “backlash effects.” And, as the mediation analysis demonstrates, part-time work for men is perceived as indicating an underlying negative attribute of lower levels of commitment.

The findings from this research also complicate “work first” public policy prescriptions that argue that any job is better than no job. Many workforce development programs are based on the premise that assisting a worker to obtain employment, any employment, will serve as a “stepping stone” to better jobs in the future. While there are certainly good reasons that people take any job that they can find – specifically in cases where economic hardship is imminent – the experimental data presented here finds that non-standard employment is generally as scarring for workers as unemployment. Thus, it may be the case that any job – specifically, a job with a non-standard employment relationship – is no better than joblessness when thinking about one's future employment opportunities.

The theoretical development and empirical findings presented in this article advance sociological scholarship about the consequences of the changing economic landscape. The increase in non-standard employment relations in the United States affects workers not just while they are in those positions, but also limits their opportunities as they attempt to transition in to their next job. Additionally, the negative effects of non-standard employment – with the exception of skills underemployment – appear to be concentrated among male workers. This finding assists in conceptualizing the complex ways that gender infuses the labor market in the

contemporary United States. Together, these findings develop sociological knowledge about how changing economic structures shape workers' employment opportunities and begin to identify the mechanisms through which those consequences operate.

APPENDIX A – FIELD EXPERIMENT TREATMENTS

Below, I provide examples of the different employment histories used in the field experiment. The examples are for the Administrative Assistant openings that were applied to in Boston, Massachusetts. The employers' names have been altered. Each of these treatments was the applicant's work history for the 12 months prior to submitting the job application.

1. Full-Time, Standard:

Technology Company – Boston, MA June 2012 – Present
Office Manager & Executive Assistant

- Coordinate all office management tasks, which includes working with computer and phone system vendors, maintaining necessary levels of office supplies, and managing all office filing systems.
- Answer and screen incoming phone calls, coordinate travel arrangements, and draft memos and letters for executive staff.
- Plan and coordinate all aspects of meetings for executive staff and key stakeholders.

2. Part-Time:

Technology Company – Boston, MA June 2012 – Present
Office Manager & Executive Assistant (Part-Time)

- Coordinate all office management tasks, which includes working with computer and phone system vendors, maintaining necessary levels of office supplies, and managing all office filing systems.
- Answer and screen incoming phone calls, coordinate travel arrangements, and draft memos and letters for executive staff.
- Plan and coordinate all aspects of meetings for executive staff and key stakeholders.

3. Temporary Employment Agency:

Temp Agency – Boston, MA June 2012 – Present
Temporary Administrative Assistant

Serve as a temporary Administrative Assistant through [Name of Temp Agency]. Assignments at different companies have included:

- Answering incoming phone calls, scheduling travel arrangements, and writing letters and other correspondence for executive staff.
- Coordinating conferences, meetings, and retreats for staff, managers, and clients.
- Developing and improving office coordination systems, such as ordering supplies and updating administrative technology.

4. Skills Underemployment:

Large Retailer – Boston, MA June 2012 – Present
Sales Representative

- Provide high-quality customer assistance in merchandise selection and other service areas.
- Maintain high level of cleanliness and a welcoming environment on the retail floor.
- Build and strengthen relationships with repeat customers.

5. Unemployment: The most recent job was omitted in the unemployment condition. To ensure that this resume was of a similar length to and had the same number of work experiences as the resumes in the other conditions, a college internship was added to the applicant's work history. The internship was the following:

Anonymous Bank – Boston, MA Summer 2004
Summer Intern

- Assisted with meeting and conference planning, scheduling, and answering phones.
- Drafted memos and correspondence and participated in special projects on an as-needed basis.

APPENDIX B – FIELD EXPERIMENT REGRESSION RESULTS

[Table B1 About Here]

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TABLES & FIGURES

Table 1. Survey Experiment Respondent and Firm Characteristics

		Sample Percent/Median
Respondent Characteristics		
Male		52.9%
Race/Ethnicity		
White		74.6%
Black		11.5%
Hispanic		8.9%
Asian		6.8%
Other Race		2.2%
Education		
High School or Less		7.6%
Some College		17.6%
College		42.4%
Some Graduate School		11.3%
Graduate School		21.2%
Income (Median)		\$67,500
Age (Median)		40.5
Job Tenure in Years (Median)		5
Firm Characteristics		
	Sample Percent	National Percent
Number of Employees		
Fewer than 10	17.4%	78.6%
Between 10 and 99	37.9%	19.6%
Between 100 and 499	18.8%	1.5%
500 or more	26.0%	0.3%
Industry		
Agriculture, Mining, Construction	5.4%	13.6%
Education and Health	16.6%	11.8%
Financial and Information	16.3%	10.3%
Leisure and Hospitality	7.5%	10.0%
Manufacturing	14.4%	4.7%
Professional and Business Services	16.8%	24.7%
Public Administration	4.9%	5.6%
Retail	9.3%	11.7%
Transportation, Utilities, Wholesale	8.3%	8.5%
Other	0.7%	0.2%

Notes: National estimates of the individual-level characteristics of hiring decision-makers are not available. National firm characteristic estimates are from the U.S. Census Bureau, 2008 Statistics of U.S. Businesses.

Table 2. Logistic Regression Models of the Consequences of Employment Histories on Being "Very Likely" to be Recommended for an Interview

	Male Applicants (1)	Female Applicants (2)
Employment History		
Full-Time (omitted)	-- --	-- --
Part-Time	-0.513* (0.236)	-0.255 (0.220)
Temporary Agency	-0.445+ (0.235)	-0.127 (0.222)
Skills Underemployment	-0.747** (0.270)	-0.610** (0.233)
Unemployment	-0.447* (0.195)	-0.320+ (0.182)
Constant	-0.734*** (0.178)	-0.513*** (0.163)
n (clusters)	439	452
n (observations)	878	904

Notes: Clustered standard errors in parentheses. Log-odds presented. Both models include controls for the order in which the resumes were presented, the format of the resume, and the name on the resume. Statistical Significance (two-tailed tests): + $p < .10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 3. Mediation Analysis of the Role of Perceived Human Capital, Competence, and Commitment in Explaining the Effects of Non-Standard Work Histories on Interview Recommendations

3a. Perceived Human Capital				
	Male Applicants		Female Applicants	
	Average Mediation	Proportion of Total Effect Mediated	Average Mediation	Proportion of Total Effect Mediated
Part-Time	-0.005 [-.041, .032]	0.059 --	-- --	-- --
Temporary Agency	-0.030 [-.067, .001]	0.429 --	-- --	-- --
Skills Underemployment	-0.085 [-.123, -0.047]	0.628 --	-0.118 [-.160, -0.077]	1.026 --
Unemployment	-0.036 [-.068, -0.004]	0.429 --	-0.080 [-.115, -0.047]	1.122 --

3b. Perceived Competence				
	Male Applicants		Female Applicants	
	Average Mediation	Proportion of Total Effect Mediated	Average Mediation	Proportion of Total Effect Mediated
Part-Time	-0.010 [-.042, .023]	0.125 --	-- --	-- --
Temporary Agency	-0.036 [-.072, -0.000]	0.432 --	-- --	-- --
Skills Underemployment	-0.079 [-.115, -0.043]	0.632 --	-0.083 [-.113, -0.043]	0.697 --
Unemployment	-0.024 [-.054, .005]	0.289 --	-0.062 [-.098, -0.028]	0.875 --

3c. Perceived Commitment				
	Male Applicants		Female Applicants	
	Average Mediation	Proportion of Total Effect Mediated	Average Mediation	Proportion of Total Effect Mediated
Part-Time	-0.037 [-.072, -0.000]	0.404 --	-- --	-- --
Temporary Agency	-0.031 [-.068, .006]	0.335 --	-- --	-- --
Skills Underemployment	-0.040 [-.077, -0.003]	0.318 --	-0.034 [-.073, .004]	0.301 --
Unemployment	-0.008 [-.038, .023]	0.098 --	-0.035 [-.070, -0.001]	0.497 --

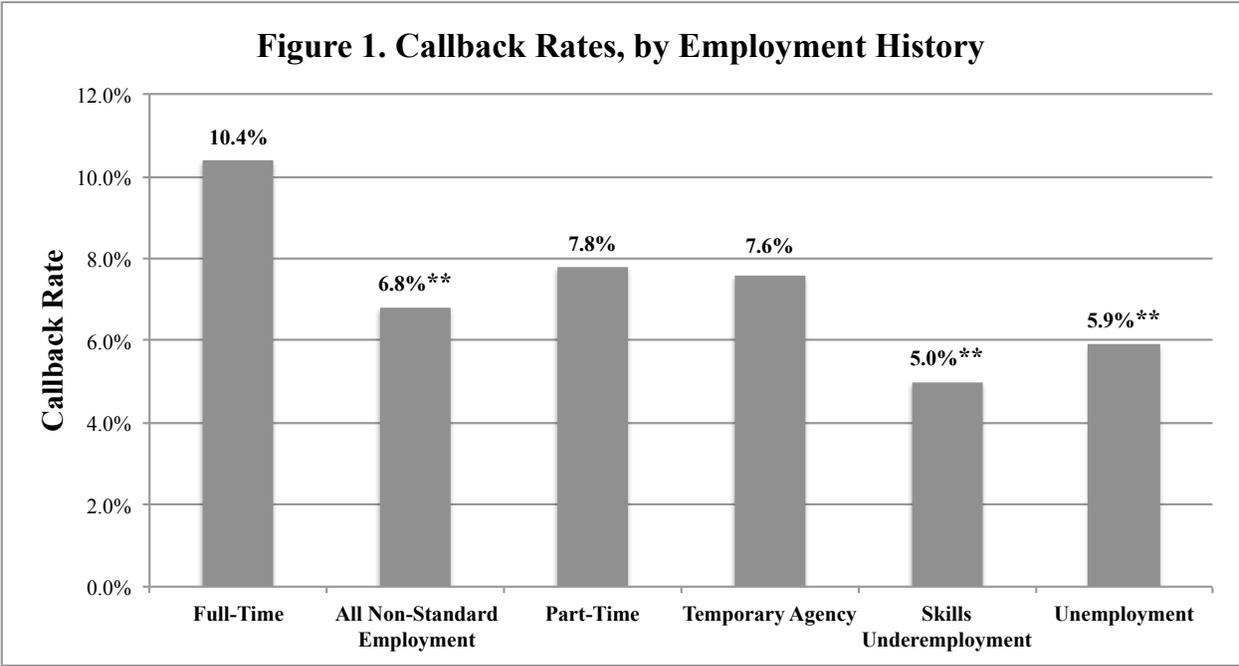
Notes: 95% confidence intervals in brackets. Estimates derived from 1500 simulations and standard errors are clustered by respondent. Bolded "Average Mediation" estimates indicate that the confidence interval does not include zero.

Table B1. Logistic Regression Models of the Consequences of Employment Histories for Receiving a "Callback" from an Employer

	Received "Callback" From Employer							
	All Applicants		Male Applicants		Female Applicants		All Applicants	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Employment History								
Full-Time (omitted)	--	--	--	--	--	--	--	--
Any Non-Standard	-0.468*** (0.137)	--	-0.679*** (0.190)	--	-0.286 (0.198)	--	-0.679*** (0.190)	--
Unemployment	-0.615** (0.189)	-0.615** (0.189)	-0.960** (0.294)	-0.960** (0.294)	-0.352 (0.255)	-0.352 (0.255)	-0.960** (0.294)	-0.960** (0.294)
Part-Time	--	-0.318 (0.209)	--	-0.821* (0.341)	--	0.0484 (0.272)	--	-0.821* (0.341)
Temporary Agency	--	-0.332 (0.209)	--	-0.419 (0.285)	--	-0.251 (0.305)	--	-0.419 (0.285)
Skills Underemployment	--	-0.817** (0.261)	--	-0.859* (0.397)	--	-0.748* (0.348)	--	-0.859* (0.397)
Interactions								
Non-Standard X Female	--	--	--	--	--	--	0.393 (0.274)	--
Unemployed X Female	--	--	--	--	--	--	0.608 (0.389)	0.608 (0.389)
Part-Time X Female	--	--	--	--	--	--	--	0.869* (0.436)
Temporary X Female	--	--	--	--	--	--	--	0.168 (0.417)
Underemployed X Female	--	--	--	--	--	--	--	0.111 (0.528)
Female Applicant	0.299 (0.195)	0.312 (0.195)	--	--	--	--	0.00457 (0.254)	0.00457 (0.254)
Constant	-2.312*** (0.176)	-2.319*** (0.177)	-2.158*** (0.179)	-2.158*** (0.179)	-2.154*** (0.181)	-2.154*** (0.181)	-2.158*** (0.179)	-2.158*** (0.179)
n (clusters)	1210	1210	599	599	611	611	1210	1210
n (observations)	2420	2420	1198	1198	1222	1222	2420	2420

Notes: Standard errors in parentheses. Log-odds presented.

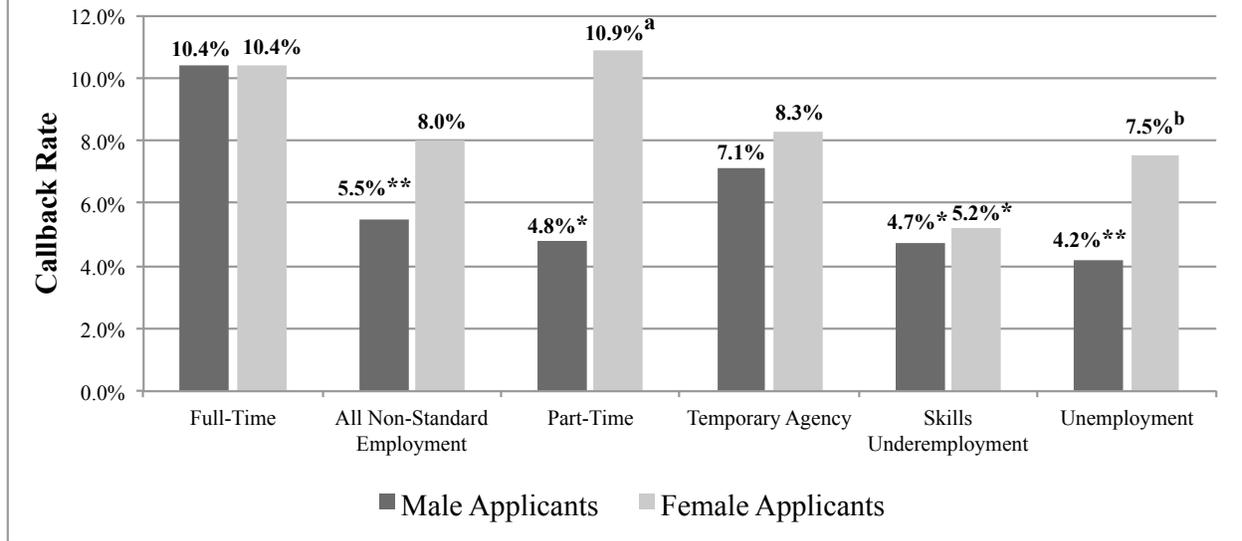
Statistical significance (two-tailed tests): * p<0.05, ** p<0.01, *** p<0.001



Statistical significance (two-tailed tests): * $p < .05$; ** $p < .01$

Notes: All statistical tests are z-tests for differences in proportions comparing the callback rate in each employment history condition to the callback rate in the full-time condition.

Figure 2. Callback Rates, by Employment History and Gender



Statistical significance (two-tailed tests): * $p < .05$; ** $p < .01$

Statistical significance (two-tailed tests): ^b $p < .10$; ^a $p < .05$

Notes: All statistical tests are z-tests for differences in proportions. The stars indicate statistical tests comparing the callback rate in each employment history condition, separately for male and female job applicants, to the callback rate in the full-time condition. The letters indicate statistical tests comparing the callback rate for male and female job applicants *within* a given employment history condition.