

**The Gig Work Penalty in Perceived Welfare Deservingness:**  
**Evidence from Survey Experiments**

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**Abstract**

Considering the drastic increase in precarious non-standard workers such as app-based gig workers who are easily excluded from social security programs and fringe benefits, the research question of this paper is “How are gig workers perceived as receiving unemployment and healthcare benefits?”. Even though existing studies answered some criteria of reciprocity or identity matter for deservingness, no studies that I know of have investigated how the specific labor market characteristics affect perceived deservingness, and how the atypical work arrangement is related to the existing criteria. To answer the questions, I conducted novel survey experiments as part of the 2022 Cooperative Election Study (CES). The findings show that gig workers are penalized for the perceived deservingness of unemployment benefits. In the case of healthcare benefits, doing a gig job does not affect their perceived deservingness. However, when immigrants do the gig jobs, they get punished as less deserving of healthcare benefits compared to immigrants with regular jobs. It implies a double standard, which means immigrants are more severely penalized when they exhibit ‘unfavorable’ behavior, having atypical jobs in this case. This paper contributes to filling the unanswered gap in the public image of app-based gig workers. Also, this paper sheds light on that the ‘job’ searching effort as the criterion of deservingness should not be treated as a binary concept because all jobs are not treated homogeneously. The findings of the divergent perceived deservingness suggest how to approach the policy designs for social security programs for newly emerging precarious worker groups to bring political consensus.

## **I. Introduction**

With the rapid growth of the platform economy, the labor market facilitates alternative ways of commodifying labor from how the standard work arrangement does with the normative ideal of secure full-time work. The platform economy or gig economy means using short-term work arrangements with high flexibility by connecting workers, customers, and businesses on digital platforms (Anderson et al. 2021), and the gig economy makes up a growing share of the American workforce as about one in six Americans have earned money from an online gig platform (Anderson et al. 2021; Upwork 2020). Without any formal contracts, gig workers have a high degree of autonomy and flexibility (Katz and Krueger 2019; Smith 2016), which attracts many workers to the gig economy. However, this flexibility could be a double-edged sword, as it comes at the expense of job security and stability, and gig workers' financial status is more volatile and vulnerable to economic changes than that of traditional workers (Vallas & Schor 2020; Chen et al. 2019; Berg et al. 2018; Manyika et al. 2016).

A major concern regarding the future of work is to produce increasingly precarious working conditions by not being protected from the social insurance system and tax-subsidized employer benefits. Gig workers are often excluded from the existing social insurance programs such as employer-sponsored health insurance and retirement plans which had been established based on the standard employment model (Berg et al. 2018; Behrendt et al. 2019). Gig workers' precarity also stems from the fundamentally distinct gig economy structure. Generally, the responsibility for bodily injury, damage to assets, and risks of employment are devolved onto gig workers rather than being protected by the employer (Ravenelle 2019; Vallas and Schor 2020). Also, besides their irregular working hours, they are subject to disruption to work because of the evaluation as the gig economy produces reputational insecurity with algorithmic control (Ravenelle 2019; Wood et al.

2019; Schor et al. 2020; Wood and Lehdonvirta 2022). The shifting of economic risks and the importance of modification of welfare systems to ensure living standards and security for gig workers increase the need to answer how the American public thinks of the deservingness of those with insecure employment conditions of government programs in the era of the future of work.

With the complexity of welfare politics practically and politically, whether to expand the eligibility of social insurance by investigating how the public perceives the welfare deservingness of the newly emerging working group is a pressing issue for welfare states. The perceptions of deservingness clearly are associated with the way social programs are designed and administered (Schneider and Ingram 1993). Existing literature about deservingness found some criteria such as motivation to work or identity as a majority are vital to be perceived as more deserving of welfare programs. Existing work tells us little, however, about how the *nature* of work itself affects perceived deservingness. No studies that I know of have answered enough whether specific types of recipients' work arrangements, especially about a newly emerging app-based gig jobs, matter or not. To fill the empirical and theoretical gaps, this paper demonstrates to what extent non-standard workers are penalized for receiving two major social programs, unemployment insurance and public healthcare benefits, compared to conventional workers by using pre-registered survey experiments<sup>1</sup>.

Drawing on the insights of the existing literature, these experiments seek to answer two important research questions. First, “Do the American public perceive non-standard workers as less deserving of public assistance than those in more traditional employment?”, and second, “Do the effects of factors that have been shown to shape perceived deservingness, such as motivation

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<sup>1</sup> All hypotheses and research questions along with the study design were pre-registered on the Open Science Framework website prior to data analysis. See Bae (2023).

to work and immigrant status, differ for non-standard workers relative to other workers?” To answer these questions, I use two specific social programs, unemployment insurance and public healthcare programs with the two existing deservingness criteria, motivation to work (*reciprocity*) and immigrant status (*identity*), respectively for 2X2 factorial survey experiments. The different deservingness criteria are applied to each unemployment insurance and healthcare program in this paper to find out the effect of gig work and existing criteria on perceived deservingness properly based on the specific features of the social programs. Specifically, when determining the deservingness of unemployment insurance, the criterion of reciprocity as motivation to work would be determinant considering the growing concern of moral hazard of unemployment insurance and doubt about the willingness to work of the unemployed who get the benefit (Krug et al. 2019; Larsen 2002). Also, based on the existing literature about healthcare chauvinism and the deservingness of public healthcare (Albrekt Larsen 2020; Larsen and Scheffer 2020; Eick and Larsen 2022), this paper seeks to fill the gap in the effects of doing gig jobs and immigrants on the deservingness of receiving healthcare benefit.

As I expected, Americans consider gig workers to be significantly less deserving of unemployment benefits than traditional workers, and this penalty persists even when the workers are described as being motivated to work. In addition, I found that the “gig work deservingness penalty” more strongly exists for immigrants for public healthcare benefits, a paramount consideration given that immigrants and other disadvantaged groups are more likely to rely on the gig economy for employment. Lastly, the effect of the specific policy types is different among gig workers as Americans perceive gig workers as more deserving of public healthcare benefits than unemployment benefits. These findings establish a determinant factor of the specific job status in the perceived deservingness of social programs. Also, the “gig work deservingness penalty” and

the conditional effects of the existing criteria by specific job status propose an important consideration to scholars of social welfare politics and public opinions.

## **II. Theory and Hypotheses**

### **Social Legitimacy of the Welfare States**

In the early stages of welfare state formation, the debate about the fundamental moral question of '*who should get what and why*' has dominated (Jeene 2015; van Oorschot et al. 2017), which underlies solidarity and social justice in the welfare states. This question implies that particular groups are more entitled to government support, while others should be excluded (Larsen 2008; Cook 1979; Laenen, T., & Roosma, F. 2022; van Oorschot 2000, 2006). Perception of beneficiaries is strongly related to actual policy because policy designs reflect perceptions of target populations (Schneider and Ingram 1997), and it influences the support of government programs and public opinions as part of the social legitimacy of social programs (Gilens 1999; Petersen 2012). In the wake of labor market change and with the emergence of new working groups, the debate is inevitable as welfare states were built to protect workers of the states, especially regular workers (Skocpol 1992). The need for welfare reform and (re)targeting new groups under the labor market changes highlights the importance of the social legitimacy of targeted welfare schemes to deal with new social risks (van Oorschot et al. 2017; van Oorschot and Roosma 2017).

Different groups of the needy are perceived differently within welfare states (van Oorschot 2006). Usually, social protection for the unemployed despite their capacity to work is less supported, and social protection for immigrants is least supported, whereas the elderly and disabled are seen as more deserving (van Oorschot 2006; Jeene 2015; van Oorschot and Roosma 2017, 7;

Buss 2019; Geiger 2021). Also, the type and the delivery systems of government programs affect the different levels of social legitimacy and positive or negative images of the targeted groups (Schneider and Ingram 1993; Soss and Schram 2007; Ellis and Faricy 2020). Contributory social insurance schemes tend to bring higher social legitimacy than mean-tested tax-financed assistance as those who pay contributions signal that they are entitled to benefits (Coleman 1982). Usually, the public is more generous when it comes to evaluating recipients' deservingness of in-kind benefits such as healthcare benefits than cash benefits such as unemployment benefits (Jensen and Petersen 2017; Geiger 2021).

The perceived deservingness and actual policy design are mutually related. Perceived deservingness as the images of the target population can affect actual policy designs such as sanctions for the application process by impacting policymaker acceptance (van Oorschot 2006). For example, perceptions of deservingness have large effects on public support for pushing low-deserving welfare recipients into requirements such as job training (Petersen et al. 2011). Also, policymakers might be less tolerant of strict conditions and sanctions, and reduce administrative burdens if the individual claimant is seen as deserving (Baekgaard et al. 2021). Meanwhile, based on social constructions of deservingness literatures, policy designs also correspond to the social construction of the deservingness of the target groups. (Schneider and Ingram 1997; Schneider and Ingram 1993). For example, the recipients of welfare programs like Temporary Assistance for Needy Families (TANF) are viewed as those who are dependent on negative stereotypes. Given perceptions of deservingness clearly play into the way that social programs are designed and administered (Schneider and Ingram 1993), the image of the newly emerging category of workers will suggest the policy designs as the potential benefit claimants.

## Deservingness Criteria and Images of Target Groups

Existing work has suggested the ‘CARIN’ criteria (Control, Attitude, Reciprocity, Identity, Need) as a framework for understanding the criteria that influence perceived deservingness (van Oorschot and Roosma, 2017; Cook, 1979; van Oorschot, 2000; van Oorschot et al., 2017). It shows how much the groups are perceived as deserving depends on based on the five criteria. *Control* refers to the group’s control over its situation and whether they are blameworthy for their neediness. *Attitude* refers to whether welfare recipients display gratitude or are likable. *Reciprocity* is about whether claimants contribute to society in the past or future. *Identity* is about shared identity. *Need* means the level of need.

Depending on welfare claimants’ features such as work status, age, and immigrant status, welfare beneficiaries are subject to different rules (Buss 2019). According to the criterion of control over the situation, the unemployed who face uncontrolled situations such as those not responsible for their job loss are seen as more deserving than those who get fired due to neglect of duty with culpability for unemployment due to blameworthiness (van Oorschot 2000; Geiger 2021). Engaging in job-seeking activities matters for perceived deservingness as those not working to help themselves are perceived as “undeserving poor” in terms of reciprocity criterion (Larsen 2008; Buss 2019; Petersen 2012; Jeene 2015) or effort to find work can be interpreted as control criterion (Buss 2019). Normally, because the older are considered as those with greater reciprocity with contributing to the social system and lower control which means they might find it difficult to find jobs (Buss 2019; van Oorschot and Roosma 2017), strict conditions and harsh sanctions apply to the young unemployed with low perceived deservingness (Larsen 2008). Regarding the criterion of identity, immigrants or racial minorities are indeed deemed less deserving than native-born citizens (Reeskens and van der Meer 2015; Reeskens and van der Meer 2019; van Oorschot

2008; Kootstra 2016).

However, there are unanswered questions about how the *nature* of work affects perceived deservingness. Existing literature investigated motivation to work and work history are crucial for perceived deservingness in terms of reciprocity criterion, but studies have not established whether non-standard workers are perceived as less deserving than other workers. Based on the CARIN criteria, gig workers would be perceived as less deserving in terms of reciprocity due to the less contribution to the conventional social insurance systems. On the other hand, gig workers would be perceived as more deserving because doing hustle jobs can be interpreted as efforts to escape their financial insecurity by themselves in terms of control criterion. Second, if those in non-standard jobs are considered less deserving, which aspects of the jobs or the workers factor into this perception? Existing literature assumes that app-based gig workers are considered undeserving of government support because they are relatively young (Ravenelle et al., 2021), and if so, the gig penalty exists in terms of reciprocity and control criteria. Similarly, app-based workers might be considered less deserving since racial minorities such as Hispanics are more engaged in the app-based economy in terms of identity criterion. Existing work tells us little, however, about how the *nature* of non-standard work itself affects perceived deservingness. Therefore, this paper investigates twofold: whether having a deviant work arrangement affects the perceived deservingness as receiving two different social programs – unemployment insurance (UI) and public healthcare insurance (HI) benefits, and whether the existing criteria such as motivation to work (reciprocity) and immigrant status (identity) have a divergent effect depending on the non-standard work arrangement.



## **Work Ethic, Reciprocity, and Deservingness of Receiving Unemployment Benefits**

Americans value a strong work ethic (Bobo 1998; DeSante 2013). Americans believe people should take care of their personal problems by themselves first without relying on government aid (Sniderman and Brody 1977, 501), and would like to help those who help themselves first. In that sense, those who are reliant on government programs are considered lazy and have a lack of commitment to work ethics with the social stigma of the unemployed (Rein 2001; Krug et al. 2019). The hostility toward laziness and lack of work ethics stems from a strong belief in self-efficiency and deep concerns about relying on welfare programs without self-help. Furthermore, a workfare system that promotes the priority of participating in the labor market while limiting the provision of welfare with work requirements and stringent conditions in the U.S. is prioritized to reduce the attractiveness of social benefits (Rueda 2015; Brodtkin and Larsen 2013; Bonoli 2013; Clasen et al. 2016). Given the features of the emphasis on the workfare system and the criterion of reciprocity through societal contributions, those who are looking for jobs will be perceived as more deserving of unemployment benefits than those without motivations.

*H1a: Americans will be more likely to perceive workers with motivation to work as deserving of unemployment benefits than those without motivation to work.*

Fundamentally, the stress on work ethic and the workfare system stems from the vigilance about the moral hazard of public assistance and doubt about the willingness to work of the unemployed who would get government benefits (Larsen 2002). Due to these concerns, those with high work motivation are perceived as more deserving, however, whether what kinds of job arrangements or the *nature* of work affects the perceived deservingness has not been answered yet.

In this sense, I hypothesize the perceived deservingness of gig workers by drawing on the insights of the existing literature and theory. Gig workers' atypical work arrangements might be treated as antithetical to Americans' strong beliefs in the Protestant work ethic and the American Dream, the belief in upward mobility with hard work (Kim 2022), and hard work as American values and norms (DeSante 2013) because the public might consider that gig workers do not put enough effort or investment for having more decent jobs in terms of control criterion. This is led by a belief that the working poor simply do not work enough or are lazy (Schiller 1994). Based on this theoretical expectation relating to work ethic literature and the criterion of control, even if they have the same level of active job-seeking behavior, gig workers will be perceived as less deserving than traditional workers.

*H1b: Americans will be less likely to perceive gig workers as deserving of unemployment benefits than traditional workers.*

In addition to these hypotheses, this paper also seeks to answer a specific research question to find out the conditional effects of the existing criterion, motivation to work, depending on the work arrangement. I pre-registered this question without directional hypotheses since the deservingness of gig workers has not been studied yet. If the fact that someone is a non-standard worker is more salient and drowns out other considerations and criteria, the effect of the job search effort on the perceived deservingness of gig workers will not be stronger than that of traditional workers. Also, in terms of path dependence or status quo bias, as traditional workers are entitled to regular UI benefits, the public might consider traditional workers should show more strong motivation to work. On the other hand, if the public considers that gig workers have a weak work ethic and are too lazy to step out from poverty by getting more decent jobs as mentioned earlier,

the effect of job searching efforts will have a stronger effect on gig workers. If so, gig workers might be evaluated as undeserving poor in terms of the control criterion. Given the privileges of traditional workers for accessing social programs and the strong work ethic for welfare politics in the U.S. context, I expect the degree of work ethic as motivation to work would be applied differently depending on the work status.

*Q1: Is the effect of motivation to work on perceived deservingness larger or smaller for gig workers as compared to traditional workers?*

### **Immigration, Work Ethic, and Deservingness of Healthcare Benefits**

With the influx of immigrants, recent research about public opinion and welfare policies explores the effect of increased immigrants on welfare support, especially Hispanic and Latinos in the U.S. context (Garand et al. 2015; Abrajano and Hajnal 2015; Eger, M. A., & Breznau, N. 2017; Brady and Finnigan 2014; Soss et al. 2001; Hero and Preuhs 2007; Kootstra 2016; Sainsbury 2006; Burgoon and Rooduijn 2021; Schmidt-Catran and Spies 2016). Greater ethnic heterogeneity from immigration usually reduces public support for social policy as the public view that immigrants exploit the welfare system especially when a fiscal threat exists (Taylor-Gooby 2005; Semyonov et al. 2006; Haselswerdt 2021). With the hostility toward immigrants taking advantage of welfare programs (Kitschet 1997) and the assumption of ‘welfare magnets’ (Borjas 1999; Allard & Danziger 2000), immigrants are perceived as least deserving of welfare provision (van Oorschot 2000; 2006; Brady and Finnigan 2014; Fox 2012; Romero 2011; van der Waal et al. 2016). Also, the public assumes that immigrants take out more from the welfare state than they contribute to it with the concerns of economic threats to welfare state systems (De Koster et al. 2013) and of

cultural threats from cultural diversity (van de Waal et al. 2016). Generally, this deservingness gap is insurmountable even with favorable features, which implies the immigrant penalty (Reeskens and van de Meer 2018). Immigrants are normally perceived to be less deserving, and especially older immigrants are constructed as ‘underserving’ of government programs due to low contribution and concerns about the burden on U.S. taxpayers (Yoo 2008). Therefore, based on the deservingness criteria of identity and perceptions of lack of reciprocity toward immigrants, I hypothesize that immigrant workers are seen as less deserving of healthcare benefits than native-born American workers despite their generosity toward healthcare benefits.

*H2a: Americans will be more likely to perceive native-born American workers as deserving of public healthcare benefits than immigrant workers.*

As per H1b, I expect gig workers will be seen as less deserving of public healthcare benefits than traditional workers. With the Protestant work ethic and the essential value of hard work as Americans values (DeSante 2013; Kim 2022), Americans tend to blame the poor for their conditions as the concept of individual responsibility and they believe working poor are not willing to work hard to make decent living (McClosky and Zaller 1984; Schiller 1994). Based on the theoretical background and the criterion of control to have enough effort to overcome their financial difficulty by themselves, some might consider gig workers are too lazy to put enough effort into seeking more traditional jobs or get blamed for their financial insecurity as not taking decent and conventional jobs. Thus, I expect gig workers will be perceived as less deserving of receiving healthcare benefits than traditional workers regardless of their immigrant status.

*H2b: Americans will be less likely to perceive gig workers as deserving of public healthcare*

*benefits than traditional workers.*

Additionally, this paper seeks to answer a specific research question about the conditional effect of the existing criterion, identity as immigrant status, by the work arrangement as per *Q1*. If non-standard workers are already established as less deserving, it doesn't matter that much whether they are immigrants or not. On the other hand, the emphasis on work ethic and hard work in welfare politics in the U.S. is not neutral in terms of national origins, accordingly, certain minorities are punished more severely for the same level of "laziness" (DeSante 2013). Similarly, when ethnic minority welfare claimants have unfavorable features, such as having short work history, they are punished more severely than ethnic majorities as a double standard (Kootstra 2016). The finding that work ethic is not a race-neutral value implies that it would not be neutral by immigrant either, then the effect of immigrant status would have a stronger effect on gig workers. Given the precarious feature of gig workers and the belief that Americans do not reward hard work in a color-blind manner (DeSante 2013), I expect immigrant status as the identity criterion would be applied differently depending on the work status.

*Q2: Is the effect of national origins on perceived deservingness larger or smaller for gig workers as compared to traditional workers?*

### **Program Types and Perceived Deservingness**

The level of perceived deservingness of gig workers would vary depending on the specific social programs' features or delivery types. Health benefits are mainly considered to be provided with egalitarian attitudes because it is perceived as universal rights (Jensen and Petersen 2017). In

terms of welfare delivery systems, healthcare benefits, in-kind benefits are preferable compared to cash assistance like pension and unemployment benefits because of the low level of transferability (Ellis and Faricy 2020; Eick and Larsen 2022). Due to these features, in-kind benefits are more generously provided even to unfavorable groups such as immigrants (Eick and Larsen 2022), which implies that gig workers would be more generously perceived as receiving in-kind healthcare benefits. Thus, based on the theoretical argument about egalitarian attitudes toward health benefits and preference for in-kind benefits, I expect Americans would be more generous in providing healthcare services than unemployment benefits despite gig workers' atypical features.

*H3: Americans will perceive gig workers as more deserving of healthcare benefits than unemployment benefits.*

### **III. Experiment Design and Data**

To test these hypotheses and answer these questions, I administered survey experiments that randomly exposed respondents to hypothetical scenarios about those with different work arrangements who face the need for unemployment and healthcare benefits. The experiments are embedded in a 1,000-respondent module on the 2022 Cooperative Election Study (CES, formerly the Cooperative Congressional Election Study). Randomization is carried out by YouGov, the survey research firm that runs the CES, using its online survey software. Since CES is designed to be representative of all national adults in the US, it has the advantage of generalizability compared to other survey sources.

I developed three different survey experiments for each case of unemployment and healthcare benefits. To avoid the possibility of spillovers (Transue et al. 2009), I randomly varied

the order of three survey experiments. Each condition randomly varies the characteristics of hypothetical workers to measure respondents' perceptions of the workers' deservingness. Specifically, the first survey experiment is a 2X2 full factorial survey experiment with random assignment to a job status cue (traditional/ gig worker) and work motivation cue (high/low) in the vignette description, which means each condition has approximately 250 respondents to test the difference in perceived deservingness for unemployment benefits. To make the hypothetical worker not seem as culpable for being unemployed according to the control criteria, the situation of job loss is described as a situation beyond their control, which means it is not caused by their neglect of duty. After the conditions randomly being shown, each respondent is asked to what extent they think the hypothetical worker deserves to receive the benefits using a four-point Likert scale. As this paper aims to answer perceived deservingness rather than testing the respondents' knowledge of the actual social programs, I describe the question with "in your opinion" as Reeskens and van der Meer (2019) present. This experiment tests *H1a*, *H1b*, and *Q1*.

The second experiment is also a 2X2 full factorial experiment with treatments for job arrangement (traditional/ gig worker) and immigration status (a native-born American/ immigrant) to measure the perceived deserving of public healthcare benefits. Specifically, each vignette of treatment and control describes the case of a gig and a regular worker injured in a car accident on duty respectively. Both control and treatment conditions describe a background of national origins as a native-born American or immigrant to test the effects of job status and immigrant status on perceived deservingness. After the conditions are randomly shown, each respondent is asked how much they think the hypothetical person deserves to get unemployment and healthcare benefits, using a four-point Likert scale. This experiment tests *H2a*, *H2b*, and *Q2*.

The last survey experiment randomizes two hypothetical situations of a gig worker who

needs either unemployment or healthcare benefits to find out whether the perceived deservingness of gig workers on government programs would differ depending on the type of social programs: unemployment insurance (cash assistance) vs. healthcare benefit (in-kind benefit). To have both conditions with information equivalence, each scenario is an uncontrollable situation that is not caused by their neglect of duty. In other words, the first one shows an involuntary loss of income and the second one shows an unexpected accident. Each condition has approximately 500 respondents. After randomization, I asked respondents about the perceived deservingness of each hypothetical worker. This experiment will test *H3*. The factorial survey experiments' instrument is included in Appendix A.

#### **IV. Results<sup>2</sup>**

As the preregistration says (Bae 2023), I use a two-tailed critical p-value of 0.1 for these tests. I begin by testing *H1a* and *H1b* with a simple comparison of the treatment groups' mean with t-tests as displayed in Figure 1. Regarding *H1a*, Figure 1 with the baseline of group A shows that those with motivation to work are perceived as more deserving of unemployment benefits than those without motivation to work, regardless of work arrangement as traditional workers or gig workers. Specifically, the mean difference in the deservingness of unemployment benefits between traditional workers with motivation to work (mean = 3.55, std. dev.= 0.72) and those without motivation to work (mean = 2.70, std. dev.= 1.02) is substantively meaningful and statistically significant ( $p < 0.01$ , Cohen's D effect size = 0.96). Also, the mean difference between

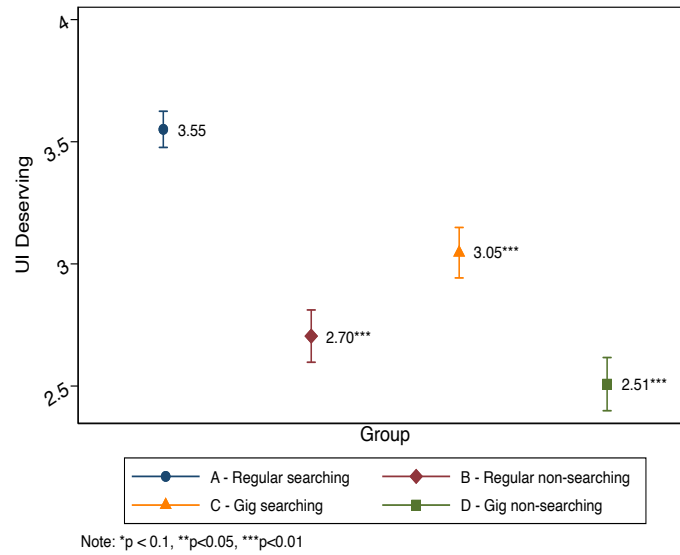
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<sup>2</sup> Even though heterogeneous effects by party ID and anti-immigrant sentiment on perceived deservingness have not been registered not in the preregistration, additional analyses are added as explanatory tests in Appendix C. Also, robustness check is added in Appendix B.



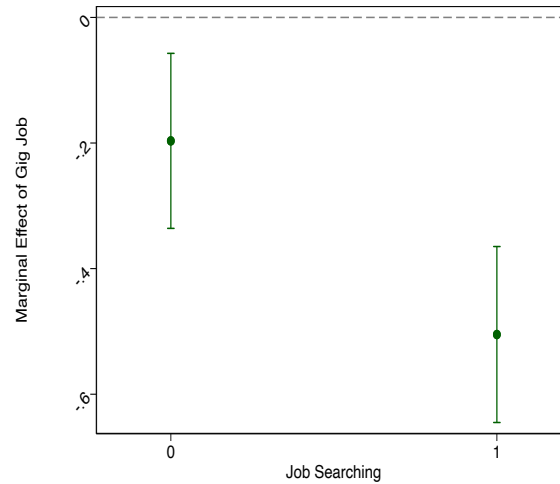
gig workers with motivation to work (mean = 3.05, std. dev.= 0.97) and those without motivation to work (mean = 2.51, std. dev.= 1.05) is substantively meaningful and statistically significant ( $p < 0.01$ , Cohen's D effect size = 0.532). Thus, the results provide strong support for *H1a* and are consistent with other literature on the importance of motivation to work as a determinant of perceived deservingness.

To test *H1b* when using different baselines for significance tests, Figure 1 shows that gig workers are perceived as less deserving of unemployment benefits than traditional workers even when motivation to work is held constant. Specifically, the mean difference between traditional workers with motivation to work (mean = 3.55, std. dev.= 0.72) and gig workers with motivation to work (mean = 3.05, std. dev.= 0.97) is substantively meaningful and statistically significant ( $p < 0.01$ , Cohen's D effect size = 0.592). Also, the mean difference between traditional workers without motivation to work (mean = 2.70, std. dev.= 1.02) and gig workers without motivation to work (mean = 2.51, std. dev.= 1.05) is substantively meaningful and statistically significant ( $p < 0.05$ , Cohen's D effect size = 0.19). The thought-provoking finding is that the “gig work penalty” in perceived deservingness does not originate from the different working hours because I controlled each condition's working hours as 40 hours per week in the survey vignette. It suggests important points for scholars of welfare state attitudes to consider that the deservingness gap with the “gig work penalty” might be insurmountable despite the same working hours, but at least motivated gig workers are seen as more deserving than unmotivated traditional workers. Thus, the results support *H1b* that job status is an important factor of perceived deservingness.



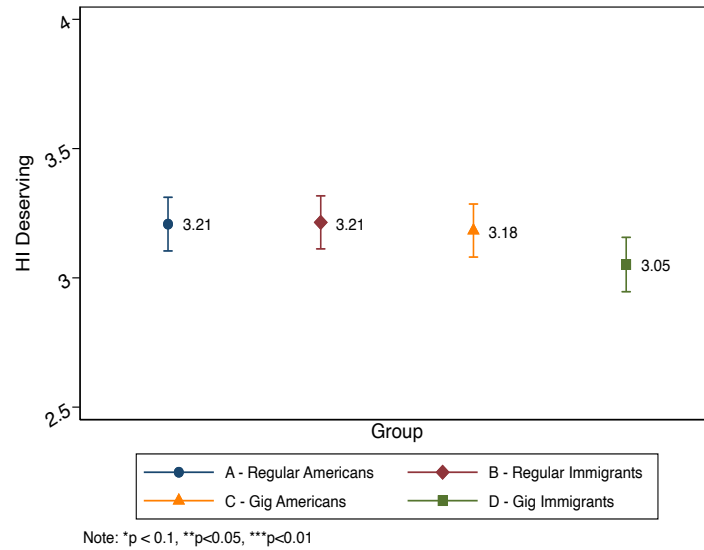
**Figure 1.** Mean deservingness of unemployment benefits in each group with 90% CIs

Next, I test the conditional effect of the motivation to work by job status on perceived deservingness to indicate the presence of a heterogeneous effect that stated in *Q1*. Figure 2 displays predicted rating with 90% confidence intervals of different level of job status and engagement in job searching with an OLS model. Even though the conditional effect might have the floor effect in the case of gig workers, the conditional effect of motivation to work on perceived deservingness is larger for traditional workers ( $p < 0.01$ ), which implies that traditional workers get more penalized when not engaging in job searching than gig workers. The relative leniency toward gig workers who are not showing labor market reintegration behavior suggests people's different expectations of these different types of workers which might lead from the public's image of gig workers as peripheral and deviant from traditional ones.



**Figure 2.** Marginal Effect of Gig Job on UI deservingness, with 90% CIs

Next, I test the deservingness gap of health benefits depending on gig work status and immigration status, expected by *H2a* and *H2b*. Regarding *H2a*, Figure 3 with the baseline of group A shows that there is no statistically significant difference in the deservingness of health benefits between native-born Americans and immigrants when the work arrangement as traditional workers or gig workers is held. This is different from the existing literature on healthcare chauvinism (Larsen and Schaeffer 2020). Regarding *H2b*, Figure 3 shows that there is no punishment for being a gig worker in deservingness of health benefits in the case of native-born Americans when using different baselines for significance tests. However, the comparison between Group B and Group D in Figure 3 shows that an immigrant gig worker (mean = 3.05, std. dev.= 0.97) is perceived as less deserving of healthcare benefits than immigrant traditional workers (mean = 3.21, std. dev.= 1.0) ( $p < 0.1$ , Cohen's D effect size = 0.165). It shows that the public tends to penalize immigrants more when immigrants do atypical jobs as gig workers, which can be interpreted as a double standard: immigrants are punished more severely when having unfavorable behavior than the majority (Kootstra 2016).

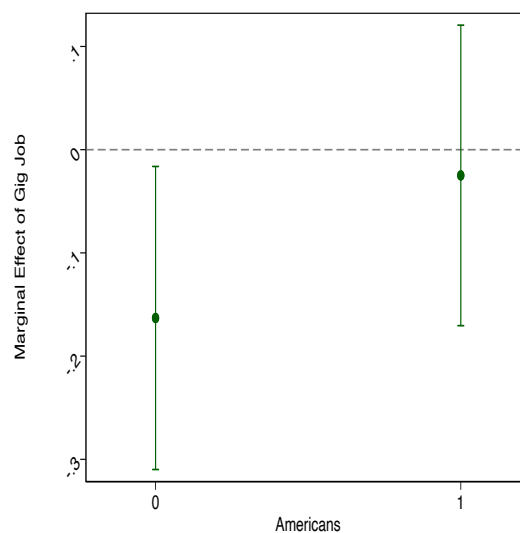


**Figure 3.** Mean deservingness of unemployment benefits in each group with 90% CIs

Even though *H2a* and *H2b* are not strongly supported except for the significant difference in the perceived deservingness between immigrants with traditional jobs and those with gig jobs, the findings show intriguing implications. Unlike the existing literature, the result does not show the inevitable deservingness gap between native-born citizens and immigrants in terms of health benefits. It might be because the public has more egalitarian attitudes toward health benefits. Especially, the public might wish to provide government healthcare services to those perceived as unlucky in the case of an ‘uncontrollable’ and ‘unfortunate’ situation no matter what their immigrant statuses are as this survey experiment vignette describes the situation of the workers injured in a car accident on duty. This suggests that this experiment is a difficult test for the importance of job status as a variable affecting perceived deservingness, making the stronger penalty for gig work in the immigrant condition especially noteworthy.

Figure 4 by an OLS model displays predicted ratings with 90% confidence intervals across

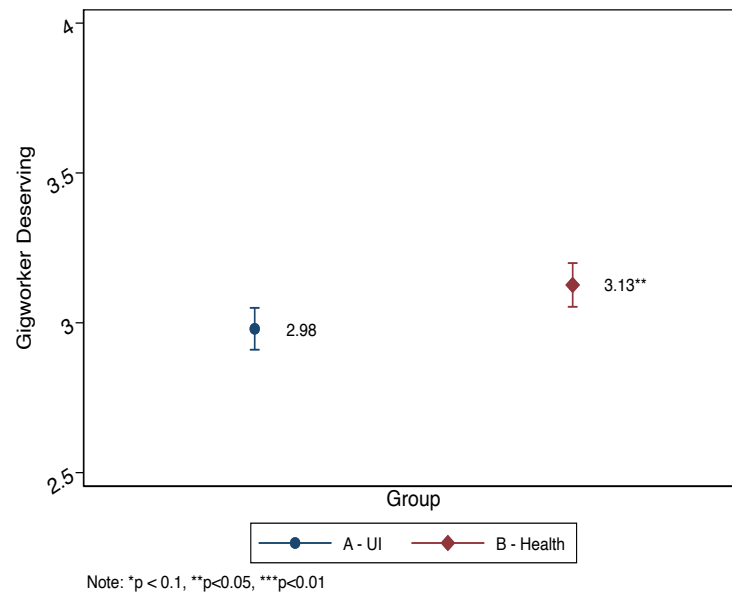
different work arrangements and immigration statuses to test the conditional effect stated in *Q2*. It does not have a statistically significant effect of nationality on perceived deservingness by work arrangement ( $p=0.272$ ). However, the directions of the findings imply that a conditional effect of nationality on perceived deservingness would be larger for gig workers than traditional workers. It implies the public might expect immigrants should do more ‘traditional’ jobs for higher deservingness of public health benefits for more strict conditions.



**Figure 4.** Marginal Effect of Gig Job on HI deservingness, with 90% CIs

Lastly, I test *H3* on the effect of different policy types on perceived deservingness among gig workers. Figure 5 shows that Americans perceive gig workers as more deserving of public healthcare benefits than unemployment benefits ( $p<0.05$ , Cohen’s *D* effect size = 0.1512), as expected by *H3*. As the existing literature found more generosity of healthcare benefits to sick individuals (Jensen and Petersen 2017), even toward less favorable groups such as immigrants (Eick and Larsen 2022), this result expands the existing theory even toward non-standard workers. This finding also somewhat is related to the different levels of the deservingness of their

beneficiaries by the delivery system of social programs (Ellis and Faricy 2020). It implies that it might be easier to reach a political consensus of expanding public health benefits toward non-standard workers compared to the case of unemployment benefits for them.



**Figure 5.** Gig workers' deservingness of UI and HI

## V. Discussion and Conclusion

This paper is the first to present an empirical test of how specific work arrangements affect workers' perceived deservingness for social programs. The existing studies found that Americans reward hard work as the criteria of control and reciprocity, and a strong work ethic is a vital factor for perceived deservingness. However, the existing work tells us little about how the *nature* of job status itself affects perceived deservingness. In this sense, this paper fills an important research gap in the social legitimacy of benefit obligations related to specific types of job status.

Furthermore, this paper contributes to advancing the literature by establishing the

relationship between existing criteria for perceived deservingness and specific job status. Especially, existing literature have treated the motivation to engage in job-seeking as homogenously (Buss 2019; Reeskens and van der Meer 2019). However, this paper establishes that there is a perceived deservingness gap between gig workers and traditional workers despite their reintegration strategy to work. It sheds light on the finding that labor market reintegration behavior should not be treated homogeneously or binarily, but what specific type of jobs welfare recipients are looking for is an important determinant of perceived deservingness. Notably, the finding that the ‘gig work deservingness penalty’ does not originate from gig workers’ fewer working hours implies that the public might consider gig workers fundamentally deviant or have different expectations of standards from these different types of workers. The finding of gig workers’ lower deservingness of unemployment benefits suggests the potential avenues for future research on what factors might serve to mitigate the deservingness penalty of gig work. For example, per Keiser and Miller (2020), would Americans be more supportive of programs that aid gig workers if the administrative burdens were relatively high?

Regarding healthcare benefits, this paper found no significant differences in perceived deservingness when native-born Americans have either traditional or gig jobs. However, in the case of immigrants, they are punished when working as gig workers compared to working as traditional ones. It is aligned with the existing literature that ethnic minorities with unfavorable behaviors are punished more severely based on a double standard (Kootstra 2016). In the case of immigrant gig workers, doing non-standard jobs might be interpreted as an unfavorable aspect. Also, this paper does not find the insurmountable gap between native-born Americans and immigrant workers. It might be because people are less likely to care about their nationality in the case of uncontrollable and unfortunate situations. However, considering healthcare chauvinism

against recently immigrated COVID-19 patients exists even during the uncontrolled spread of COVID-19 (Larsen and Schaeffer 2021), there are some possibilities that the public still perceives immigrants as less deserving of healthcare even under uncontrolled situations. Especially, the degree of healthcare chauvinism would differ depending on the specific features of the immigrants such as whether they are undocumented or not. With an understanding of the heterogeneity of immigrant status with certain features (Reeskens & van Oorschot 2012; Reeskens & Van der Meer 2019), further studies are needed to answer the detailed perceived deservingness gaps of health benefits among native-born Americans, documented, and undocumented immigrants by job status.

This paper also finds out the different layouts of deservingness depending on the different policy types among gig workers. Americans perceive gig workers as less deserving of receiving unemployment benefits than healthcare benefits. It is aligned with the existing literature that people consider that in-kind healthcare benefits should be provided more generously as they perceive it as a more universal right (Jensen and Petersen 2017). It implies that the consensus about non-standard workers' healthcare insurance could be reached easily compared to unemployment insurance.

Despite the theoretical contributions of this paper, there is one possible concern regarding the findings on the deservingness of unemployment benefits. Respondents familiar with the actual unemployment insurance benefits might notice that the policy does not apply practically to non-standard workers, which might lead to biased answers to the downward of gig workers' deservingness. However, since the survey experiment asks not about actual eligibility but perceived deservingness by asking their own opinions about the hypothetical workers, the bias is not too worrisome and the perceived deservingness as the legitimacy of benefits which is asked throughout the vignettes does not indicate the actual eligibility of the hypothetical workers in the



actual systems.

Also, there are several limitations to the designs of survey experiments due to the limited survey time and structural restrictions of the data. Particularly, as the vignettes do not control for age, gender, or other characteristics in conditions that respondents might infer from their approach to employment, it is hard to know what inferences are being made about the perceptions. For example, the respondents might expect gig workers to be relatively young, and therefore less deserving (Larsen 2008). Relating to the vignettes about immigrants, as the vignettes merely describe either the immigrant or American, it does not contain other important aspects of immigrants such as the length of residence, origin of country, or whether they are documented or not. Of course, there are trade-offs running either abstract or concrete versions of the experiment (Brutger et al. 2022), but it is worth seeing how the levels of abstraction of contextual details affect the effect size of treatment for future study. Additionally, in the third survey experiment, the finding shows that Americans are more generous to gig workers having health benefits (in-kind) compared to unemployment benefits (cash assistance). Even though the finding implies that recipients of in-kind benefits are perceived as more deserving, the delivery system and benefit types should be disentangled to see the pure effect of the welfare delivery systems (Ellis and Faricy 2019). Also, although this survey experiment focuses on the effect of the different policy types on perceived deservingness only among gig workers particularly, it would be worth comparing the effect of different policy types on traditional workers as well.

Lastly, even though this paper establishes that there is a clear deservingness penalty for gig workers in American public opinion, the mechanisms behind this effect have not been clearly established. It may be because Americans consider gig workers as having weak work ethics with their low skills or not putting enough effort to get decent conventional jobs with job training in

terms of criterion of control and reciprocity as I expected. Or, Americans might speculate that gig workers, especially immigrant gig workers, might not pay taxes properly or they contribute less to taxes even if they are following the law. Investigating the theoretical mechanisms of the perception gap will answer how to narrow the deservingness gap as the policy designs for future study. For example, considering immigrants' equal access to welfare programs only after they have worked and paid taxes for a considerable time (Reeskens and van Oorschot 2012), the "gig work deservingness penalty" could be reduced if the information that they pay taxes properly is provided despite their atypical job status.

With the understanding of these limitations, I suggest several avenues for future work. Whether and to what extent gig workers are able to overcome the deservingness penalty if they have high skills, are old, or contribute to the social security system? Does the finding change when asked to consider "undocumented" or "illegal" immigrants compared to "immigrants" in general? Does the effect of immigrants doing gig jobs change by specific racial and ethnic backgrounds? Does specific program types or administrative burdens on the programs increase the perceived deservingness of gig workers? The underlying and detailed rationales for the deserving gaps to gig workers will be answered by answering these questions for future work.

This paper investigates how specific labor market characteristics affect the perceived deservingness of social programs, and how they are related to the existing deservingness criteria. Especially, considering that the motivation to work is chiefly codified into the liberal welfare regime with selective welfare programs and workfare system in the U.S., the perceived deservingness of a newly emerging group is an important factor of welfare politics to gain political support for benefit obligations. Also, this paper revisits that perceptions of deservingness clearly play into the way that social programs are designed and administered (Schneider and Ingram 1993).

The current social welfare system in the U.S. puts gig workers in a precarious position because of their ineligibility for certain programs based on traditional employment, indicating that these programs should be revised to better fit the changing nature of work. The prospects for such change will depend largely on how society views this vulnerable and growing segment of the workforce.

## Reference

- Albrekt Larsen, C. (2020). The institutional logic of giving migrants access to social benefits and services. *Journal of European Social Policy*, 30(1), 48-62.
- Alesina, A. and Glaeser, E. (2004) *Fighting Poverty in the US and Europe: a World of Difference*. New York: Oxford University Press.
- Allard, S. W., & Danziger, S. (2000). Welfare magnets: Myth or reality?. *Journal of Politics*, 62(2), 350-368.
- Anderson, M., McClain, C., & Faverio, M. (2021). *The state of gig work in 2021*. Pew Research Center (December 2021)
- Arnold, R. D. (1990). *The Logic of Congressional Action*. New Haven: Yale University Press.
- Bae (2023) “American Public Opinion Toward Gig Workers’ Deservingness: Evidence from Survey Experiment (Pre-Registration).”3rd March <https://osf.io/bhgxu>
- Baekgaard, M., Moynihan, D. P., & Thomsen, M. K. (2021). Why do policymakers support administrative burdens? The roles of deservingness, political ideology, and personal experience. *Journal of Public Administration Research and Theory*, 31(1), 184-200.
- Behrendt, C., Nguyen, Q. A., & Rani, U. (2019). Social protection systems and the future of work: Ensuring social security for digital platform workers. *International Social Security Review*, 72(3), 17–41. doi:10.1111/issr.12212.
- Berg, J., Furrer, M., Harmon, E., Rani, U., & Silberman, M. S. (2018). *Digital labour platforms and the future of work. Towards Decent Work in the Online World*. Rapport de l’OIT.
- Bonoli, G. (2013) *The Origins of Active Social Policy: Labour Market and Childcare Policies in a Comparative Perspective*. Oxford: Oxford University Press.
- Borjas, G. J. (1999). Immigration and welfare magnets. *Journal of labor economics*, 17(4), 607-637.
- Brady, D. and Finnigan, R. (2014) Does Immigration Undermine Public Support for Social Policy? *American Sociological Review* 79(1): 17–42.
- Brady, D., & Bostic, A. (2015). Paradoxes of social policy: Welfare transfers, relative poverty, and redistribution preferences. *American Sociological Review*, 80(2), 268-298.
- Brodkin, E. Z., & Larsen, F. (2013). Changing boundaries: The policies of workfare in the US and Europe. *Poverty & Public Policy*, 5(1), 37-47.
- Brutger, R., Kertzer, J. D., Renshon, J., Tingley, D., & Weiss, C. M. (2022). Abstraction and detail in experimental design. *American Journal of Political Science*, April 2022, 1–16.
- Buss, C. (2019). Public opinion towards targeted labour market policies: A vignette study on the perceived deservingness of the unemployed. *Journal of European Social Policy*, 29(2), 228-240.

- Carmel, E., & Sojka, B. (2021). Beyond welfare chauvinism and deservingness. Rationales of belonging as a conceptual framework for the politics and governance of migrants' rights. *Journal of Social Policy*, 50(3), 645-667.
- Chen, M. K., Rossi, P. E., Chevalier, J. A., & Oehlsen, E. (2019). The value of flexible work: Evidence from uber drivers. *Journal of political economy*, 127(6), 2735-2794.
- Clasen, J., Clegg, D. and Goerne, A. (2016) 'Comparative Social Policy Analysis and Active Labour Market Policy: Putting Quality Before Quantity', *Journal of Social Policy*, 45(1): 21–38.
- Cook, F.L. (1979), *Who should be helped? Public support for social services*, Beverly Hills: Sage Publications.
- DeSante, C. D. (2013). Working twice as hard to get half as far: Race, work ethic, and America's deserving poor. *American Journal of Political Science*, 57(2), 342-356.
- Eger, M. A., & Breznau, N. (2017). Immigration and the welfare state: A cross-regional analysis of European welfare attitudes. *International Journal of Comparative Sociology*, 58(5), 440-463
- Eick, G. M., & Larsen, C. A. (2022). Welfare chauvinism across benefits and services. *Journal of European Social Policy*, 32(1), 19-32.
- Geiger, B. B. (2021). Disabled but not deserving? The perceived deservingness of disability welfare benefit claimants. *Journal of European Social Policy*, 31(3), 337-351.
- Geiger, B. B. (2021). Disabled but not deserving? The perceived deservingness of disability welfare benefit claimants. *Journal of European Social Policy*, 31(3), 337-351.
- Gilens, M. (1999). *Why Americans Hate Welfare: Race, Media, and the Politics of*.
- Haderup Larsen, M., & Schaeffer, M. (2021). Healthcare chauvinism during the COVID-19 pandemic. *Journal of Ethnic and Migration Studies*, 47(7), 1455-1473
- Haselswerdt, J. (2021). Social welfare attitudes and immigrants as a target population: Experimental evidence. *Perspectives on Politics*, 19(2), 442-459.
- Hero, R. E., & Preuhs, R. R. (2007). Immigration and the evolving American welfare state: Examining policies in the US states. *American Journal of Political Science*, 51(3), 498-517.
- Jeene, M. D. (2015). *Who should get what and why, under which conditions: Descriptions and explanations of public deservingness opinions*. Ridderprint.
- Jensen, C., & Petersen, M. B. (2017). The deservingness heuristic and the politics of health care. *American Journal of Political Science*, 61(1), 68-83.
- Katherine Keisler-Starkey and Lisa N. Bunch, (2021) *U.S. Census Bureau Current Population Reports*, P60-274, Health Insurance Coverage in the United States: 2020, U.S. Government

Publishing Office, Washington, DC, September 2021.

- Katz, L. F., & Krueger, A. B. (2019). The rise and nature of alternative work arrangements in the United States, 1995–2015. *ILR review*, 72(2), 382-416.
- Keiser, L. R., & Miller, S. M. (2020). Does administrative burden influence public support for government programs? Evidence from a survey experiment. *Public Administration Review*, 80(1), 137-150.
- Kinder, Donald R., and Lynn M. Sanders. (1996). *Divided by Color: Racial Politics and Democratic Ideals*. Chicago: University of Chicago Press.
- Kitschelt, H. (1997). *The Radical Right in Western Europe*. Ann Arbor: University of Michigan Press.
- Knotz, C.M. (2018) ‘A Rising Workfare State? Unemployment Benefit Conditionality in 21 OECD Countries, 1980–2012’, *Journal of International and Comparative Social Policy*, 34(2): 91–108.
- Kootstra, A. (2016). Deserving and undeserving welfare claimants in Britain and the Netherlands: Examining the role of ethnicity and migration status using a vignette experiment. *European Sociological Review*, 32(3), 325-338.
- Krug, G., Drasch, K., & Jungbauer-Gans, M. (2019). The social stigma of unemployment: consequences of stigma consciousness on job search attitudes, behaviour and success. *Journal for Labour Market Research*, 53(1), 1-27.
- Laenen, T., & Roosma, F. (2022). Who should get what and why? Insights from welfare deservingness theory. in *Solidarity and Social Justice in Contemporary Societies: An Interdisciplinary Approach to Understanding Inequalities* (pp. 65-75). Cham: Springer International Publishing.
- Larsen, C. (2002) Unemployment and Stigmatization: the Dilemma of the Welfare State, in J. G. Andersen and K. Halvorsen (eds) *Unemployment and Citizenship: Marginalisation and Integration in the Nordic Countries*. Bristol: The Policy Press.
- Larsen, C.A. (2008) ‘The Political Logic of Labour Market Reforms and Popular Images of Target Groups’, *Journal of European Social Policy*, 18(1): 50–63.
- Manyika, J., Lund, S., Bughin, J., Robinson, K., Mischke, J., & Mahajan, D. (2016). *Independent Work Choice necessity and the gig economy*. McKinsey Global Institute.
- McClosky, Herbert, and John R. Zaller. (1984). *The American Ethos: Public Attitudes Toward Capitalism and Democracy*. Cambridge, MA: Harvard University Press.
- Petersen, M. B. (2012). Social welfare as small-scale help: Evolutionary psychology and the deservingness heuristic. *American Journal of Political Science*, 56(1), 1–16.
- Ravenelle, A. J., Kowalski, K. C., & Janko, E. (2021). The side hustle safety net: Precarious workers and gig work during COVID-19. *Sociological Perspectives*, 64(5), 898-919.

- Reeskens, T., & van der Meer, T. (2015). *The color of benefits. A large-scale survey experiment on the importance of ethnicity as deservingness heuristic*. 25th February, MaDColloquium, WZB Berlin Social Science Center.
- Reeskens, T., & Van der Meer, T. (2019). The inevitable deservingness gap: A study into the insurmountable immigrant penalty in perceived welfare deservingness. *Journal of European Social Policy*, 29(2), 166-181.
- Reeskens, T., & Van Oorschot, W. (2012). Disentangling the ‘New Liberal Dilemma’: On the relation between general welfare redistribution preferences and welfare chauvinism. *International Journal of Comparative Sociology*, 53(2), 120-139.
- Rein, M. (2001) ‘Dominance, Contest and Reframing’, in A. Ben-Arieh and J. Gal (eds) *Into the Promised Land: Issues Facing the Welfare State*. Westport, CT: Praeger Publishers.
- Rueda, D. (2015), ‘The state of the welfare state: Unemployment, labor market policy, and inequality in the age of workfare’, *Comparative Politics*, 47, 3, 296–314.
- Sainsbury, D. (2006) ‘Immigrants’ Social Rights in Comparative Perspective: Welfare Regimes, Forms of Immigration and Immigration Policy Regimes’, *Journal of European Social Policy*, 16(3): 229–44.
- Schiller, B. (1994). Who are the working poor?. *Public Interest*, (115), 61-72.
- Schneider, A., & Ingram, H. (1993). Social construction of target populations: Implications for politics and policy. *American Political Science Review*, 87(2), 334-347.
- Schneider, Anne, and Helen Ingram. (1997). *Policy design for democracy*. Lawrence, KS: Univ. of Kansas Press.
- Skocpol, T. (1992). State formation and social policy in the United States. *American Behavioral Scientist*, 35(4-5), 559-584.
- Smith, A. (2016). *Gig work, online selling and home sharing*. Pew Research Center (November 2016)
- Soss, J., & Schram, S. F. (2007). A public transformed? Welfare reform as policy feedback. *American Political Science Review*, 101(1), 111-127.
- Soss, J., Schram, S. F., Vartanian, T. P., & O'brien, E. (2001). Setting the terms of relief: Explaining state policy choices in the devolution revolution. *American Journal of Political Science*, 378-395.
- Transue, J. E., Lee, D. J., & Aldrich, J. H. (2009). Treatment spillover effects across survey experiments. *Political Analysis*, 17(2), 143-161.
- Upwork (2020) *Freelance Forward 2020: The U.S. Independent Workforce Report*. September 2020
- Vallas, S., & Schor, J. B. (2020). What do platforms do? Understanding the gig economy. *Annual*

- Review of Sociology*, 46, 273-294.
- Van der Waal, J., Achterberg, P., Houtman, D., De Koster, W., & Manevska, K. (2010). 'Some are more equal than others': Economic egalitarianism and welfare chauvinism in the Netherlands. *Journal of European Social Policy*, 20(4), 350-363.
- van Oorschot, W. (2000), 'Who should get what, and why? On deservingness criteria and the conditionality of solidarity among the public', *Policy and Politics*, 28 (1), 33–48.
- Van Oorschot, W. (2006). Making the difference in social Europe: deservingness perceptions among citizens of European welfare states. *Journal of European Social Policy*, 16(1), 23-42.
- van Oorschot, W. (2008), 'Solidarity towards immigrants in European welfare states', *International Journal of Social Welfare*, 17 (1), 3–14.
- van Oorschot, W., & Roosma, F. (2017). The social legitimacy of targeted welfare and welfare deservingness. in *The Social Legitimacy of Targeted Welfare: Attitudes to Welfare Deservingness*. (pp. 3-34). Edward Elgar Publishing.
- van Oorschot, W., Reeskens, T., & Meuleman, B. (2012). Popular perceptions of welfare state consequences: A multilevel, cross-national analysis of 25 European countries. *Journal of European Social Policy*, 22(2), 181-197
- van Oorschot, W., Roosma, F., Meuleman, B., & Reeskens, T. (Eds.). (2017). *The social legitimacy of targeted welfare: Attitudes to welfare deservingness*. Edward Elgar Publishing.
- Wood, A. J., & Lehdonvirta, V. (2022). Platforms disrupting reputation: Precarity and recognition struggles in the remote gig economy. *Sociology*, 00380385221126804.
- Wood, A. J., Graham, M., Lehdonvirta, V., & Hjorth, I. (2019). Good gig, bad gig: autonomy and algorithmic control in the global gig economy. *Work, Employment and Society*, 33(1), 56-75.
- Yoo, G. J. (2008). Immigrants and welfare: Policy constructions of deservingness. *Journal of Immigrant & Refugee Studies*, 6(4), 490-507.



## Appendices for “The Gig Workers Penalty in Perceived Welfare Deservingness : Evidence from Survey Experiments”

[Appendix A: Survey Instrument]

Randomization and survey flow: The order of ZOU340, ZOU341, and ZOU342 are randomized.

### - **ZOU340** **ZOU340a**

SINGLE CHOICE

UI - Regular worker (job searching)

*Please randomly assign respondents to one of the four questions ZOU340a, ZOU340b, ZOU340c, and ZOU340d: Each question will have around 250 respondents.*

Imagine a worker who had been working 40 hours a week at Walmart, but lost their job, and is looking for other jobs. In your opinion, how deserving is this person of receiving government unemployment benefits?

1. Not deserving at all
2. Somewhat undeserving
3. Somewhat deserving
4. Very deserving

---

### **ZOU340b**

SINGLE CHOICE

UI- Regular worker (no job searching)

*Please randomly assign respondents to one of the four questions ZOU340a, ZOU340b, ZOU340c, and ZOU340d: Each question will have around 250 respondents.*

Imagine a worker who had been working 40 hours a week at Walmart, but lost their job, and is not currently looking for other jobs. In your opinion, how deserving is this person of receiving government unemployment benefits?

1. Not deserving at all
2. Somewhat undeserving

3. Somewhat deserving
4. Very deserving

---

**ZOU340c****SINGLE CHOICE**

UI- gig worker (job searching)

*Please randomly assign respondents to one of the four questions ZOU340a, ZOU340b, ZOU340c, and ZOU340d: Each question will have around 250 respondents.*

Imagine an Uber driver who had been working 40 hours a week, but experienced a significant drop in passengers and could no longer make a living, and is now looking for similar work through other apps or platforms like DoorDash or Instacart. In your opinion, how deserving is this person of receiving government unemployment benefits?

1. Not deserving at all
2. Somewhat undeserving
3. Somewhat deserving
4. Very deserving

---

**ZOU340d****SINGLE CHOICE**

UI- gig worker (no job searching)

*Please randomly assign respondents to one of the four questions ZOU340a, ZOU340b, ZOU340c, and ZOU340d: Each question will have around 250 respondents.*

Imagine an Uber driver who had been working 40 hours a week, but experienced a significant drop in passengers and could no longer make a living, and is not currently looking for similar work through other apps or platforms like DoorDash or Instacart. In your opinion, how deserving is this person of receiving government unemployment benefits?

1. Not deserving at all
2. Somewhat undeserving
3. Somewhat deserving
4. Very deserving

---

**- ZOU341**  
**ZOU341a**

**SINGLE CHOICE**

Health- regular worker (Native)

*Please randomly assign respondents to one of the four questions ZOU341a, ZOU341b, ZOU341c, and ZOU341d: Each question will have around 250 respondents.*

Imagine an American who had been working as a full-time delivery worker for FedEx. On the way to make a delivery, the person is injured in an auto accident. In your opinion, how deserving is this person of receiving public health benefits?

1. Not deserving at all
2. Somewhat undeserving
3. Somewhat deserving
4. Very deserving

---

**ZOU341b**

**SINGLE CHOICE**

Health - regular worker (non-native)

*Please randomly assign respondents to one of the four questions ZOU341a, ZOU341b, ZOU341c, and ZOU341d: Each question will have around 250 respondents.*

Imagine an immigrant who had been working as a full-time delivery worker for FedEx. On the way to make a delivery, the person is injured in an auto accident. In your opinion, how deserving is this person of receiving public health benefits?

1. Not deserving at all
  2. Somewhat undeserving
  3. Somewhat deserving
  4. Very deserving
-

**ZOU341c****SINGLE CHOICE**

Health - gig worker (Native)

*Please randomly assign respondents to one of the four questions ZOU341a, ZOU341b, ZOU341c, and ZOU341d: Each question will have around 250 respondents.*

Imagine an American who had been working as a driver for Doordash, a food delivery app. On the way to make a delivery, the person is injured in an auto accident. In your opinion, how deserving is this person of receiving public health benefits?

1. Not deserving at all
  2. Somewhat undeserving
  3. Somewhat deserving
  4. Very deserving
- 

**ZOU341d****SINGLE CHOICE**

Health - gig worker (Non-native)

*Please randomly assign respondents to one of the four questions ZOU341a, ZOU341b, ZOU341c, and ZOU341d: Each question will have around 250 respondents.*

Imagine an immigrant who had been working as a driver for Doordash, a food delivery app. On the way to make a delivery, the person is injured in an auto accident. In your opinion, how deserving is this person of receiving public health benefits?

1. Not deserving at all
  2. Somewhat undeserving
  3. Somewhat deserving
  4. Very deserving
- 

**- ZOU342  
ZOU342a****SINGLE CHOICE**

## Compare - UI

*Please randomly ask half of the respondents ZOU342a and ask the other half ZOU342b.*

Imagine someone who had been working as a driver for Instacart, a grocery delivery app. However, they experienced a significant drop in customers and could no longer make a living. In your opinion, how deserving is this person of receiving government unemployment benefits?

1. Not deserving at all
  2. Somewhat undeserving
  3. Somewhat deserving
  4. Very deserving
- 

## **ZOU342b**

### SINGLE CHOICE

## Compare - Health

*Please randomly ask half of the respondents ZOU342a and ask the other half ZOU342b.*

Imagine someone who had been working as a driver for Instacart, a grocery delivery app. On the way to make a delivery, the person is injured in an auto accident. In your opinion, how deserving is this person of receiving public health benefits?

1. Not deserving at all
2. Somewhat undeserving
3. Somewhat deserving
4. Very deserving

## [Appendix B: Robustness check]

Table B.1. Interaction Models with all Controls Displayed

|   | (1) UI   |        | (2) HI   |        |
|---|----------|--------|----------|--------|
| Job searching                                 | 0.86***  | (0.08) |          |        |
| Native  |          |        | 0.10     | (0.08) |
| Gig workers                                   | -0.24*** | (0.08) | -0.08    | (0.09) |
| Gig workers X Job searching                   | -0.31*** | (0.12) |          |        |
| Gig workers X Native                          |          |        | 0.005    | (0.12) |
| Black   | 0.094    | (0.09) | 0.11     | (0.10) |
| Hispanic                                      | -0.048   | (0.12) | -0.022   | (0.12) |
| Others  | -0.014   | (0.12) | -0.045   | (0.12) |
| Party ID (3-point scale)                      | -0.023   | (0.03) | -0.030   | (0.03) |
| Female  | 0.074    | (0.06) | 0.17***  | (0.06) |
| Family income (categorical)                   | -0.007   | (0.01) | 0.0023   | (0.01) |
| Birth year                                    | 0.00061  | (0.00) | 0.0015   | (0.00) |
| Education (categorical)                       | -0.0063  | (0.02) | -0.022   | (0.02) |
| US citizen                                    | -0.55*   | (0.29) | -0.42    | (0.30) |
| Part-time                                     | 0.012    | (0.11) | 0.12     | (0.11) |
| Temporarily laid off & Unemployed             | 0.15     | (0.12) | -0.0096  | (0.12) |
| Retired                                       | -0.20**  | (0.10) | -0.085   | (0.10) |
| Permanently disabled, Homemaker,<br>Student   | -0.050   | (0.09) | 0.0094   | (0.09) |
| At least one parent was an immigrant          | 0.12     | (0.16) | 0.072    | (0.16) |
| At least one grandparent was an<br>immigrant  | 0.15     | (0.15) | -0.022   | (0.15) |
| All my family members were born in. the<br>US | 0.12     | (0.14) | -0.016   | (0.14) |
| Anti-immigrant sentiment                      | -0.17*** | (0.02) | -0.24*** | (0.02) |
| Constant                                      | 1.21     | (4.79) | 0.062    | (4.89) |
| Observations                                  | 937      |        | 936      |        |

Standard errors in parentheses

\* p<0.1, \*\* p<0.05, \*\*\* p<0.01

### [Appendix C: Heterogeneous effects]

Figure C.1. Mean Deservingness of Unemployment Benefits, by Democratic Respondents (90% CIs) (Figure 1 in the main text)

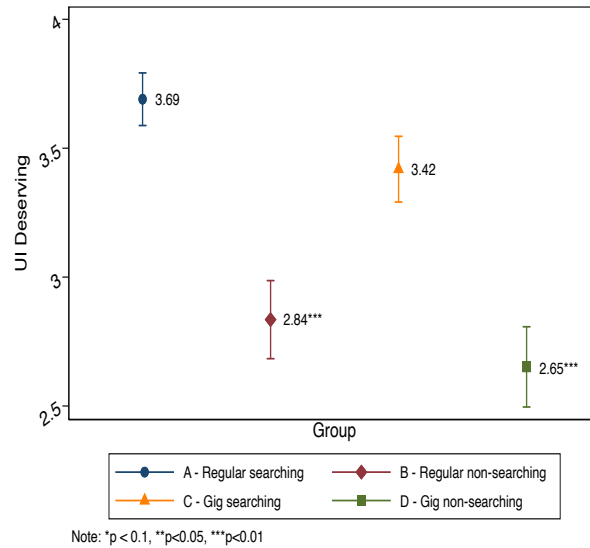


Figure C.2. Marginal Effect of Gig Job on UI Deservingness, by Democratic Respondents (90% CIs) (Figure 2 in the main text)

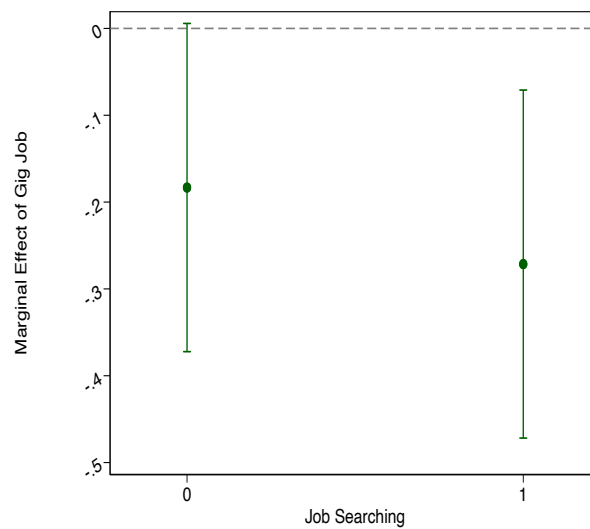


Figure C.3. Mean Deservingness of Healthcare Benefits, by Democrats Respondents (90% CIs)  
(Figure 3 in main text)

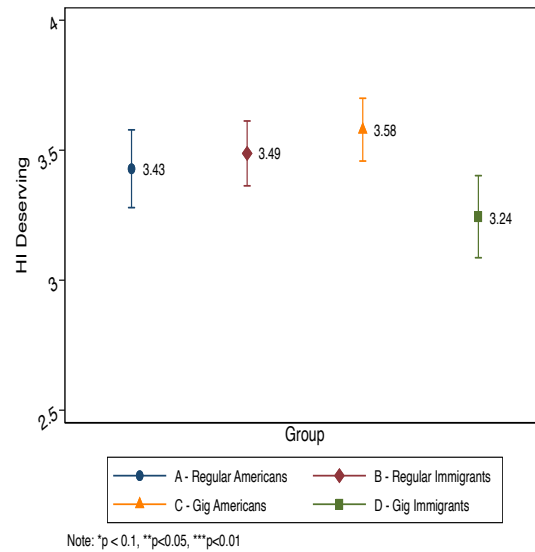


Figure C.4. Marginal Effect of Gig Job on HI Deservingness, by Democrats Respondents (90% CIs) (Figure 3 in main text)

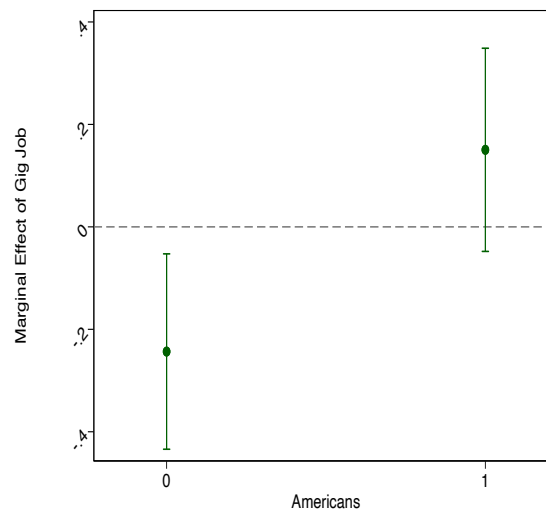




Figure C.5. Mean Deservingness of Unemployment Benefits and Marginal Plot, by Republicans Respondents (90% CIs) (Figure 1 in main text)

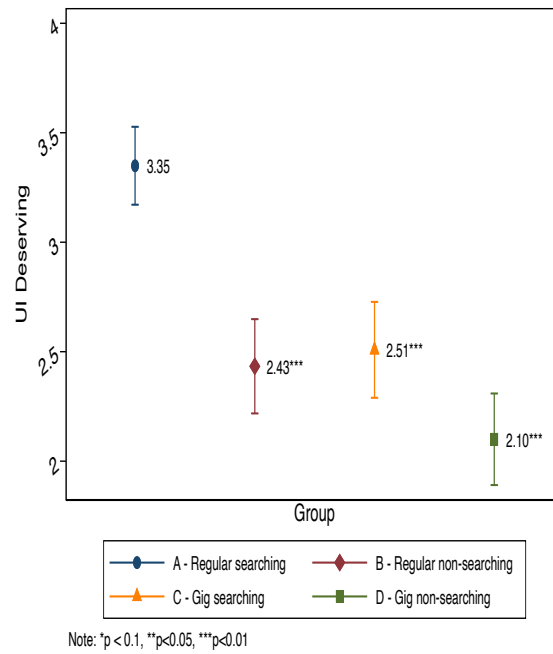


Figure C.6. Marginal Effect of Gig Job on UI Deservingness, by Republicans Respondents (90% CIs) (Figure 2 in main text)

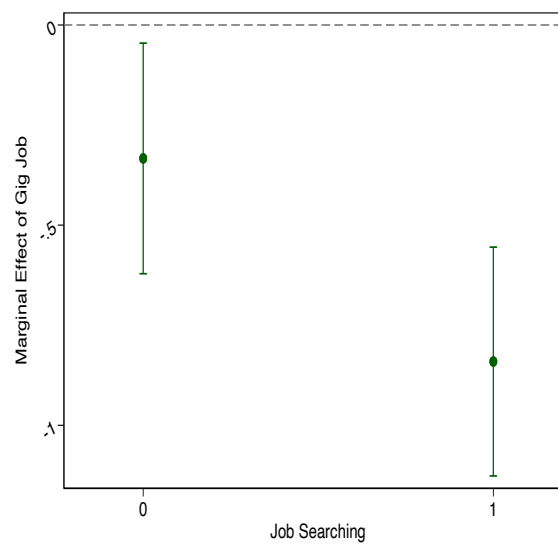


Figure C.7. Mean Deservingness of Healthcare Benefits, by Republicans Respondents (90% CIs)  
(Figure 3 in main text)

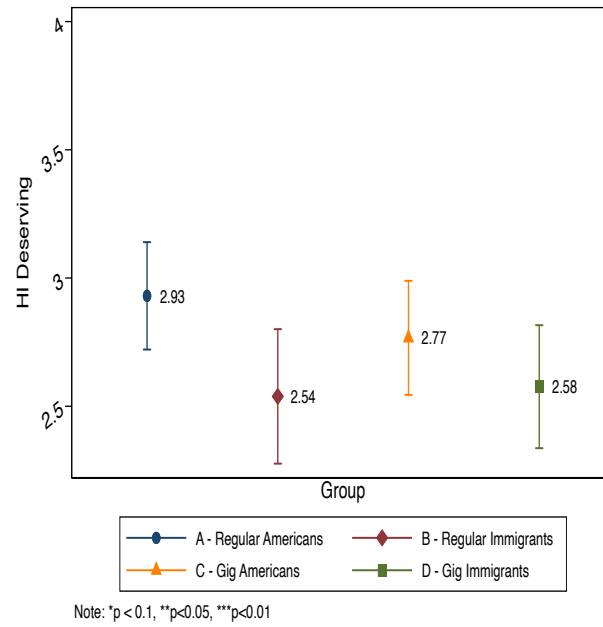


Figure C.8. Marginal Effect of Gig Job on HI Deservingness, by Republicans Respondents (90% CIs) (Figure 4 in main text)

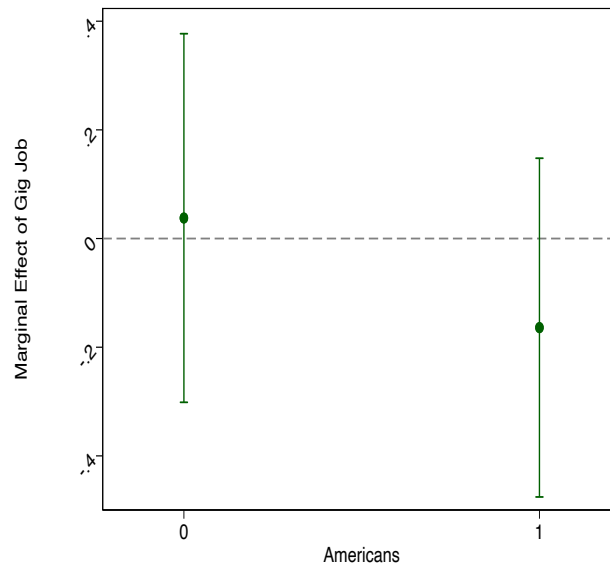


Table C.1. Interaction Model with Heterogenous Effects by Party ID

|   | (1) UI  |        | (2) HI  |        |
|---|---------|--------|---------|--------|
| Job searching                           | 0.92*** | (0.16) |         |        |
| Native                                  |         |        | 0.39**  | (0.17) |
| Gig workers                             | -0.33** | (0.16) | 0.038   | (0.18) |
| Democrats                               | 0.40*** | (0.14) | 0.95*** | (0.15) |
| Job searching X Gig workers             | -0.51** | (0.23) |         |        |
| Native X Gig workers                    |         |        | -0.20   | (0.24) |
| Job searching X Democrats               | -0.061  | (0.20) |         |        |
| Native X Democrats                      |         |        | -0.45** | (0.21) |
| Gig workers X Democrats                 | 0.15    | (0.20) | -0.28   | (0.22) |
| Job searching X Gig workers X Democrats | 0.42    | (0.29) |         |        |
| Native X Gig workers X Democrats        |         |        | 0.60*   | (0.31) |
| Constant                                | 2.43*** | (0.11) | 2.54*** | (0.13) |
| Observations                            | 637     |        | 636     |        |

Standard errors in parentheses

\* p<0.1, \*\* p<0.05, \*\*\* p<0.01

Figure C.9. Mean Deservingness of Unemployment Benefits, by Less Anti-immigrant Sentiment Group (90% CIs) (Figure 1 in main text)

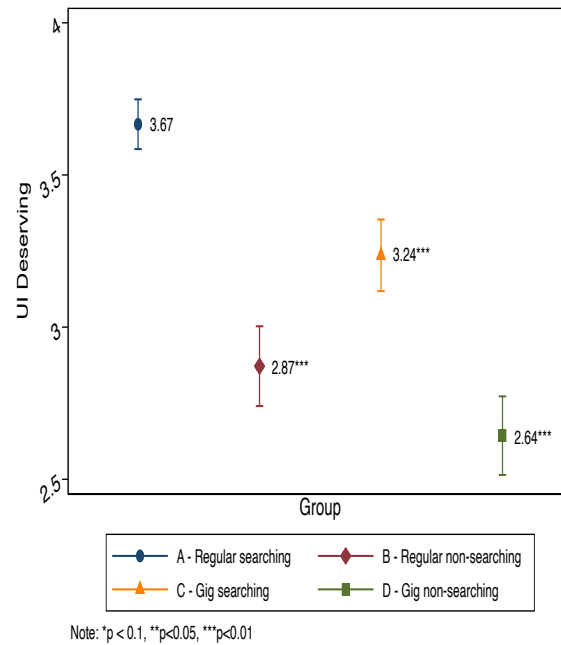


Figure C.10. Marginal Effect of Gig Job on UI Deservingness, by Less Anti-immigrant Sentiment Group (90% CIs) (Figure 2 in the main text)

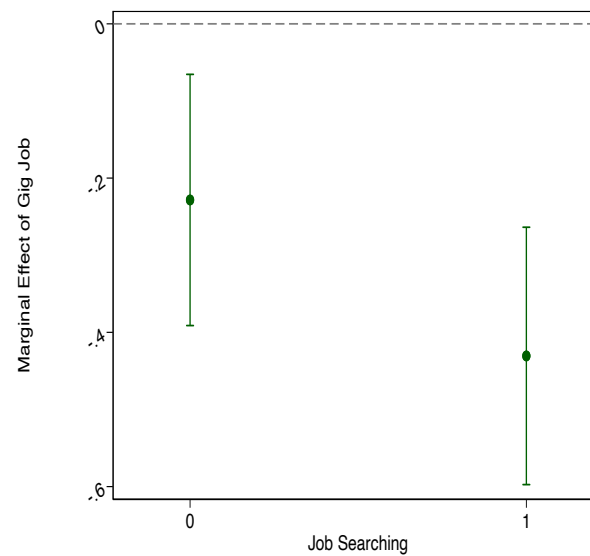


Figure C.11. Mean Deservingness of Healthcare Benefits, by Less Anti-immigrant Sentiment Group (90% CIs) (Figure 3 in main text)

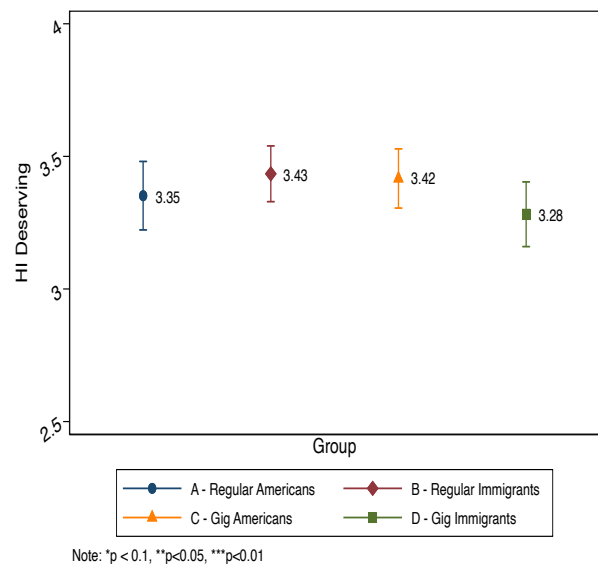


Figure C.12. Marginal Effect of Gig Job on HI Deservingness, by Less Anti-immigrant Sentiment Group (90% CIs) (Figure 4 in main text)

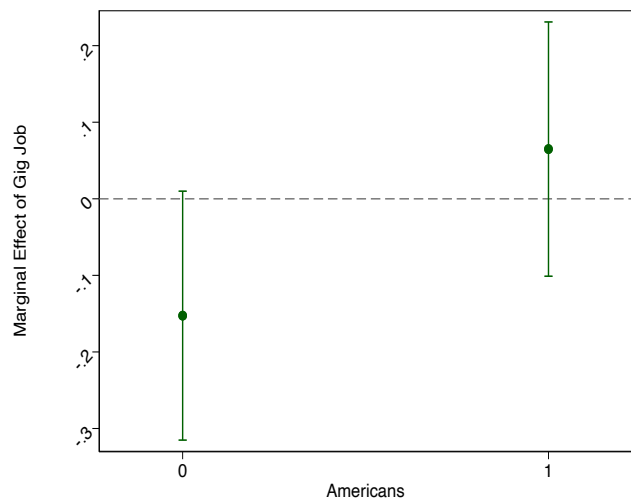


Figure C.13. Mean Deservingness of Unemployment Benefits, by More Anti-immigrant Sentiment Group (90% CIs) (Figure 1 in main text)

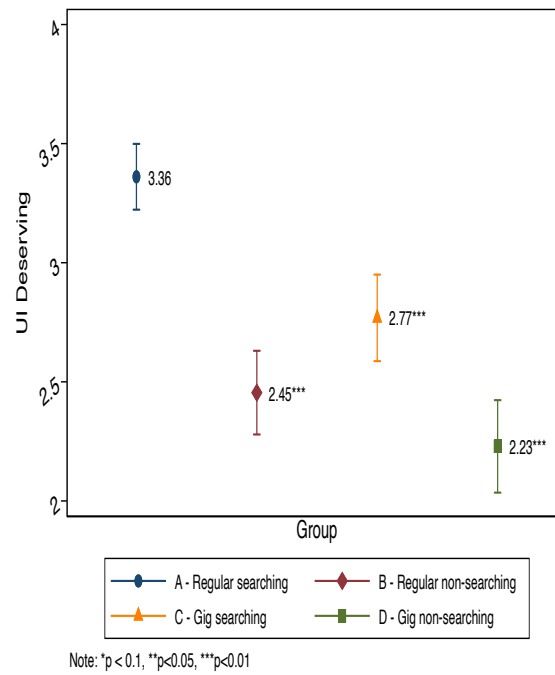


Figure C.14. Marginal Effect of Gig Job on UI Deservingness, by More Anti-immigrant Sentiment Group (90% CIs) (Figure 2 in main text)

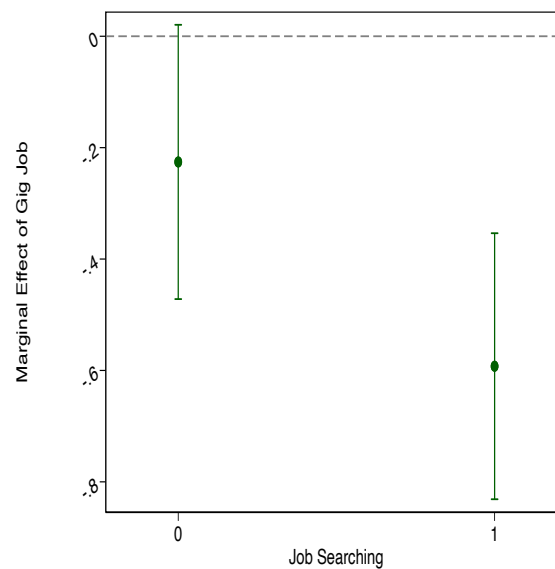


Figure C.15. Mean Deservingness of Healthcare Benefits, by More Anti-immigrant Sentiment Group (Figure 3 in main text)

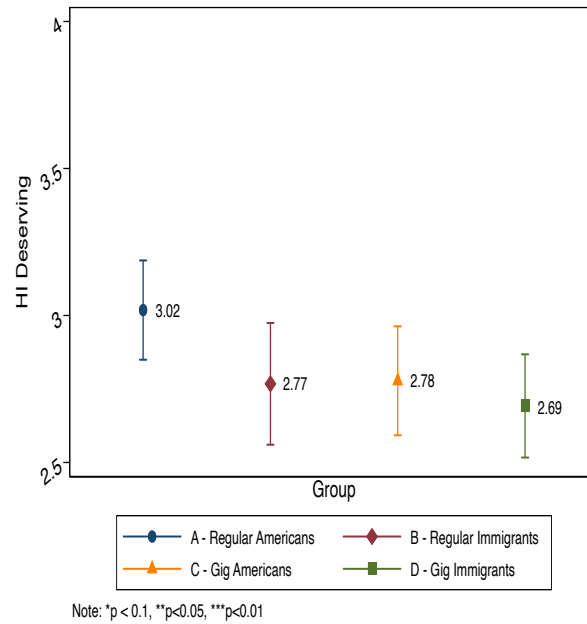


Figure C.16. Marginal Effect of Gig Job on HI Deservingness, by More Anti-immigrant Sentiment Group (90% CIs) (Figure 4 in main text)

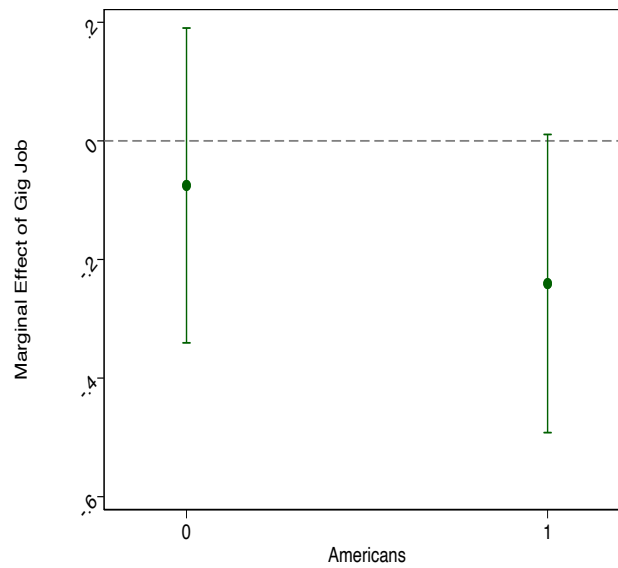


Table C.2. Interaction Model with Heterogenous Effects by Anti-immigrant Sentiment

|  | (1) UI   |        | (2) HI   |        |
|--|----------|--------|----------|--------|
| Job searching  | 0.80***  | (0.11) |          |        |
| Native   |          |        | -0.083   | (0.11) |
| Gig workers  | -0.23**  | (0.10) | -0.15    | (0.11) |
| Anti-immigrant sentiment                               | -0.42*** | (0.12) | -0.67*** | (0.13) |
| Job searching X Gig workers                            | -0.20    | (0.15) |          |        |
| Native X Gig workers                                   |          |        | 0.22     | (0.15) |
| Job searching X Anti-immigrant sentiment               | 0.11     | (0.17) |          |        |
| Native X Anti-immigrant sentiment                      |          |        | 0.33*    | (0.17) |
| Gig workers X Anti-immigrant sentiment                 | 0.0027   | (0.17) | 0.077    | (0.18) |
| Job searching X Gig workers X Anti-immigrant sentiment | -0.16    | (0.24) |          |        |
| Native X Gig workers X Anti-immigrant sentiment        |          |        | -0.38    | (0.25) |
| Constant   | 2.87***  | (0.08) | 3.43***  | (0.07) |
| Observations   | 996      |        | 994      |        |

Standard errors in parentheses

\* p<0.1, \*\* p<0.05, \*\*\* p<0.01