

Valuing Alternative Work Arrangements*

Alexandre Mas

Princeton University and NBER

Amanda Pallais

Harvard University and NBER

September 2016

Abstract

We use a field experiment to study how workers value alternative work arrangements. During the application process to staff a national call center we randomly offered applicants choices between traditional M-F 9 am – 5 pm office positions and alternatives. These alternatives include flexible scheduling, working from home, and positions that give the employer discretion over scheduling. We randomly varied the wage difference between the traditional option and the alternative, allowing us to estimate the entire distribution of willingness to pay (WTP) for these alternatives. We validate our results using a nationally-representative survey. The great majority of workers are not willing to pay for flexible scheduling relative to a traditional schedule: either the ability to choose the days and times of work or the number of hours they work. However, the average worker is willing to give up 20% of wages to avoid a schedule set by an employer on a week's notice. This largely represents workers' aversion to evening and weekend work, not scheduling unpredictability. Traditional M-F 9 am – 5 pm schedules are preferred by most jobseekers. Despite the fact that the average worker isn't willing to pay for scheduling flexibility, a tail of workers with high WTP allows for sizable compensating differentials. Of the worker-friendly options we test, workers are willing to pay the most (8% of wages) for the option of working from home. Women, particularly those with young children, have higher WTP for work from home and to avoid employer scheduling discretion. They are slightly more likely to be in jobs with these amenities, but the differences are not large enough to explain any wage gaps.

*We would like to thank Joshua Angrist, David Autor, David Card, Henry Farber, Edward Freeland, Claudia Goldin, Nathan Hendren, Lawrence Katz, Patrick Kline, Alan Krueger, Claudia Olivetti, Jesse Shapiro, Basit Zafar, and seminar participants at NBER Summer Institute for their many helpful comments and suggestions. We would also like to thank Jenna Anders, Stephanie Cheng, Kevin DeLuca, Jason Goldrosen, Disa Hynsjo, and Carl Lieberman for outstanding research assistance. This project received IRB approval from Princeton (#0000006906) and Harvard (#15-0673).

1 Introduction

Alternative work arrangements, such as flexible scheduling, working from home, and part-time work are a common and by some measures a growing feature of the U.S. labor market.¹ While these arrangements may facilitate work-life balance, they are not necessarily worker-friendly. Many jobs have irregular schedules, whereby workers cannot anticipate their work schedule from one week to the next; many workers are on-call or work during evenings, nights and weekends. The emergent gig economy, while still small (Ferrell and Greig, 2016), has put these trade-offs into focus. Workplace flexibility has been touted as both one of the benefits and costs of the fragmentation (or “Uberization”) of the workplace.²

There is a policy debate as to whether and how government should encourage alternative work arrangements that promote work-life balance (Council of Economic Advisors, 2010). This debate extends to regulation of overtime in the Fair Labor Standards Act, flexibility options in the Family Medical Leave Act, and federal initiatives to promote telecommuting. Scheduling policy is a key decision for employers. In 2016, Walmart shifted from giving managers discretion on shift scheduling to offering some workers predictable fixed shifts and the ability to make their own schedules (DePillis, 2016). Starbucks announced that it was revising its policies to end irregular schedules to promote “stability and consistency” in scheduling (Kantor, 2014). These changes came during increasing legal scrutiny of irregular scheduling work practices (Weber, 2015).

Despite this active debate on how alternative work arrangements should be promoted and regulated, very little is known about how workers actually value different arrangements. Efficient public and corporate policies on alternative work arrangements require an understanding of these valuations. One approach is estimating compensating wage differentials on workplace amenities, building on the theoretical framework for hedonic pricing in Rosen (1974) and Rosen (1986). There is an enormous literature that has sought to do this using cross-sectional and longitudinal data, but it is well known that estimates from these approaches are unstable to adding person or workplace controls, and are often wrong-signed.³ This fragility of compensating differentials estimates may be due to the presence of unmeasured worker and firm characteristics, measurement error, or the presence of search frictions in the labor market (Hwang et al., 1998; Lang and

¹Katz and Krueger (2016) document a significant rise in alternative work arrangements between 2005 and 2015. They consider temporary help agency workers, on-call workers, contract company workers, and independent contractors or freelancers as workers with alternative arrangements.

²For examples, see “Uber’s Business Model Could Change Your Work,” *New York Times*, January 28, 2015.

³Papers in this literature include those that estimate the value of statistical life, summarized in Viscusi and Aldy (2003), studies reviewed in Smith (1979), Brown (1980), Goddeeris (1988), Lanfranchi et al. (2002), Kostiuk (1990), and Oettinger (2011). Hall and Mueller (2015), Sorkin (2015), and Taber and Vejlín (2016) use worker flows to infer the importance of non-wage amenities. In a novel approach to estimating market compensating differentials, Stern (2004) uses multiple job offers for PhD job candidates in biology to estimate the tradeoff between starting pay and the opportunity to conduct research.

Majumdar, 2004; Bonhomme and Jolivet, 2009). Additionally, in standard models of equalizing differences, such as Rosen (1986), compensating wage differentials are set to equate the utility of marginal workers in jobs with and without an amenity, providing only limited information on valuations for other workers.

In this paper we report estimates of worker valuations over alternative work arrangements from a field experiment with national scope. The experiment elicits preferences on work arrangements by building a simple discrete choice experiment into the application process for a national call center. In this way we employ a method that can flexibly back out a willingness to pay (WTP) distribution from (effectively) real market transactions.⁴ We consider a number of commonly-discussed arrangements, including flexible scheduling, working from home, and irregular schedules.

We carried out a large scale recruitment drive to staff a national call center. The purpose of the call center was to implement telephone surveys, unrelated to this project. We posted job ads on a major electronic job board in 68 metro areas for telephone interviewer positions. The job ads described the position and several required qualifications, but did not include any additional information about the nature of the job such as the schedule or whether the job was on site. During the application process, we asked applicants their preference between two positions: a baseline position offering a traditional 40 hour 9 am – 5 pm Monday-Friday on-site work arrangement (in the applicant’s local area) and a randomly-chosen alternative arrangement. The alternatives included flexible scheduling, working from home, and positions that gave the employer discretion over scheduling. We also randomly varied the wage difference between these two options.⁵ In the experimental portion of the application we were silent on whether these were actual positions; we simply asked applicants to tell us their preference over two job descriptions. This gave us latitude to vary the parameters of the position descriptions. However, the positions were fully consistent with the type of job that we advertised thereby approximating a market choice.⁶ We elicited preferences from approximately 7,000 applicants, allowing us to estimate the willingness to pay (WTP) distribution for a number of common

⁴Discrete choice experiments are an extension of the contingent valuation literature whereby rather than directly asking people for valuations over an attribute (the stated preference method), people are given the choice of two or more scenarios and are asked to choose their preferred option. These scenarios usually vary the attributes and the prices and WTP can be estimated using random utility models (McFadden, 1973; Manski, 1977). Choice experiments have been shown to have better properties relative to stated preference valuation methods (Hanley et al., 1998). A question is whether these experiments, which are usually survey-based, correspond to actual market behavior. This is something we can overcome by embedding the choice in a real market setting. Diamond and Hausman (1994), who critique stated preference valuation methods, hypothesize that the problem with the approach is not methodological but due to “an absence of preferences” over the attributes they are being asked to value. This is far less of a concern here since we are asking people to make choices over realistic work arrangements.

⁵In terms of methodology, our approach is similar to Flory et al. (2015) and Hedegaard and Tyran (2014). Both of these studies use data collected in the application phase to learn about the preferences of job seekers. Flory et al. (2015) randomize job applicants into different compensation packages and measure gender differences in the probability that someone applies as a function of the compensation scheme presented. This approach is informative about the direction of preferences, but does not yield WTP measures. Hedegaard and Tyran (2014) focus on preferences on the ethnic background of co-workers.

⁶The actual jobs combined the highest wage the applicant viewed, scheduling flexibility, and the ability to work remotely.

alternative work arrangements using a simple discrete choice framework.⁷

There are several challenges to the approach that require addressing. First, prior to running the experiment we hypothesized that some applicants would not pay close attention to the position descriptions. We implemented several placebo tests which confirmed that approximately 25% of applicants are inattentive. By estimating the inattention rate, we can account for misclassification in the econometric model and recover the unbiased WTP distribution.⁸ Second, we are eliciting preferences only from jobseekers who respond to this position. To address this we can weight the estimates by observed worker characteristics to match a nationally-representative sample of workers. Additionally, we designed a module in the nationally representative Understanding America Study (UAS) that elicited preferences over scheduling flexibility and employer discretion, using a choice framework similar to the one described above. This survey has additional advantages that it has information on worker characteristics that are not possible to obtain from the applicants, such as presence of children, and that there is no potential for responses to the survey to act as a signal to potential employers.

The first, surprising, finding is that the great majority of workers do not value scheduling flexibility: either the ability to set their own days and times of work at a fixed number of hours, or the ability to choose the number of hours they work. This is true both among job applicants and survey respondents in the UAS.⁹ While the average WTP for jobs with flexible schedules is low, there is a long right tail in the WTP distribution for these arrangements, reflecting people who are relatively inelastic to the price of flexibility. Thus, there remains considerable potential for reasonably large market compensating wage differentials for flexible scheduling. We find evidence of heterogeneity in valuations in all of the job attributes we consider; mean WTP estimates may differ substantially from marginal WTP estimates. Caution is therefore warranted when interpreting benefit-cost analyses that are based on average valuations alone.

Second, of the employee-friendly alternatives we consider, working from home is the most valued. On average, job applicants are willing to take 8% lower wages for the option of working from home. The fact that working from home is still relatively uncommon—even in the industry in which we are hiring—while there is a substantial share of workers willing to take wage cuts for these jobs, suggests that it may be costly for employers to offer this arrangement. Taking our estimates of the WTP distribution at face value, the share

⁷The applicant figure refers to the number of jobseekers who initiated the application process and chose one of the two jobs presented. Of these, 78% completed the application and applied for the job. At present, we have contacted 150 applicants to offer them jobs, subject to their passing a required criminal background check.

⁸It is an interesting question whether this type of inattention should be taken into account when estimating the WTP for these positions. This type of inattention may represent a real friction in the labor market. By adjusting the estimates, our framework allows us to estimate the welfare costs to inattention.

⁹This result is noteworthy in that it shows that survey based choice experiments, when designed properly, elicit responses that are close to market choices.

of hourly workers who work at home (9%) implies that it would cost at least 21% of wages for employers to switch to work at home positions.

Third, job applicants and UAS respondents have a strong aversion to jobs that permit employer discretion in scheduling: the average applicant is willing to take a 20% wage cut to avoid these jobs, and almost 40% of applicants would not take this job even if it paid 25% more than a M-F 9 am - 5 pm position. The distaste for jobs with employer discretion is due to aversion to working non-standard hours, rather than unpredictability in scheduling. For most workers, a traditional M-F 9 am - 5 pm schedule works well: workers are not willing to take lower wages to set their schedules on top of this, but they are willing to take substantial wage cuts to avoid evening and weekend work.

The paper also contributes to our understanding of how women and men differentially value workplace amenities and how this translates into the observed gender wage gap. A large literature has examined gender differences in work arrangements and asked to what extent these differences can explain gender wage gaps.¹⁰ We find that women are more likely to select flexible work arrangements than are men. While women do not tend to value flexible schedules, they do place a higher average value on working from home and avoiding irregular work schedules than do men. The latter is particularly true for women with young children. Despite this, women are only slightly more likely to be in work-from-home jobs and slightly less likely to be in jobs with irregular schedules. The differences in observed work arrangements are not large enough to lead to significant gender gaps even with substantial compensating wage differentials. While there are gender differences in the propensity to select into alternative work arrangements, there is no detectable relationship between workers' education or score on a cognitive test we administered and their choices.

We begin by discussing our experimental design (Section 2) and conceptual and econometric framework (Section 3). From there, we present our main estimates of workers' valuations for alternative work arrangements (Section 4) and show external validity through the nationally-representative UAS (Section 5). We examine heterogeneity of WTP by subgroup in Section 6 and discuss the implications of our findings for compensating differentials in Section 7.

2 Experimental Design

Our experiment is structured around the hiring process for a national call center that we staffed to implement a labor market survey, unrelated to this project, during calendar year 2016. The experiment takes place during the application process for these positions.

¹⁰Studies include Filer (1985), Goldin and Katz (2011), Goldin and Katz (2012), Flory et al. (2015), Goldin (2014), and Wiswall and Zafar (2016).

We posted advertisements for telephone interviewer positions on a national U.S. job search platform. The platform has separate portals for most regions and we posted a customized ad in 68 large metro areas. The ads were modeled off of existing ads on the site; the text of these ads is presented in Appendix Figure 1. They mentioned the necessary skills for the job, emphasized that the position did not include sales or telemarketing, and included information about the job's wage range.¹¹ We provided no information about the job's schedule, location, or duration. The ad had a link to our website where interested jobseekers could apply for a position.

We ran the labor market survey and conducted all hiring under the auspices of a center responsible for the hiring. We did not disguise the center's mission (the study of labor markets) or its personnel. However, the center did not specify an affiliation with any university or this particular project. The center website is professionally designed, and the feedback we received from applicants we spoke to is that the ad and the website looked like those of a regular employer.

Once applicants followed the link to our site, they could apply by creating an account which required them to enter their contact information, year of birth, and zip code. The next step in the application was a voluntary self-identification page where applicants could provide their race/ethnicity and gender. The page prominently stated that this information was optional and that the questions could be skipped, though the vast majority of applicants responded.¹² We did not feel that it would be appropriate to ask about marital or parental status.

The third step of the application was the discrete choice experiment. Applicants were shown two descriptions of job positions. The two positions differed in their characteristics (e.g., schedule or the ability to work from home) and their hourly wages. The characteristics and wages were assigned at random to applicants. While we could have shown each applicant multiple job descriptions with varying wages and amenities, to minimize cognitive load, we limited the comparison to two options, a baseline and an alternative. In fact, we show that even with just two simple choices there is a substantial amount of inattention that we have to account for. Additionally, in our judgment, more than two choices would have made the research intent of this section too obvious. Implementing a between-subject design also allows us to avoid carry-over effects. In Subsection 2.1 we describe the positions and randomization in more detail.

We told applicants that the type of work in both jobs was the same and asked them which job they would

¹¹The necessary skills specified were “good communication skills”, “ability to work with others”, and “used to basic computer and/or mobile applications.” The platform has a field for the compensation range. We filled this in to be consistent with the site's typical practices as well as to encourage applications from interested participants and prevent applicants uninterested in jobs at these wages from wasting their time. The wage range corresponded to the lowest and highest wage in the discrete choice experiment. We hired at the highest wage in the range.

¹²Ninety-five percent of applicants provided their gender and 93% provided their race.

choose if both were available. We assured applicants that we would not look at their choices before making hiring decisions. The position descriptions were crafted to match the general description of the telephone interviewer position advertised, but we did not tell applicants that these were the actual positions available. Without specifying them, we indicated that there were other positions they could be hired for (“...regardless of your choice you will be considered for all open positions”). This approach allowed us to use position descriptions that deviated from the real jobs, while maximizing realism by describing positions that were like the ones advertised.¹³

This step of the application process produces the key data for our analysis. The remainder of the application asked about applicants’ background, including their educational attainment. We asked workers six quantitative questions from the ACT WorkKeys, ranging from simple multiplication to basic algebra, which we use as a measure of cognitive ability. Most (78%) workers who made a job choice completed the application. Our main analysis uses all choices made, but we show in an appendix table that the results are similar if we restrict attention to workers who ultimately applied for the jobs.

2.1 Job Description and Wages

As described above, applicants were shown two position descriptions that differed in their work arrangements and wages. In all of the main comparisons we use the same baseline job description: a traditional 40 hour-per-week, Monday - Friday 9 am - 5 pm position physically located near downtown of the city we advertised in. This job description reads:

“The position is 40 hours per week. ¶ This is a M-F 9 am - 5 pm position. The work is exclusively on-site in downtown [city]. This position pays [wage] dollars per hour.”

Here [city] is the city of the job ad (sometimes we used “center city” or a variant of this instead of “downtown” to conform to local terminology), and [wage] is a randomly-selected wage.¹⁴ We compare this baseline position to five alternatives: (1) “flexible schedule:” a 40 hour-per-week position that allows the worker to make his or her own work schedule, (2) “flexible number of hours:” a position that gives the worker the

¹³The real job offered workers the maximum of the hourly wages shown in the position descriptions, plus additional compensation for using their own phones and devices, flexible schedules (within the constraint of work hours being appropriate times to conduct telephone surveys), and remote work. The duration of the job was either one or two months and either 20 or 40 hours per week, depending on when they applied and the surveys we were running. This information was conveyed to all applicants who were selected for the position at the time the job offer was first extended. At this time, we have contacted 150 applicants who completed the application process to offer them jobs, subject to their passing a required criminal background check.

¹⁴The ¶ indicates a line break.

choice of how many hours to work per week up to 40, (3) “work from home:” a 40 hour-per-week M-F 9 am - 5 pm position that gives the worker the option of working at home, (4) “combined flexible:” a position that allows workers to make their own schedule, choose the number of hours they work, and work from home, and (5) “employer discretion:” a 40 hour-per-week position that lets the employer select the worker’s schedule (including weekends and evenings) with one week’s notice. The exact wording of each of the descriptions is listed in Table 1.

We randomize which jobs workers are presented with and the wages in these jobs. For each metro area, we randomly selected a maximum hourly wage of \$16 or \$19. In a given metro area, all applicants observed one position that offered either the \$16 or \$19 wage.¹⁵ For the second option, we displayed a wage that was a randomly-selected increment lower than the maximum wage. The increments – \$0, \$0.25, \$0.50, \$0.75, \$1.00, \$1.25, \$1.50, \$1.75, \$2.00, \$2.25, \$2.50, \$2.75, \$3.00, \$4.00, and \$5.00 – were selected to allow us to capture both very small and very large willingness to pay. Each increment had a uniform probability of selection. The baseline position was sometimes (randomly) assigned the higher wage and sometimes assigned the lower wage, so that we have approximate symmetry in the relative wages offered between the two positions. We also randomized which job was presented first.

Appendix Figure 2 provides an example of the page with the job descriptions. This page was designed with several goals in mind. First, we wanted to ensure that only parameters of job would affect workers’ choice. Thus, we referred to jobs only by number (not name) to minimize the extent to which job titles would affect workers’ choices.¹⁶ We also made the wording of the job descriptions as similar as possible. To maximize the fraction of applicants who read both job applications carefully, we forced applicants to physically click on each position to see the job descriptions. We also required applicants to manually type the number of the job they preferred to lessen the tendency to simply click through to the next page.

2.2 Measuring Inattention

A challenge for any experiment that manipulates information is accounting for the presence of people who do not fully process the information. Despite our efforts, some workers did not read the choices carefully. Because estimates of quantiles and higher order moments of the WTP distribution will be influenced by this form of misclassification, we implemented a number of mechanisms to measure the inattention rate and we incorporate estimates of the inattention rate into the econometric models.

¹⁵We select whether a city has a maximum wage of \$16 or \$19 at random.

¹⁶These numbers were randomly assigned to jobs. The numbers were also balanced within comparisons, so if some individuals were given a choice between Position #78 which was inflexible and Position #81 which was flexible, other participants would be faced with a choice between Position #81 which was inflexible and Position #78 which was flexible.

First, we presented some applicants with two positions that were identical except that one of them stated at the end, “This position is currently unavailable, please select the other position.” The fraction of workers who choose the unavailable position is an indicator of the fraction of inattentive workers.¹⁷ Second, on the page after the job choice, we asked workers whether they chose a fixed schedule M-F 9 am - 5 pm job or one with an alternative schedule. The fraction of workers answering incorrectly is another inattention measure. Finally, the measure we utilize in the estimation approach, which is described in more detail in the next section, is the estimated share of applicants who choose a dominated position when this position pays \$5 per hour less than the alternative. This approach is attractive because it allows us to calculate inattention rates that are specific to each comparison and demographic group. We estimate that, on average, 13.3% of individuals chose the dominated position when it paid \$5 less than the alternative. In comparison, 13.3% of individuals answered which question they chose incorrectly and 13.0% chose the “unavailable” position. We show in appendix tables that our results are robust to using either of these alternative methods of measuring the inattention rate. Our findings highlight the importance of accounting for inattention in even simple discrete choice experiments, especially when the analyst is interested in higher moments of the distribution.

3 Conceptual and Econometric Framework

We use workers’ choices over positions to estimate applicants’ distribution of willingness to pay (WTP). The experimental design limits the differences in the positions to the work arrangement and the wage.

Building on Rosen (1986), we assume that an individual chooses between two jobs, which are equivalent except for the presence of an amenity (e.g., the ability to work from home, a traditional schedule). Job $A = 1$ has the amenity, while job $A = 0$ does not. The difference in wages between the two jobs is $\Delta w = w_1 - w_0$. In the experiments $\Delta w \in [-5, 5]$. Each individual i has a willingness to pay WTP_i for the amenity: μ is the population mean willingness to pay, while σ is the population standard deviation. If the individual is fully attentive, she prefers the job with the amenity if her willingness to pay for the amenity (WTP_i) exceeds the price of the amenity $-\Delta w$:

$$P_{\Delta w} \equiv Pr(WTP_i > -\Delta w).$$

If there is probability 2α that the individual is inattentive, the probability that she chooses the job with the

¹⁷Both positions used the language from the baseline position. If a fraction α of workers choose the lower-wage option, this suggests that 2α workers chose their preferred job at random.

amenity is:

$$Pr(A_i = 1 | \Delta w) = P_{\Delta w}(1 - \alpha) + (1 - P_{\Delta w})\alpha = F(b\Delta w + c; \mu, \sigma)(1 - 2\alpha) + \alpha. \quad (1)$$

Equation 1 is a mixture model that can be estimated by maximum likelihood (ML) given an estimate for α and a parametric assumption about the cdf of $WTP_i : F(\cdot)$. We assume WTP_i follows a logistic distribution, though a normality assumption works just as well. Under the logistic assumption, with estimates of b and c we can fully characterize the WTP distribution: $\hat{\mu} = -1 * \hat{c}/\hat{b}$ and $\hat{\sigma} = 1/0.55\hat{b}$.¹⁸ The q th quantile of the WTP distribution can be computed by inverting the cdf: $\Delta \hat{w}_q = F^{-1}(q; \hat{\mu}, \hat{\sigma})$. Standard errors are bootstrapped.¹⁹

An advantage of our design is that we can plot our estimates of $P_{\Delta w}$ nonparametrically to assess distributional assumptions. For a given Δw , the share of individuals in the sample who choose $A = 1$ is:

$$Y_{\Delta w} = P_{\Delta w}(1 - 2\alpha) + \alpha + \varepsilon_{\Delta w},$$

where $\varepsilon_{\Delta w}$ represents sampling error. We use an estimate of α to transform this share so that it is an unbiased estimate of the share of jobseekers whose willingness to pay for a job attribute exceeds $-\Delta w$:

$$\tilde{Y}_{\Delta w} \equiv \frac{Y_{\Delta w} - \hat{\alpha}}{1 - 2\hat{\alpha}} = P_{\Delta w} + \tilde{\varepsilon}_{\Delta w}.$$

We plot $\tilde{Y}_{\Delta w}$ against Δw to visually assess fit.

We estimate a treatment- and (when applicable) subgroup-specific α . Our estimate of α is the share of applicants who chose the dominated position (the position without the amenity) when it paid \$5 less per hour, that is, $\hat{\alpha} = 1 - \hat{E}[Y | \Delta w = 5]$. We estimate $\hat{E}[Y | \Delta w = 5]$ by estimating the linear regression $Y_{\Delta w} = \gamma + \beta \Delta w + \zeta_{\Delta w}$ for values of Δw ranging from 2 to 5 and calculating $\hat{\alpha} = 1 - (\hat{\gamma} + 5\hat{\beta})$. We present estimates without the inattention correction as well. In practice, this correction will affect estimates at the tails of the WTP distribution, but not estimates of the mean or median.

For most treatments the logistic specification provides a good description of the data, but in some cases we can observe that the symmetry assumption seems to be violated. In particular, the logistic cdf does not capture the extreme non-linearity in \tilde{Y} at $\Delta w = 0$ we observe for some comparisons. In these cases $E[\tilde{Y} | \Delta w]$ is approximately 1 for most positive values of Δw and shifts downward close to $\Delta w = 0$. This

¹⁸The 0.55 parameter in the denominator corrects for the scale parameter.

¹⁹We bootstrap standard errors to take into account variability in the estimation of the inattention rate.

close-to-discontinuous shift suggests that there may be mass points in the cdfs of WTP that the logistic distribution cannot accommodate. To account for this, we estimate a “breakpoint” model that nests a mass point:

$$E[\tilde{Y} | \Delta w] = \begin{cases} 1, & \text{if } \Delta w > w^* \\ F(b\Delta w_i + c; \mu, \sigma)(1 - 2\alpha) + \alpha, & \text{if } \Delta w \leq w^* \end{cases},$$

where w^* is a breakpoint. We impose the constraint $b \leq 0$ to ensure that predicted values can be interpreted as a cdf. Rather than assume a value of w^* , we estimate a structural break model where we vary w^* from $w^* = -2$ through $w^* = 5$ (the no mass point case) and select the value of w^* that minimizes the root mean square error of the model.

To calculate the mean and variance of WTP in the breakpoint model we use the integration by parts expression for computing a mean and variance of a distribution from a cdf:

$$\hat{\mu} = \int_{-\infty}^0 (1 - \hat{Y}) d\Delta w - \int_0^{\infty} \hat{Y} d\Delta w$$

$$\hat{\sigma}^2 = 2 \int_0^{\infty} \Delta w (1 - \hat{Y}) d\Delta w - 2 \int_{-\infty}^0 \Delta w \hat{Y} d\Delta w - \hat{\mu}^2$$

The integrals are computed numerically, the quantiles are calculated by inverting the cdf, and the standard errors are bootstrapped.

4 Willingness to Pay for Alternative Work Arrangements

4.1 Descriptive Statistics and Randomization Assessment

Panel A of Table 2 shows the characteristics of our sample and a representative sample of workers in telephone occupations from the CPS.²⁰ Like workers in telephone occupations in general, our sample is disproportionately female. Applicants average 33 years old. Approximately half of our sample has some college but no degree, while the rest of the sample is split between people with a high school degree and those with a college degree. Our sample is also racially diverse – more so than workers in telephone occupations. This is in part, but not entirely, because our experiment is focused within metro areas. Panel B of Table 2 shows that the UAS sample comes close to matching the CPS sample.

²⁰We define telephone occupations to include telemarketers, bill and account collectors, customer service representatives, and interviewers (except eligibility and loan).

Table 3 shows that the randomization was balanced. For each of the five different treatments, we regress each of six applicant characteristics on indicators for each wage gap (Δw) the applicant was randomly assigned in the application process. If the randomization was implemented correctly the wage gap indicators should not be jointly significant. We only include the variables that were collected before the jobs were presented: gender, race, and age. The table reports the p-value for each of the 30 regressions, corresponding to six demographic characteristics and five alternative work arrangements. The wage gap indicators are jointly significant for predicting the demographic characteristic in only one of these combinations (work from home and Hispanic), a number we may expect to see by chance given the number of tests. Appendix Table 1 replicates this table, limiting the sample to workers who chose one of the two job options presented (and thus did not stop the job application before making a choice). It shows that observable characteristics look balanced along this dimension as well. Appendix Figures 3 and 4 show that neither the probability of making a choice nor the probability of entering the subsequent demographic information is related to the wage gap. Appendix Table 2 shows that, consistent with random assignment, workers in the different treatments have similar demographic characteristics.

4.2 Main Treatments

We begin with visual nonparametric and parametric summaries of the data. We show binned scatterplots of the inattention-corrected fraction of applicants who chose the arrangement with the amenity, against the wage gap (Δw) between this job and the job without the amenity. We overlay the scatterplot with the ML and breakpoint model fits, which can be interpreted as cdfs of the WTP distribution since they are monotonic and bounded between 0 and 1. We also report statistics from the WTP distribution using the ML model in Table 4 and the breakpoint model in Appendix Table 3. Statistics from the ML inattention-uncorrected estimates are presented in Appendix Table 4 and scatterplots with the uncorrected data are presented primarily in appendix figures. We discuss the estimates for each of the main alternatives sequentially below.

Flexible Scheduling

Figure 1 plots the raw fraction of workers choosing the flexible schedule job at each wage gap, without the inattention correction. There is a strong positive relationship between the premium for the flexible alternative (Δw) and the probability that an applicant chose a flexible job. Reading from this figure where the scatterplot intersects the y-axis at 0.5 and multiplying by -1 , the median WTP for flexible scheduling is positive but less than \$1 per hour.²¹ Only 60% of applicants chose the flexible alternative when $\Delta w = 0$,

²¹The x-axis of this graph shows the wage premium for the job with the higher amenity. Multiplying this by -1 gives the cost of the amenity. The cost that 50% of workers is willing to pay is the median WTP.

suggesting that a large fraction of applicants place no value on this arrangement. In the figure we can see that when $\Delta w = \$5$, that is, when the flexible position pays \$5/hour more than the baseline position, approximately 20% of applicants still choose the fixed position. This gap is expected if there is inattention. As we discussed above, we fit a line over the range of points between $\Delta w = 2$ and $\Delta w = 5$ to estimate the share of applicants who choose the dominated position (the baseline position) when it pays \$5 less than the more-flexible position. We do not interpret the share of applicants choosing the flexible position when Δw is large and negative (that is, when flexibility is more expensive) as reflecting inattention because there are applicants who might have strong preferences for flexibility.

After estimating the inattention rate using the procedure described above, we calculate the inattention-corrected shares \tilde{Y} .²² These shares are plotted in Figure 2 along with the estimated implied cdfs using the ML and breakpoint models. The inattention correction shifts shares that are greater than 0.5 towards 1 and shares that are less than 0.5 towards 0, making the implied cdfs steeper. This changes the tails of the WTP distribution (where the y-axis meets the lower and upper quantiles) but not the median. Inspecting this figure we can see that after correcting for inattention almost everyone prefers the flexible alternative when it pays more, modulo sampling error. This is effectively mechanical at $\Delta w = \$5$, but not at other values of Δw . There is a “cliff” in the cdf at $\Delta w = 0$, indicating a mass point in the WTP distribution at this point; approximately 60% of workers do not value being able to make their own schedule at all. The ML model cannot capture this extreme nonlinearity while the breakpoint model does. In both models most individuals do not value the ability to make their own schedule and the median WTP for flexible scheduling is 0 or close to 0. However, there is a tail of individuals who place a high value on this option: the top 25% of workers are willing to give up at least 10% of their wages to be able to make their own schedule (Table 4 and Appendix Table 3).²³ This quantitatively and qualitatively important heterogeneity in valuations is something that we observe across all arrangements we consider. We see a very similar pattern of estimates in the nationally-representative UAS discussed below.

One potential concern is that at 40 hours per week there may be limited latitude to adjust schedules. To investigate this possibility, we conducted a supplementary study where we gave workers a choice between a baseline job and one of our five alternatives, but all jobs were 20 hours per week rather than 40 hours per week.²⁴ These estimates are reported in Appendix Table 5. The median WTP remains very low in this part-time alternative: we estimate it at \$0.55 (se = \$0.50).

²²Technically these are not shares because they can be greater than 1 or less than 0, but we use this term for convenience.

²³In the tables we report WTP in levels, as in the experimental variation. We divide our estimates by \$17, the approximate average wage presented to workers (and approximately the average wage selected) to convert the levels into percentages.

²⁴The flexible number of hours job allows workers to choose the number of hours they work, up to 20 hours per week.

The participants in our experiment are a selected sample of workers who responded to our job advertisement. We can construct WTP estimates that match the demographic and education characteristics of the hourly workforce by reweighting the sample. We construct WTP estimates that weight our sample to match a nationally-representative sample of hourly workers (those in the 2016 March CPS) using DiNardo, Fortin and Lemieux (1996) weights. We create two sets of weights: the first uses only the characteristics collected before participants saw their job options (age, race, and gender) and the second adds educational attainment categories.²⁵ Descriptive statistics from the March 2016 CPS, our experimental sample, and our experimental sample reweighted with both sets of weights are in Appendix Table 6. Table 5 presents willingness to pay estimates using the reweighting. The results are very similar to the estimates using the unweighted data, suggesting that our estimates appear representative of a wider population. This similarity between the weighted and unweighted estimates is also observed for the other arrangements we examine. This is largely because as discussed below, aside from by gender, there are not large differences in WTP by worker characteristics. We provide additional evidence that the estimates are representative in Section 5 where we report WTP estimates from a discrete choice experiment embedded into a nationally representative survey.

Flexible Number of Hours

For the remaining treatments, we show the inattention-corrected figures in the text; the uncorrected versions are in Appendix Figures 5-8. The low valuation for flexibility, on average, is even more striking for the ability to choose the number of hours worked, as shown in Figure 3. Here the more parsimonious ML model provides a reasonable fit to the data. The figure shows that the median worker actually slightly prefers the M-F 9 am - 5 pm job over the ability to choose the number of hours worked. While the median worker does not value being able to choose the number of hours she works, the top 25% of workers are willing to give up about 7% of their wages for this flexibility.

We again explore the sensitivity of the estimates to changing the jobs to 20 hour-per-week positions. This is particularly important for the flexible number of hours comparison because of the possibility that applicants dislike the flexible option because they believe that the position is less likely to come with benefits. We eliminate this potential concern by limiting the positions to a maximum of 20 hours. In this 20-hour version, we see a somewhat higher mean valuation for this alternative (Appendix Table 5), but it remains small and the median WTP is both insignificantly different from 0 and from the estimate in the 40-hour version.

Because the negative valuation of the flexible hours arrangement by a subset of applicants is somewhat

²⁵In the first set of weights, we include race dummies, a female indicator, age, age interacted with race dummies, age interacted with the female dummy, and the female dummy interacted with race dummies. We add educational attainment indicators to create the second set of weights.

puzzling, we created a focus group on Mechanical Turk to help us understand why some people might prefer less hours flexibility. We gave Mechanical Turk workers the choice between the baseline and flexible hours position at the same wage and asked them to explain their choice. By virtue of being on Mechanical Turk, the workers in this survey were much more likely to prefer the flexible number of hours option. However, the ones who preferred the M-F 9 am - 5 pm job typically mentioned that they liked having someone else set the schedule and tell them how many hours they should work. They expressed concern that if they could choose it would be difficult to force themselves to work their desired number of hours.²⁶ This qualitative evidence suggests that there may be psychological, not just economic, factors that enter into the decision over work arrangements.

The flexible number of hours arrangement offers jobseekers two benefits. It allows workers to make adjustments if they need to work more or fewer hours in a given week and it allows them to optimize the number of hours worked if they typically prefer to work fewer than 40 hours. To disentangle these two possible benefits, and to better understand jobseekers' labor supply behavior, we designed an auxiliary study that elicited workers' preferences over the number of hours of work. We gave applicants choices between jobs with different wage and hour combinations. We elicited preferences over a 20 versus 40 hour-per-week position, as before, randomly varying the wage gap between the two jobs such that either wage could be up to $+/-$ \$5/hour from the other. The higher-paying job paid \$16 per hour. Using the above framework, we can estimate WTP for the 40 hour-per-week job relative to the 20 hour-per-week job. For this exercise, we specify an inattention rate of $\alpha = 0.133$ (the mean in our data) rather than estimating it from the share choosing a dominated position since there is no obvious dominated position for these comparisons.

Inattention-corrected WTP estimates are shown in Table 6.²⁷ At the wages we offer, most workers prefer the 40-hour job: the median worker is willing to take more than a \$6 per hour pay cut for a 40-hour job relative to a 20-hour job. This implies a median value of time of under \$4 per hour between 20 and 40 hours of work.²⁸ Even at the top of the distribution, workers' value of time is fairly low. The 75th percentile value of time is approximately \$11, well below the predicted market hourly wage of \$16 for the applicant

²⁶These are a sample of the responses conditional on choosing the baseline schedule job: "Although being able to choose my hours would be nice, I would kind of have to force myself to work the 40 hours a week;" "I like that the hours and pay are fixed... [with the flexible hours job] I might be tempted to work less hours at the start of [the week] then work longer hours later to compensate or make enough for that week which would be tiring and stressful;" "I would prefer to have a set schedule every week. A routine is better for me personally;" "[the fixed schedule] suits me better. I like it when someone tells me how long I should work. That way there's an expectation that I can live up to. If I were to choose the hours that I would like to work, it would make me feel uncomfortable and I wouldn't be sure how the employer would feel about that;" "I prefer to have set hours so I will know for sure what my schedule will be. This makes it much easier for me to plan other activities and know the expectations."

²⁷Uncorrected estimates are in Appendix Table 7.

²⁸This value of time is calculated as the amount the worker has to earn per hour in hours 20 through 40 to be indifferent between the 20 and 40 hour-per-week jobs: $\frac{40 \times (16 - \widehat{WTP}) - 20 \times 16}{20}$.

pool.²⁹ In the standard labor supply model, the decision to work part-time when a worker is unconstrained is due to a high shadow value of time and/or a low wage. Our estimates suggest that jobseekers by and large prefer working 40 hours, even at wages substantially lower than the one we offered. This may explain the very low valuation for hours flexibility since one of its primary benefits (lower regular hours) appears to be of low value to most jobseekers.³⁰

We also investigated preferences for working overtime. Estimating how workers value overtime is particularly important in the context of the Fair Labor Standards Act (FLSA), which requires employers to pay most hourly workers time-and-a-half for work over 40 hours per week. To our knowledge, it is not known how this legislated wage premium compares to workers' WTP to avoid working these additional hours. Overtime pay complicates estimating WTP for positions over 40 hours per week. If we presented a 40 versus 50 hours choice without mentioning overtime pay it would be unclear what applicants assume about overtime pay. To circumvent this problem, we gave some applicants a choice between a 40 hour-per-week job and a 50 hour-per-week job which both paid the same base wage (\$16 per hour). We randomly varied the overtime premium so that workers would either earn $1.5 \times$ or $2 \times$ wages for hours over 40 hours per week. Using the fraction of applicants who chose the 50-hour position at the two overtime premia and assuming a logistic distribution for WTP, we can recover estimates of the WTP distribution.

We have to pay most workers a premium to work over 40 hours: 40 hours appears close to the bliss point at workers' predicted market wage. Fifty-four percent of jobseekers accept overtime at $1.5 \times$ wages and 63% accept overtime at $2 \times$ wages: the FLSA overtime requirements make the median jobseeker in our applicant group close to indifferent towards working overtime.³¹ When assuming a logistic distribution, these rates imply a WTP to work 40 hours per week of \$0.88 in terms of the overall wage (not just for hours over 40). Workers' average value of time between 40 and 50 hours of work is almost \$20 per hour, substantially higher than their predicted market wage and their value of time before 40 hours of work.

Working from Home

While we see that workers largely do not value choosing the number of hours they work or which hours these are, applicants do largely value working from home. The cdf of WTP for this alternative relative to

²⁹The 75th percentile value of time is calculated using the 25th percentile of the WTP distribution (\$2.37 per hour). To calculate applicants' predicted market wage, we estimate the average hourly wage in 2016 for hourly workers with the education, race, and gender composition of workers in our sample using CPS data.

³⁰This finding is also relevant for understanding the prevalence of part-time work. In 2015, 25% of workers worked less than 35 hours per week, and 20% of workers reported working fewer than 35 hours per week by choice. With the usual caveats about generalizing, our estimates suggest that most workers would prefer full-time jobs, with a relatively small fraction preferring part-time work at the same hourly wage. While this may seem obvious given the distribution of hours, one might have hypothesized that 40 hour-per-week work hour blocks exceed the preferred hours of many workers due to technological or organizational constraints. Our experimental evidence suggests this is not the case.

³¹Both of these rates are inattention-corrected. We use the average inattention rate in the experiment to adjust the estimates.

the baseline is shown in Figure 4. The average worker does value working from home and is willing to give up about 8% of wages for this option.³² Twenty five percent of applicants are willing to pay at least \$2.45 per hour, or about 14% of wages, to work from home. Yet, approximately 20% of applicants choose to work on-site even when there is no wage penalty for doing so ($\Delta w = 0$). Bloom et al. (2015) also find that many workers (50% in the company they study) prefer working on-site, all else equal.³³ However, the estimates suggest that almost no workers are willing to accept a lower wage to work on-site.

Part of the benefit of working from home is a reduction in commuting times. However, we do not find that this drives workers' desire to work from home. Using workers' zip codes, we calculated their average driving time to the downtown area of their metro area, corresponding to where the job was said to be located. We used the Google Maps API to calculate the typical driving time on a Monday at 8 am for each worker. Workers' round-trip commute averages 40 minutes or 8% of a working day; roughly the magnitude of the mean WTP for working at home. However, workers with longer commutes were not, on average, willing to pay more for the option of working from home (Appendix Table 8).

Combined Flexible Option

The option that combines flexible scheduling, flexible number of hours, and working from home is shown in Figure 5. If these types of flexibility are complements, workers could value the sum of the components more than the parts. We don't see evidence supporting this: the mean valuation of this combined option (\$1.17) is close to the sum of its components (\$1.59). This approximate equivalence does, however, provide some reassurance that we are not subjected to the embedding bias of Kahneman and Knetsch (1992).³⁴ Overall, the combined flexible option looks very similar to the work from home option, the only worker-friendly alternative that workers seem to value.

Employer Discretion

While most workers seem content to work a regular M-F 9 am - 5 pm job with a fixed schedule and a set number of hours, they are quite averse to arrangements where the employer has discretion over the work schedule. As a reminder, we gave workers a choice of a 40 hour-per-week, M-F 9 am - 5 pm job and a 40 hour-per-week job where the employer sets the schedule – which can include evenings and weekends, but not nights – at least one week in advance.³⁵ Figure 6 shows the cdf for the WTP distribution to avoid this option. Note here that the baseline M-F 9 am - 5 pm job is now the higher amenity position and the y-axis

³²Estimated mean WTP is about 5% for the 20 hour-per-week version (Appendix Table 5).

³³The choice we study is slightly different from the one in Bloom et al. (2015) in that our choice provided workers the option of working from home, not a potential requirement to do so.

³⁴The embedding bias occurs when individuals are estimated to have a higher WTP for a good when the good is evaluated on its own rather than when it is presented as part of a larger, composite good.

³⁵In a pilot, we told workers we would give them this schedule at least two weeks in advance and the results were similar.

is the fraction of people who choose the baseline job. The x-axis is the difference in the wage between the baseline position and the employer discretion position. For this alternative the ML and breakpoint models yield an almost identical fit, suggesting no mass point in the WTP distribution. The average worker is willing to give up 20% of wages to avoid this employer discretion (Table 4 and Appendix Table 3). And while there is variation in workers' aversion to this work arrangement, even the bottom 25% of workers are willing to give up 10% of earnings to avoid this option. Here we see a similar pattern of estimates in the nationally-representative UAS study discussed below as well as in the 20 hour-per-week comparisons (Appendix Table 5).

The appendix shows the robustness of these results to several different estimation strategies. Appendix Table 9 shows the results using different estimates of inattention, while Appendix Table 10 limits the sample to (1) workers who completed the job application, (2) unemployed workers, and (3) workers who were not employed part-time.

Workers may dislike employer discretion either because it entails working non-standard hours or because it requires workers to adjust their schedules on short notice. We use two sets of supplemental treatments to distinguish between these possibilities. We find that workers have a strong aversion for working non-standard times, in particular evenings and weekends. However, conditional on working non-standard hours, they do not appear to dislike having their hours change from week to week or learning their schedules only a week in advance.

In the first supplementary treatment we gave some workers a choice between a standard M-F 9 am - 5 pm job and a job with a potentially non-standard schedule that was consistent from week to week. (The exact wording of this treatment and the others in this section are presented in Appendix Table 11.) The position description stated that the work schedule would be the same from week to week, but would be determined at a future time, before the job begins.³⁶ This job differs from the employer discretion job only in that in this job the hours are the same from week to week, while in the employer discretion job, the schedule can change from week to week and workers are only guaranteed a week's notice of their schedule. Despite the fact that this job came with consistency and ability for more advanced planning, the average worker required the same amount to take this job (20%) as they did for the employer discretion job (Table 7). This points to the non-standard work schedule as the more likely reason for the strong distaste for irregular jobs.

We test workers' aversion to non-standard schedules directly in the second set of supplementary treatments. Here we elicit preferences for schedules that involve working alternative times and days. We gave

³⁶The schedule in this job was described as follows: "The work schedule in this position will be the same from week to week. You will be given your work schedule before the job begins. The hours can be morning through evening, weekdays and weekends, but not nights."

workers a choice between our baseline M-F 9 am - 5 pm job and jobs with consistent alternative schedules: (1) Monday - Friday 7 am - 3 pm, (2) Monday - Friday 12 pm - 8 pm, and (3) Thursday - Monday (including weekends) 9 am - 5 pm. On average, workers like the 7 am - 3 pm schedule. However, they dislike working evenings and weekends. The average worker requires 14% more to work evenings and 19% more to work on the weekends. It is interesting that the point estimate for the mean WTP for weekend work (\$3.27) is very close to the corresponding point estimate for employer discretion (\$3.41). This pattern further reinforces the conclusion that the aversion to employer discretion is rooted in a distaste for non-standard work schedules. These findings are also helpful in that these very differently-worded comparisons lead us to the same conclusions, quantitatively and qualitatively, suggesting internal consistency in the experimental approach.³⁷

We also estimate workers' willingness to pay to work the "1st shift" (M-F 7 am - 3 pm) relative to the "2nd shift" (M - F 3 pm - 11 pm), by having workers choose between these two options. We find that workers strongly prefer the first to the second shift. Even the 25% of workers who least dislike the later shift require approximately 8% more to work the 2nd shift. This is larger than the 2nd shift wage premium reported in employer surveys. These surveys tend to find that only a relatively small share of employers has a 2nd shift premium, and when they do it is in the 5 – 10% range (Aguirre and Moore-Ede, 2014).

5 Understanding America Study

To further probe the external validity of our experimental results, we designed a survey module to elicit valuations of work arrangements from participants in the nationally-representative Understanding America Study.³⁸ We focus on two work arrangements: flexible scheduling and employer discretion.

All employed and unemployed respondents were asked to consider the following scenario about an employer discretion job:

Imagine that you are applying for a new job in your current line of work, and you have been offered two positions. Both positions are the same as your [current/last] job in all ways, and to each other, other than the work schedule and how much they pay. ¶ Please read the descriptions of the positions below. ¶ Position 1) This position is 40 hours per week. The work schedule is Monday - Friday 9am - 5pm. This position pays the same as your [current/last] job. ¶ Position 2) This position is 40 hours per week. The work schedule in this position varies from week to week. You will be given your work schedule one week in

³⁷Diamond (1996) recommends testing for internal consistency in contingent valuation surveys. We go further in Section 5 by comparing WTP estimates in the market setting to estimates from a nationally-representative survey.

³⁸The UAS is a panel of respondents who were randomly selected to participate in an ongoing web-based survey.

advance by your employer. The hours can be morning through evening, weekdays and weekends, but not nights. ¶ This position pays “X” your current job. ¶ Which position would you choose?

Here, [current/last] is “current” for employed workers and “last” for unemployed workers. For employed workers “X” randomly varies between “30% less than,” “the same as,” “2% more than,” “5% more than,” “10% more than,” “15% more than,” “25% more than,” and “35% more than.”³⁹ These values were chosen to match the values used in our experiment, where the largest wage gap offered was 31%. We used fewer values of X – “5% more than,” “15% more than”, and “35% more than,” – for the unemployed group since they are a much smaller sample. We use workers’ choices when the employer discretion job pays 30% less than the Monday - Friday 9 am - 5 pm job to measure inattention. As in our experiment, we assume that workers choosing the employer discretion job when it pays 30% less are inattentive. We randomized whether the employer discretion position was Position 1 or Position 2.

To elicit WTP for preferences for flexible scheduling, we first ask respondents whether they can choose the days and times that they work. Unemployed and self-employed respondents are not included. If the respondent reports having a flexible job we ask:

Suppose your primary employer gives you the option of working a fixed work schedule, Monday-Friday during the daytime. Under this arrangement you would continue to work your usual number of hours but once your schedule is set you may not change the times and days of work. In exchange for having this fixed rather than flexible schedule you would get [2/5/10/20/35]% higher pay. Would you agree to this arrangement if given the choice?

If the respondent does not report having a flexible job we ask:

Suppose your primary employer gives you the option of being able to make your own work schedule. Under this arrangement, you would continue to work your usual number of hours but you may freely choose the times and days you work. In exchange for having this flexible rather than fixed schedule you would get [2/5/10/20/35]% lower pay. Would you agree to this arrangement if given the choice?

The UAS allows us to ask about the presence of children in the home, which seemed inappropriate on a job application. The survey targeted 2,593 respondents and the response rate was 83%.

³⁹We also clarify that “By pay we mean your salary if you were a salaried employee or your hourly pay if you were an hourly employee. If you were a part-time salaried employee we mean the salary you would have received if working on a full-time basis.”

We present the findings in two ways. We show figures like the ones for job applicants, plotting the share of respondents who selected either the baseline position (in the baseline vs. employer discretion comparison) or the flexible schedule position (in the flexible schedule vs. baseline comparison). We also estimate inattention-corrected ML models, as above, to quantify valuations over these alternatives (Tables 8 and 9). In the UAS, workers' average willingness to pay for flexible scheduling was 2.5% of wages, relative to 2.8% in our experimental data. This argues against the concern that experimental participants disguised their desire for flexibility to be more appealing applicants. We designed our choice page to explicitly eliminate this concern – assuring applicants that (1) their choice would not affect whether they were hired, but only what job they were matched to and (2) their choice would be reviewed only after hiring decisions were made. Applicants' willingness to avoid the employer discretion job also suggests that they were not simply choosing the most-palatable job to employers.

Figure 7 plots the choices for the flexible schedule job for survey respondents not in flexible-schedule jobs. There is very little demand in this group for flexible positions; only half of respondents are willing to take even a 2% pay cut for flexibility. Among individuals currently in positions with flexible scheduling, it is more nuanced. While the mean WTP is still quite low among this group (2.0%), there is a subset of workers that really value flexibility. The top 25% of workers in flexible jobs is willing to give up 16% of their pay for the option to make their own schedule. This is consistent with sorting in the labor market, where workers with the highest WTP for flexible scheduling are in flexible-schedule jobs.⁴⁰ This may also be driven by the endowment effect, with workers valuing the ability to make their own schedules because they have it.

Table 9 shows the additional wages workers need to accept a job with employer discretion. In the survey, unemployed workers require approximately the same wage premium to accept a job with employer discretion (22.6%) as they do in the experiment (23.1%). While one might have worried that many experimental participants were unemployed because they dislike employer discretion, unemployed workers do not dislike employer discretion more than do employed workers. Consistent with labor market sorting, the average worker in an employer discretion job is less averse to this job than is the average worker in a job without employer discretion, though this difference is not significant (Table 9 and Figure 8). Nevertheless, workers in jobs with employer discretion would be willing to give up a significant fraction of their wages for M-F 9 am - 5 pm jobs (the top 25% of workers would give up at least 44% of their earnings). This suggests the presence of frictions or other job characteristics that prevent perfect sorting.

⁴⁰Past evidence on sorting into job attributes based on preferences includes Viscusi and Hersch (2001), Borghans et al. (2006), and Krueger and Schkade (2008).

6 Heterogeneity in Valuations

A number of papers suggest that women value flexibility and standard work schedules more than do men (e.g., Wiswall and Zafar, 2016) and that this may explain gender wage gaps (e.g., Goldin and Katz, 2011). We find that women do have a higher valuation for worker-friendly work arrangements and a stronger distaste for employer discretion than do men. However, the differences in work schedules by gender along these margins are not large enough to explain a large part of gender wage gaps.

Table 10 shows mean willingness to pay by gender for the five main alternative work arrangements in our field experiment and Appendix Table 12 shows the quantiles of the WTP distribution. On average, neither men nor women are willing to pay much for flexibility in their schedules or in the number of hours they work. While we do not have information on whether the workers in our experiment have children, we do have this information for workers in the UAS. Table 11 shows that, on average, even women with young children (under 13 years of age), are not willing to take a pay cut for flexible scheduling. Even at the upper quantiles of the distribution, women with young children do not have higher WTP for flexible scheduling than do men. This is consistent with the fact that women with young children are not more likely to be in jobs with flexible schedules (Table 11).

While women do not seem to value the flexibility to adjust their schedule from the traditional M-F 9 am - 5 pm schedule, they do seem to be willing to pay substantially more than are men for the ability to work from home (more than twice as much, though this difference is not statistically significant). They are also willing to pay more for the combined flexible job. And women are willing to pay twice as much as are men to avoid employer discretion (Table 10). In particular, in the UAS, we find that women with young kids are willing to give up over a third of their wages to avoid a job with an irregular schedule. Unlike women, men with young children are not willing to pay more than other men to avoid a non-standard schedule (Table 11).

As we would expect based on their preferences, women are more likely to work from home (12.9% of female and 6.2% of male hourly workers do so at least once per week). Women are also less likely to be in jobs with irregular schedules (16.6% of women vs. 19.3% of men). These gaps change to 6.0% and 6.2%, respectively when controlling for education, race and ethnicity, age, marital status, self-employment, and part-time work.⁴¹ However, because the difference in the prevalence of these arrangements by gender is so small, even with sizable compensating differentials, these differences cannot explain large gender wage gaps. For example, with a 20% compensating differential for both work at home and working a fixed

⁴¹These statistics come from the UAS. They differ from the prevalence numbers in Table 11 since here we consider only hourly workers, for whom we think our experiment is most representative. Using all workers in the UAS, women are 3.9 percentage points more likely to work from home (3.3 percentage points with controls) and 5.2 percentage points less likely to work irregular schedules (7.8 percentage points with controls).

schedule instead of an irregular one, the differences by gender in the prevalence of these arrangements would only lead to a 1.9% raw gender wage gap or a 2.4% gap with controls.

While we do find large differences by gender in WTP for alternative work arrangements, we do not find significant or consistently-signed differences by the other characteristics we have: ethnicity, age, education, number of ACT WorkKeys questions answered correctly (experimental data only) or family income (UAS data only). Appendix Table 13 shows the differences in WTP for alternative work arrangements for these subgroups.

Table 12 presents results from regressions of whether the applicant chose the more-flexible job on worker characteristics. We limit the regression to choices in our main treatments where the more-flexible job had a lower wage. (In the employer discretion treatment, the more-flexible job is the baseline job.) We control for the wage gap Δw . Consistent with our other results, workers choosing worker-friendly arrangements are more likely to be female, but they look similar on other characteristics.

7 Discussion and Conclusion

We implement a discrete choice experiment in the job application process for a national call center to estimate workers' willingness to pay for alternative work arrangements. Despite some of the rhetoric on the importance of workplace flexibility, the majority of workers do not value flexible scheduling or the ability to choose the number of hours they work. Workers do value the option to work from home and strongly dislike employers setting their schedules on short notice. Jobseekers do not seem to mind the inconsistency of these arrangements; mostly they don't want to work nights and weekends. Overall, the traditional M-F 9 am – 5 pm schedule works well for most people, perhaps because this schedule allows them to coordinate their leisure time.

Our estimates of the WTP distribution for workplace amenities allow us to shed light on market compensating differentials. For all of the job attributes we consider, there is considerable evidence of heterogeneity in valuations, suggesting that any analysis based on mean WTP alone will lead to possibly misleading conclusions. While scheduling flexibility is not valued by most workers, the right tail in the WTP distribution still allows for potentially large market compensating wage differentials. The estimates imply that an employer could set the wage of a flexible schedule job or a work from home job at 11% or 14% below the market wage of a fixed schedule job, respectively, and still attract at least 25% of the applicants who would have applied to the fixed schedule job at the higher wage.

Whether there is a business case for setting lower wages and providing this flexibility depends on a

number of things, including the relative productivity of workers with high WTP. In the Chinese firm studied by Bloom et al. (2015), workers who chose to work from home appear at least as productive *ex ante* as workers who did not. In our experiment, workers who select into flexible positions differ significantly only in their gender; they have similar educational characteristics and scores on the cognitive application questions as workers choosing less-flexible positions (Table 12). Another important factor is the extent to which a firm can distinguish higher-ability applicants with a high WTP for these arrangements from lower-ability workers since setting a lower wage would mean attracting more lower-ability applicants. A firm would also need to consider the impact of these arrangements on worker productivity, turnover, and capital costs.

Alternatively, we can interpret our estimates as providing the WTP distribution for the overall workforce (or the population of hourly workers). There is evidence that this is a reasonable approximation given the close correspondence between the weighted and unweighted estimates, and the experimental and nationally-representative survey estimates. Viewed this way, the WTP distributions shed light on the cost to firms of alternative work arrangements. In the frictionless Rosen (1986) framework, workers with the highest valuations for an amenity work at firms with the lowest cost of providing it. These firms provide the amenity, while higher-cost firms employing lower-valuation workers do not. The market compensating differential is the marginal worker’s valuation of the amenity, or equivalently, the marginal firm’s cost of providing it.

Taking our estimated distribution of WTP as the market distribution, we can calculate the implied market compensating differential for an attribute by inverting $E[\tilde{Y} | \Delta w]$. Under perfect sorting, if p is the share of workers in the alternative arrangement, the marginal worker’s valuation is the $1 - p$ percentile of the WTP distribution. This is of course not meant to be taken literally as the actual market compensating differential – there are many reasons why such differentials may not appear – but it is a useful way to assess magnitudes.

In the UAS survey, 20% of hourly workers report being able to make their own schedules. Based on our estimates, there are still workers on the margin who would choose flexible scheduling at a 12% wage discount. The fact that employers are not offering these marginal workers flexible scheduling suggests that flexible scheduling is quite costly for the marginal employer to implement. To the extent that there is not perfect sorting of workers to firms based on the value of the amenity, this conclusion is amplified: there are workers in inflexible jobs willing to take even larger pay cuts for flexible scheduling.⁴² Offering flexible scheduling could be costly to firms because it leads to difficulties in worker coordination or in the ability to monitor workers.

⁴²One caveat is that firms may be prevented from lowering wages by the minimum wage. However, in the UAS we find that the prevalence of and WTP for flexible scheduling is similar when we restrict to workers earning above-minimum wages.

We can do a similar calculation for the ability to choose the number of hours worked. Given that 18% of hourly workers in the UAS report being able to choose the number of hours they work, this suggests a market compensating differential of at least 13% – a sizable compensating differential even given that the average worker does not value this type of flexibility.

Despite the fact that the average worker places a relatively high valuation on working from home, only a relatively small share of hourly workers (9% in the UAS) has this option. This suggests that there are workers who don't have this option who would be willing to take 21% lower wages for the ability to work from home. The fact that they are not working from home suggests that it is likely quite costly for employers to implement this type of flexibility.⁴³

Women value working from home and dislike employer discretion more than men. However, because men are only slightly less likely to work from home and slightly more likely to work irregular schedules, even with large compensating differentials, these differences in preferences cannot explain a large part of gender wage gaps.

⁴³This may be surprising given the positive benefits of work from home found in Bloom et al. (2015). Some jobs (e.g., cashiers) cannot be conducted from home and many others may require more cooperation and teamwork, potentially reducing the benefits of home work. Alternatively, many employers may overestimate the costs of allowing employees to work from home.

References

- Aguirre, Acacia and Andrew Moore-Ede**, “Shiftwork Practices 2014 Manufacturing,” *Circadian Information*, 2014.
- Bloom, Nicholas, James Liang, John Roberts, and Zhichun Jenny Ying**, “Does Working from Home Work? Evidence from a Chinese Experiment,” *The Quarterly Journal of Economics*, 2015, 165, 218.
- Bonhomme, Stéphane and Grégory Jolivet**, “The Pervasive Absence of Compensating Differentials,” *Journal of Applied Econometrics*, 2009, 24 (5), 763–795.
- Borghans, Lex, Bas Ter Weel, and Bruce A Weinberg**, “People people: Social capital and the labor-market outcomes of underrepresented groups,” Technical Report, National Bureau of Economic Research 2006.
- Brown, Charles**, “Equalizing Differences in the Labor Market,” *The Quarterly Journal of Economics*, 1980, pp. 113–134.
- Council of Economic Advisors**, “Work-Life Balance and the Economics of Workplace Flexibility,” <https://www.whitehouse.gov/files/documents/100331-cea-economics-workplace-flexibility.pdf>, March 2010.
- DePillis, Lydia**, “Walmart Is Rolling out Big Changes to Worker Schedules This Year,” *Washington Post*, February 2016.
- Diamond, Peter**, “Testing the Internal Consistency of Contingent Valuation Surveys,” *Journal of Environmental Economics and Management*, 1996, 30 (3), 337–347.
- Diamond, Peter A and Jerry A Hausman**, “Contingent Valuation: Is Some Number Better Than No Number?,” *The Journal of Economic Perspectives*, 1994, 8 (4), 45–64.
- DiNardo, John, Nicole M Fortin, and Thomas Lemieux**, “Labor Market Institutions and the Distribution of Wages, 1973-1992: A Semiparametric Approach,” *Econometrica*, 1996, 64 (5), 1001–1044.
- Ferrell, Diana and Fiona Greig**, “Paychecks, Paydays and the Online Platform Economy,” *JPMorgan Chase & Co. Institute*, February 2016.
- Filer, Randall K**, “Male-Female Wage Differences: The Importance of Compensating Differentials,” *Industrial & Labor Relations Review*, 1985, 38 (3), 426–437.
- Flory, Jeffrey A, Andreas Leibbrandt, and John A List**, “Do Competitive Workplaces Deter Female Workers? A Large-Scale Natural Field Experiment on Job-Entry Decisions,” *The Review of Economic Studies*, 2015, pp. 122–155.
- Goddeeris, John H**, “Compensating Differentials and Self-Selection: An Application to Lawyers,” *The Journal of Political Economy*, 1988, pp. 411–428.
- Goldin, Claudia**, “A Grand Gender Convergence: Its Last Chapter,” *The American Economic Review*, 2014, 104 (4), 1091–1119.
- **and Lawrence F Katz**, “The Cost of Workplace Flexibility for High-Powered Professionals,” *The Annals of the American Academy of Political and Social Science*, 2011, 638 (1), 45–67.

- and —, “The Most Egalitarian of All Professions: Pharmacy and the Evolution of a Family-Friendly Occupation,” Technical Report, National Bureau of Economic Research 2012.
- Hall, Robert E and Andreas I Mueller**, “Wage Dispersion and Search Behavior,” Technical Report, National Bureau of Economic Research 2015.
- Hanley, Nick, Robert E Wright, and Vic Adamowicz**, “Using Choice Experiments to Value the Environment,” *Environmental and Resource Economics*, 1998, 11 (3-4), 413–428.
- Hedegaard, Morten and Jean-Robert Tyran**, “The Price of Prejudice,” Technical Report, University of Copenhagen Department of Economics 2014.
- Hwang, Hae-shin, Dale T Mortensen, and W Robert Reed**, “Hedonic Wages and Labor Market Search,” *Journal of Labor Economics*, 1998, 16 (4), 815–847.
- Kahneman, Daniel and Jack L Knetsch**, “Valuing Public Goods: The Purchase of Moral Satisfaction,” *Journal of Environmental Economics and Management*, 1992, 22 (1), 57–70.
- Kantor, Jodi**, “Starbucks to Revise Policies to End Irregular Schedules for Its 130,000 Baristas,” *New York Times*, August 2014.
- Katz, Lawrence F and Alan B Krueger**, “The Rise and Nature of Alternative Work Arrangements in the United States, 1995-2015,” 2016.
- Kostiuk, Peter F**, “Compensating Differentials for Shift Work,” *Journal of Political Economy*, 1990, pp. 1054–1075.
- Krueger, Alan B and David Schkade**, “Sorting in the Labor Market Do Gregarious Workers Flock to Interactive Jobs?,” *Journal of Human Resources*, 2008, 43 (4), 859–883.
- Lanfranchi, Joseph, Henry Ohlsson, and Ali Skalli**, “Compensating Wage Differentials and Shift Work Preferences,” *Economics Letters*, 2002, 74 (3), 393–398.
- Lang, Kevin and Sumon Majumdar**, “The Pricing of Job Characteristics When Markets Do Not Clear: Theory and Policy Implications,” *International Economic Review*, 2004, 45 (4), 1111–1128.
- Manski, Charles F**, “The Structure of Random Utility Models,” *Theory and Decision*, 1977, 8 (3), 229–254.
- McFadden, Daniel**, “Conditional Logit Analysis of Qualitative Choice Behavior,” in Paul Zarembka, ed., *Frontiers in Econometrics*, Academic press, 1973, chapter 4, pp. 105–142.
- Oettinger, Gerald S**, “The Incidence and Wage Consequences of Home-Based Work in the United States, 1980–2000,” *Journal of Human Resources*, 2011, 46 (2), 237–260.
- Rosen, Sherwin**, “Hedonic Prices and Implicit Markets: Product Differentiation in Pure Competition,” *Journal of Political Economy*, 1974, 82 (1), 34–55.
- , “The Theory of Equalizing Differences,” *Handbook of Labor Economics*, 1986, 1, 641–692.
- Smith, Robert S**, “Compensating Wage Differentials and Public Policy: A Review,” *Industrial and Labor Relations Review*, 1979, pp. 339–352.
- Sorkin, Isaac**, “Ranking Firms Using Revealed Preference,” 2015.
- Stern, Scott**, “Do Scientists Pay to Be Scientists?,” *Management Science*, 2004, 50 (6), 835–853.

Taber, Christopher and Rune Vejlin, “Estimation of a Roy/Search/Compensating Differential Model of the Labor Market,” Technical Report, National Bureau of Economic Research 2016.

Viscusi, W Kip and Joni Hersch, “Cigarette smokers as job risk takers,” *Review of Economics and Statistics*, 2001, 83 (2), 269–280.

— **and Joseph E Aldy**, “The Value of a Statistical Life: A Critical Review of Market Estimates Throughout the World,” *Journal of Risk and Uncertainty*, 2003, 27 (1), 5–76.

Weber, Lauren, “Retailers Are Under Fire for Work Schedules,” *Wall Street Journal*, April 2015.

Wiswall, Matthew and Basit Zafar, “Preference for the Workplace, Human Capital, and Gender,” Technical Report, National Bureau of Economic Research 2016.

Figure 1. WTP for Flexible Schedule
Uncorrected for Inattention



Figure 2. WTP for Flexible Schedule
Corrected for Inattention

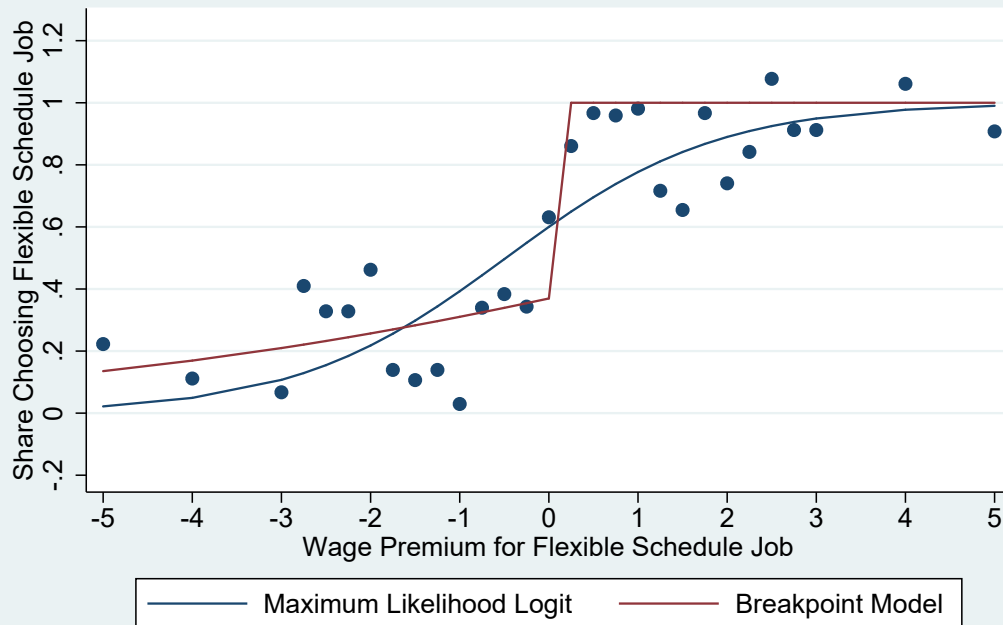


Figure 3. WTP for Flexible Number of Hours
Corrected for Inattention

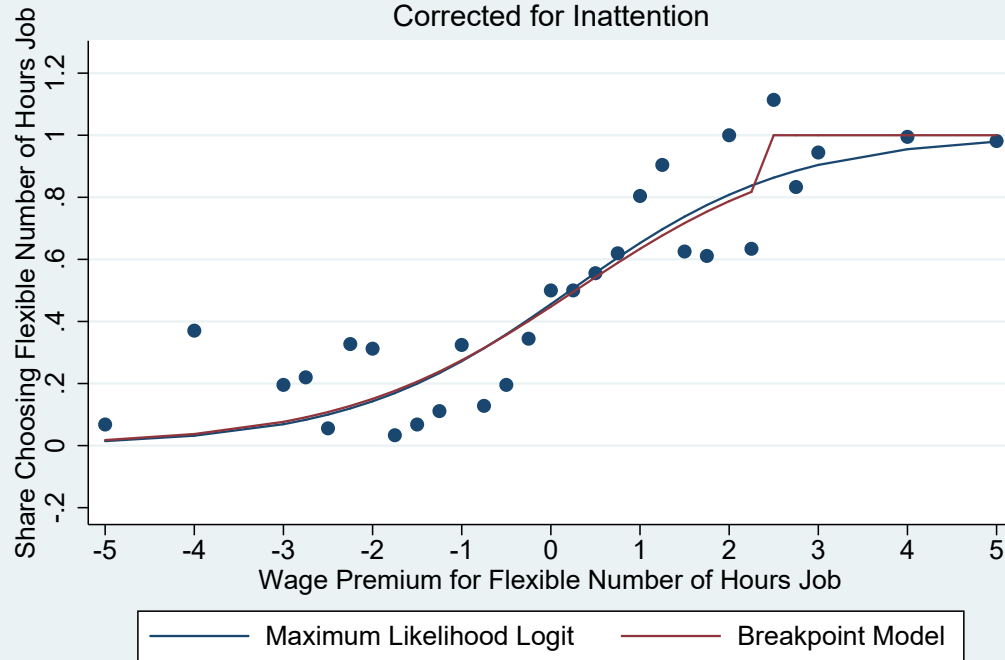


Figure 4. WTP to Work from Home
Corrected for Inattention

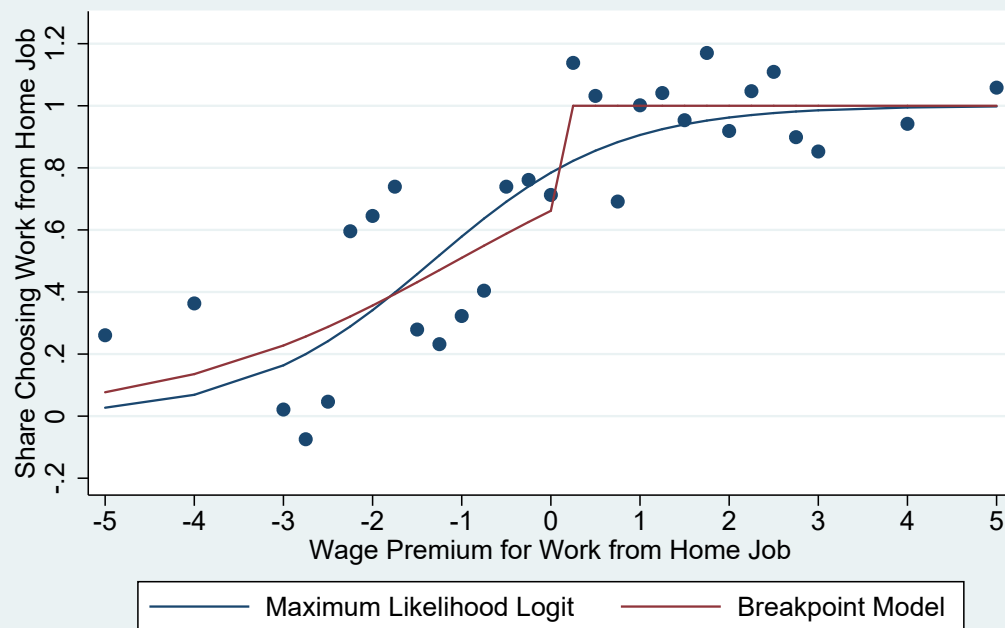


Figure 5. WTP for Combined Flexible Job
Corrected for Inattention

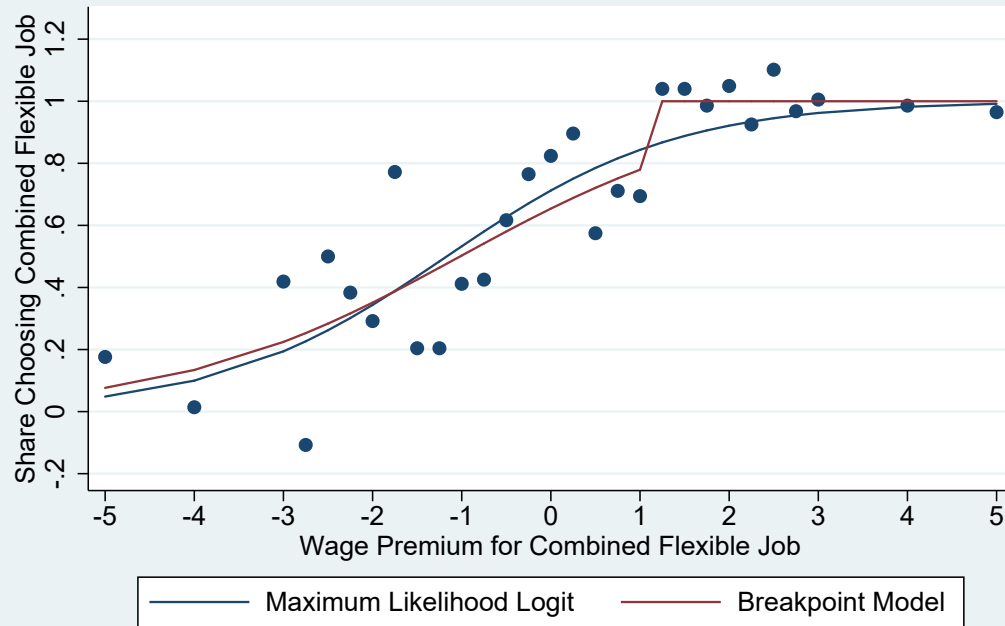


Figure 6. WTP to Avoid Employer Discretion
Corrected for Inattention

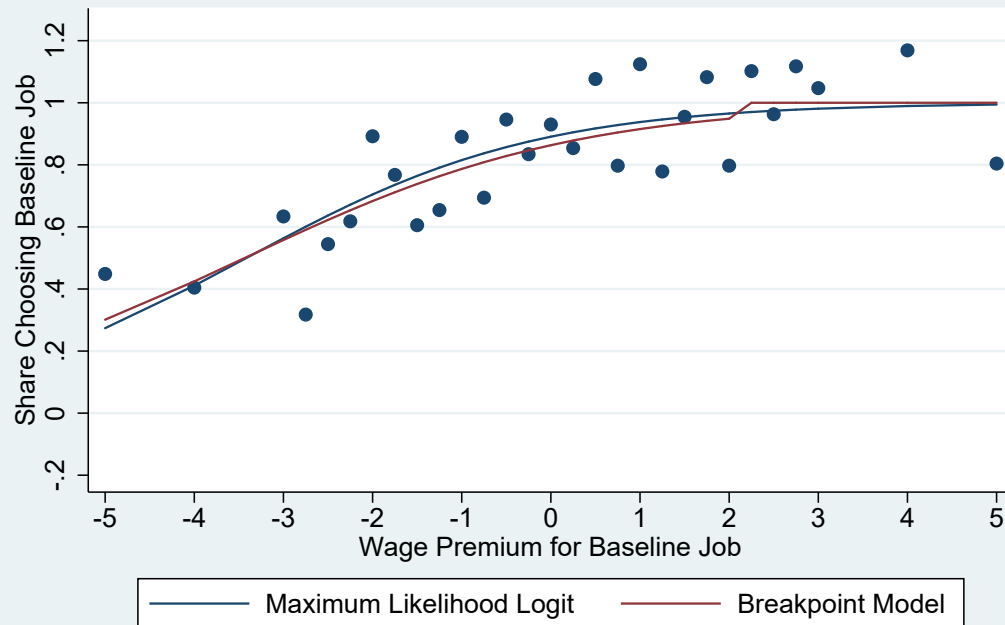
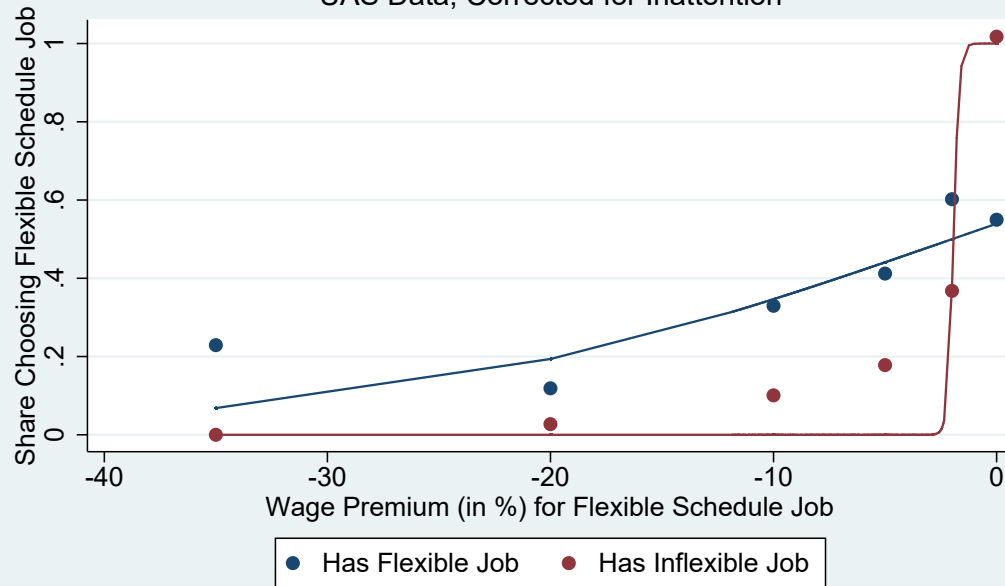


Figure 7. WTP for Flexible Schedule

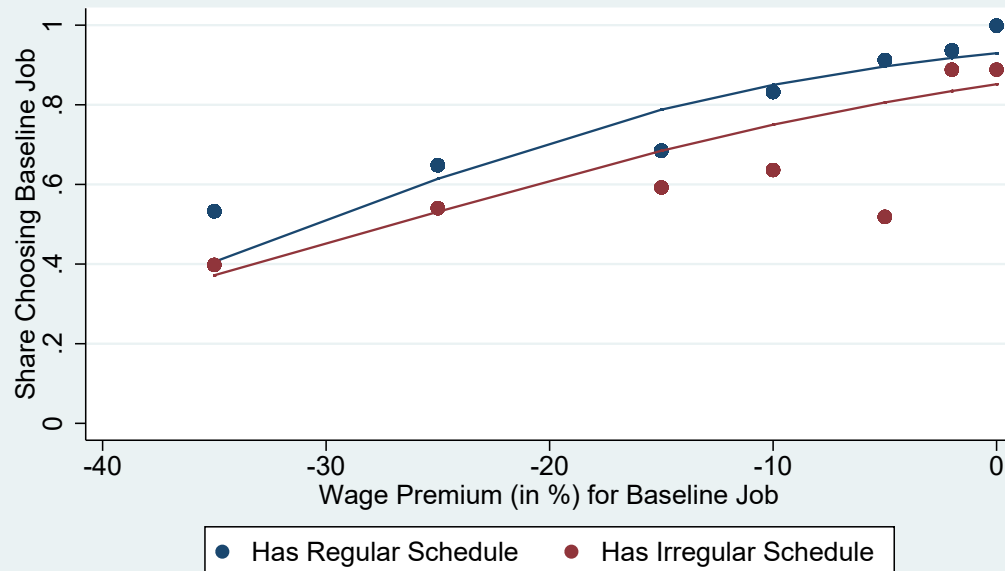
UAS Data; Corrected for Inattention



Note: Flexible jobs are defined as those in which the respondent is able to make his or her own schedule. All other jobs are defined as having inflexible schedules.

Figure 8. WTP to Avoid Employer Discretion

UAS Data; Corrected for Inattention



Note: Irregular schedules are those in which the respondent's schedule varies from week to week and is set by the respondent's employer. All other work schedules are considered regular.

Table 1. Description of Main Treatments

| <u>Treatment Name</u> | <u>Position Description</u> | <u>Sample Size</u> |
|--------------------------|---|--------------------|
| Flexible Schedule | <p>The position is 40 hours per week.</p> <p>You can make your own schedule. This can be a M-F 9 am - 5 pm schedule or other days and times. The work is exclusively on-site in downtown [city]. This position pays [wage] dollars per hour.</p> | 640 |
| Flexible Number of Hours | <p>In this position you can choose the number of hours you work, up to and including 40 hours each week.</p> <p>The position has a M-F daytime schedule. The work is exclusively on-site in downtown [city]. This position pays [wage] dollars per hour.</p> | 663 |
| Work from Home | <p>The position is 40 hours per week.</p> <p>This is a M-F 9 am - 5 pm position. You have the option of working from home as well as on-site in downtown [city]. This position pays [wage] dollars per hour.</p> | 608 |
| Combined Flexible | <p>You can choose the number of hours you work, up to and including 40 hours each week. You can make your own schedule. This can be a M-F 9 am - 5 pm schedule or other days and times.</p> <p>You have the option of working from home as well as on-site in downtown [city].</p> <p>This position pays [wage] dollars per hour.</p> | 694 |
| Employer Discretion | <p>The position is 40 hours per week.</p> <p>The hours in this position vary from week to week. You will be given your work schedule one week in advance. The hours can be morning through evening, weekdays and weekends, but not nights.</p> <p>The work is exclusively on-site in downtown [city]. This position pays [wage] dollars per hour.</p> | 640 |

Table 2. Descriptive Statistics
Experiment, UAS, and Comparison Samples

| | <u>Panel A. Experiment</u> | | | <u>Panel B. UAS</u> | |
|----------------------------|----------------------------|-------------------------|------------------------------------|---------------------|-----------|
| | Experiment | CPS (phone occupations) | CPS (phone occupations, in cities) | UAS | CPS (all) |
| Female | 75% | 67% | 65% | 47% | 52% |
| Currently Employed | 39% | 100% | 100% | 92% | 95% |
| Full-time | 16% | 81% | 82% | 76% | 77% |
| Part-time | 23% | 19% | 18% | 16% | 18% |
| Unemployed | 61% | 0% | 0% | 8% | 5% |
| Age | | | | | |
| Average Age | 33.0 | 38.9 | 38.8 | 42.9 | 46.1 |
| < 30 years old | 49% | 32% | 32% | 18% | 24% |
| 30-40 years old | 28% | 26% | 27% | 29% | 18% |
| > 40 years old | 23% | 43% | 42% | 52% | 58% |
| Education | | | | | |
| Less than High School | 2% | 6% | 6% | 7% | 15% |
| High School | 28% | 31% | 30% | 29% | 28% |
| Some College | 46% | 28% | 28% | 19% | 18% |
| College Degree | 22% | 31% | 32% | 33% | 28% |
| Advanced Degree | 2% | 4% | 4% | 13% | 11% |
| Race | | | | | |
| White | 41% | 59% | 53% | 67% | 64% |
| Black | 33% | 17% | 18% | 13% | 12% |
| Hispanic | 13% | 18% | 21% | 17% | 16% |
| Other/Don't Want to Report | 13% | 3% | 8% | 3% | 8% |
| Observations | 3,245 | 1,041 | 738 | 1,950 | 148,626 |

Notes: The first column of each panel presents descriptive statistics on the experimental sample (Panel A) and the Understanding America Study sample (Panel B). The remaining columns present descriptive statistics on comparison samples. CPS data are from March 2016. "Phone occupations" include telemarketers, bill and account collectors, customer service representatives, and interviewers (except eligibility and loan). The "in cities" column is limited to respondents who live in a metropolitan area (either inside or outside the central city).

Table 3. Randomization Assessment
p-Values from Regressions of Covariates on Wage Gap Dummies

| | Flexible Schedule | Flexible Number of Hours | Work from Home | Combined Flexible | Employer Discretion |
|----------------------------------|----------------------|--------------------------------|-------------------|----------------------|------------------------|
| Age | 0.750 | 0.271 | 0.875 | 0.720 | 0.200 |
| Female | 0.677 | 0.573 | 0.065 | 0.630 | 0.734 |
| White | 0.481 | 0.661 | 0.372 | 0.594 | 0.621 |
| Black | 0.331 | 0.055 | 0.271 | 0.416 | 0.984 |
| Hispanic | 0.054 | 0.365 | 0.049 | 0.755 | 0.442 |
| Other Race/Do Not Want to Report | 0.774 | 0.070 | 0.860 | 0.746 | 0.501 |

Notes: Each cell reports the p-value of an F-statistic from a separate regression of the demographic characteristic indicated by the row on dummies for the difference in offered wages between the baseline M-F 9 am - 5 pm job and the position indicated by the column. This table includes all applicants who were presented with the choice, regardless of whether they made a choice. There are 711 applicants in the Flexible Schedule treatment, 724 in the Flexible Number of Hours treatment, 695 in the Work from home treatment, 739 in the combined flexible treatment, and 763 in the employer discretion treatment.

Table 4. Willingness to Pay for Alternative Work Arrangements

| | Mean | Standard Deviation | <u>Quantiles</u> | | | Observations |
|---|-------------------|-----------------------|-------------------|-------------------|------------------|--------------|
| | | | 25th | 50th | 75th | |
| <u>A. Willingness to Pay for Worker Flexibility</u> | | | | | | |
| Flexible Schedule | \$0.48 (0.25) | \$2.15 (1.16) | -\$0.82 (0.58) | \$0.48 (0.25) | \$1.79 (0.88) | 640 |
| Flexible Number of Hours | -\$0.22 (0.21) | \$2.24 (0.96) | -\$1.58 (0.57) | -\$0.22 (0.21) | \$1.14 (0.66) | 663 |
| Work from Home | \$1.33 (0.30) | \$1.86 (0.87) | \$0.20 (0.53) | \$1.33 (0.30) | \$2.45 (0.67) | 608 |
| Combined Flexible | \$1.17 (0.30) | \$2.33 (0.81) | -\$0.25 (0.47) | \$1.17 (0.30) | \$2.58 (0.66) | 694 |
| <u>B. Willingness to Pay to Avoid Employer Discretion</u> | | | | | | |
| Employer Discretion | \$3.41 (0.42) | \$2.95 (0.92) | \$1.63 (0.48) | \$3.41 (0.42) | \$5.20 (0.87) | 640 |

Notes: All treatments are compared to the baseline Monday-Friday, 9 am - 5 pm position. Estimates are generated using an inattention-corrected maximum likelihood logit model using data from the experiment. Bootstrapped standard errors based on 500 samples are in parentheses.

Table 5. Willingness to Pay for Alternative Work Arrangements: Robustness to Reweighting
Reweighted by Demographic Characteristics to Match March 2016 CPS

| | Mean | Standard Deviation | Quantiles | | | Observations |
|--|-------------------|-----------------------|-------------------|-------------------|------------------|--------------|
| | | | 25th | 50th | 75th | |
| <u>A. Weighted Using Pre-Experiment Characteristics Only</u> | | | | | | |
| <u>Willingness to Pay for</u> | | | | | | |
| Flexible Schedule | \$0.44 (0.29) | \$3.66 (1.03) | -\$1.78 (0.65) | \$0.44 (0.29) | \$2.65 (0.72) | 604 |
| Flexible Number of Hours | -\$0.11 (0.24) | \$0.74 (1.05) | -\$0.56 (0.68) | -\$0.11 (0.24) | \$0.34 (0.68) | 623 |
| Work from Home | \$1.33 (0.48) | \$1.94 (0.88) | \$0.16 (0.38) | \$1.33 (0.48) | \$2.51 (0.94) | 565 |
| Combined Flexible | \$1.13 (0.38) | \$1.59 (0.91) | \$0.17 (0.62) | \$1.13 (0.38) | \$2.10 (0.72) | 643 |
| <u>Willingness to Pay to Avoid</u> | | | | | | |
| Employer Discretion | \$3.23 (0.61) | \$4.26 (0.88) | \$0.65 (0.41) | \$3.23 (0.61) | \$5.81 (1.08) | 611 |
| <u>B. Weighted Using All Demographic Characteristics</u> | | | | | | |
| <u>Willingness to Pay for</u> | | | | | | |
| Flexible Schedule | \$0.24 (0.18) | \$0.40 (0.76) | \$0.00 (0.47) | \$0.24 (0.18) | \$0.48 (0.52) | 465 |
| Flexible Number of Hours | -\$0.30 (0.34) | \$1.30 (1.04) | -\$1.09 (0.63) | -\$0.30 (0.34) | \$0.48 (0.79) | 514 |
| Work from Home | \$1.35 (0.75) | \$1.43 (1.21) | \$0.48 (0.53) | \$1.35 (0.75) | \$2.21 (1.39) | 457 |
| Combined Flexible | \$1.42 (0.61) | \$1.46 (1.00) | \$0.53 (0.55) | \$1.42 (0.61) | \$2.30 (1.09) | 522 |
| <u>Willingness to Pay to Avoid</u> | | | | | | |
| Employer Discretion | \$3.75 (1.40) | \$4.99 (1.97) | \$0.73 (0.94) | \$3.75 (1.40) | \$6.78 (2.43) | 483 |

Notes: Weights are calculated using the DiNardo, Fortin and Lemieux (1996) method, matching the covariate distribution of the March 2016 CPS. Panel A uses race dummies, a female dummy, age, and age*race, age*female, and female*race interaction terms to create weights. Panel B adds educational attainment categories. Estimates are based on an inattention-corrected maximum likelihood logit model using data from the experiment. Bootstrapped standard errors based on 500 samples are in parentheses. Sample weights are capped at a maximum of 10 standard deviations above the sample mean weight. This restriction affects 2 observations in Panel A and 5 observations in Panel B.

Table 6. Willingness to Pay for a 40 Hour-per-Week Job

| | Mean | Standard Deviation | 25th | <u>Quantiles</u> 50th | 75th | Observations |
|----------------------|--|-----------------------|-------------------|--------------------------|-------------------|--------------|
| | <u>A. WTP for a 40 Hour-per-Week Job</u> | | | | | |
| <u>Relative to</u> | | | | | | |
| 20 Hour-per-Week Job | \$6.20 (1.40) | \$6.34 (1.82) | \$2.37 (0.60) | \$6.20 (1.40) | \$10.03 (2.45) | 728 |
| 50 Hour-per-Week Job | \$0.88 (0.73) | \$6.33 (2.90) | -\$2.96 (2.42) | \$0.88 (0.73) | \$4.72 (1.18) | 751 |
| | <u>B. Shadow Value of Time</u> | | | | | |
| 20 Hour-per-Week Job | \$3.60 (2.81) | | -\$4.07 (4.90) | \$3.60 (2.81) | \$11.26 (1.19) | 728 |
| 50 Hour-per-Week Job | \$19.52 (2.94) | | \$4.17 (9.70) | \$19.52 (2.94) | \$34.87 (4.70) | 751 |

Notes: The table provides statistics on workers' willingness to pay for a 40 hour-per-week job relative to a 20 hour- and 50 hour-per-week job. Estimates are based on an inattention-corrected maximum likelihood logit model using data from the experiment. Standard errors calculated using the delta method are in parentheses.

Table 7. Unpacking Aversion to Employer Discretion

| Alternative Option | Base Option | Mean | Standard Deviation | Quantiles | | | Observations |
|--|--|-------------------|-----------------------|-------------------|-------------------|-------------------|--------------|
| | | | | 25th | 50th | 75th | |
| Irregular Hours, Consistent Schedule | M-F 9 am - 5 pm | \$3.42 (0.51) | \$5.73 (1.09) | -\$0.05 (0.50) | \$3.42 (0.51) | \$6.89 (1.06) | 626 |
| Morning Schedule (M-F 7 am - 3 pm) | M-F 9 am - 5 pm | -\$1.09 (0.44) | \$1.12 (1.52) | -\$1.77 (0.74) | -\$1.09 (0.44) | -\$0.41 (1.24) | 202 |
| Afternoon/Evening Schedule (M-F 12 pm - 8 pm) | M-F 9 am - 5 pm | \$2.39 (0.73) | \$4.34 (1.04) | -\$0.24 (0.46) | \$2.39 (0.73) | \$5.02 (1.28) | 195 |
| Weekend Schedule (Th-M 9 am - 5 pm) | M-F 9 am - 5 pm | \$3.27 (0.70) | \$4.13 (0.99) | \$0.76 (0.55) | \$3.27 (0.70) | \$5.77 (1.18) | 209 |
| 2 nd Shift (M-F 3 pm - 11 pm) | 1 st Shift (M-F 7 am - 3 pm) | \$5.20 (1.72) | \$6.21 (2.12) | \$1.43 (0.76) | \$5.20 (1.72) | \$8.96 (2.94) | 192 |

Notes: The table provides statistics on workers' willingness to pay for the base option relative to the alternative option. Estimates are based on an inattention-corrected maximum likelihood logit model using data from the experiment. Bootstrapped standard errors based on 500 samples are in parentheses. Appendix Table 11 contains the job description text for each treatment.

Table 8. Willingness to Pay for Flexible Schedule
Estimates from the Understanding America Study

| Mean | Standard Deviation | <u>Quantiles</u> | | | Observations |
|---|-----------------------|------------------|--------|----------|--------------|
| | | 25th | 50th | 75th | |
| <u>A. All</u> | | | | | |
| 2.5% | 4.0% | 0.1% | 2.5% | 4.9% | 1,598 |
| (0.4%) | (1.4%) | (0.7%) | (0.4%) | (1.1%) | |
| <u>B. In Flexible-Schedule Job</u> | | | | | |
| 2.0% | 22.9% | -11.9% | 2.0% | 15.9% | 450 |
| (2.7%) | (7.9%) | (6.8%) | (2.7%) | (3.9%) | |
| <u>C. In Inflexible-Schedule Job</u> | | | | | |
| 1.9% | 0.2% | 1.8% | 1.9% | 2.1% | 1,148 |
| (0.0%) | (0.1%) | (0.1%) | (0.0%) | (0.0%) | |
| <u>D. Difference: In Flexible-Schedule Job - In Inflexible-Schedule Job</u> | | | | | |
| 0.1% | 22.6%*** | -13.7%** | 0.1% | 13.8%*** | 1,598 |
| (2.6%) | (7.5%) | (6.4%) | (2.6%) | (3.7%) | |

Notes: The table show statistics for workers' willingness to pay for the flexible schedule job relative to the M - F 9 am - 5 pm baseline job. Data come from the Understanding America Study. Respondents are considered to have a flexible-schedule job if they report being able to make their own schedule at work. All other jobs are defined to be have inflexible schedules. Estimates are generated using an inattention-corrected maximum likelihood logit model. * denotes the difference is significant at the 10% level and is only presented for the *Difference* panels. Standard errors calculated using the delta method are in parentheses.

Table 9. Willingness to Pay to Avoid Employer Discretion
Estimates from the Understanding America Study

| Mean | Standard Deviation | <u>Quantiles</u> | | | Observations |
|--|-----------------------|------------------|--------|---------|--------------|
| | | 25th | 50th | 75th | |
| <u>A. All</u> | | | | | |
| 29.3% | 22.1% | 15.9% | 29.3% | 42.7% | 1,614 |
| (1.7%) | (2.2%) | (1.4%) | (1.7%) | (2.8%) | |
| <u>B. Employed</u> | | | | | |
| 30.1% | 22.2% | 16.7% | 30.1% | 43.6% | 1,461 |
| (1.9%) | (2.4%) | (1.5%) | (1.9%) | (3.1%) | |
| <u>C. Unemployed</u> | | | | | |
| 22.6% | 23.7% | 8.2% | 22.6% | 36.9% | 153 |
| (4.4%) | (7.6%) | (4.7%) | (4.4%) | (7.7%) | |
| <u>D. Difference: Employed - Unemployed</u> | | | | | |
| 7.6% | -1.5% | 8.49* | 7.6% | 6.6% | 1,614 |
| (4.8%) | (8.0%) | (4.9%) | (4.8%) | (8.3%) | |
| <u>E. In Job with Irregular Schedule</u> | | | | | |
| 26.9% | 27.9% | 10.0% | 26.9% | 43.9% | 218 |
| (5.2%) | (8.9%) | (4.4%) | (5.2%) | (9.6%) | |
| <u>F. In Job with a Regular Schedule</u> | | | | | |
| 30.5% | 21.4% | 17.5% | 30.5% | 43.5% | 1,250 |
| (2.0%) | (2.5%) | (1.6%) | (2.0%) | (3.2%) | |
| <u>G. Difference: Irregular - Regular Schedule</u> | | | | | |
| 3.6% | -6.5% | 7.5% | 3.6% | -0.4% | 1,468 |
| (5.6%) | (10.8%) | (4.6%) | (5.6%) | (10.2%) | |

Notes: Estimates are generated using an inattention-corrected maximum likelihood logit model using data from the Understanding America Study. Irregular schedules are those in which the employer chooses the worker's schedule and it varies from week to week; all other work schedules are considered regular. * denotes the difference is significant at the 10% level and is only presented for Panel D. Standard errors calculated using the delta method are in parentheses.

Table 10. Willingness to Pay by Gender
Data from the Experiment

| | Mean WTP for Flexibility | | | | Mean WTP to Avoid |
|-------------------------------|--------------------------|-----------------------------|------------------|----------------------|---------------------|
| | Flexible Schedule | Flexible Number of Hours | Work from Home | Combined Flexible | Employer Discretion |
| Female | \$0.58 (0.34) | -\$0.19 (0.28) | \$1.59 (0.40) | \$1.56 (0.48) | \$4.27 (0.78) |
| Male | \$0.16 (0.34) | -\$0.34 (0.36) | \$0.68 (0.42) | \$0.03 (0.44) | \$2.11 (0.54) |
| Difference (Female - Male) | \$0.42 (0.48) | \$0.15 (0.46) | \$0.91 (0.58) | \$1.52** (0.62) | \$2.16** (0.98) |
| Observations | 609 | 638 | 576 | 654 | 621 |

Notes: The table shows the mean willingness to pay for or to avoid each alternative work arrangement, by gender. Estimates are generated using an inattention-corrected maximum likelihood logit model using data from the experiment. Bootstrapped standard errors based on 500 samples are in parentheses. For the gender difference estimates, ** denotes significance at the 5% level.

Table 11. WTP by Gender and Parental Status
Data from Understanding America Study

| | <u>Flexible Schedule</u> | | | <u>Employer Discretion</u> | | |
|---|-----------------------------|---------------------------|--------------|------------------------------|----------------------------------|--------------|
| | % in Flexible-Schedule Jobs | WTP for Flexible Schedule | Observations | % in Irregular-Schedule Jobs | WTP to Avoid Employer Discretion | Observations |
| <u>A. Women</u> | | | | | | |
| Women with Children under 13 | 27.0% | 1.3% (0.7%) | 317 | 12.1% | 37.5% (6.0%) | 351 |
| Women without Children under 13 | 30.0% | 2.1% (1.1%) | 550 | 12.7% | 28.3% (2.5%) | 611 |
| p-value of Difference | 0.43 | 0.57 | | 0.82 | 0.16 | |
| <u>B. Men</u> | | | | | | |
| Men with Children under 13 | 20.2% | 2.9% (1.1%) | 248 | 15.6% | 28.2% (3.4%) | 258 |
| Men without Children under 13 | 28.6% | 3.1% (0.4%) | 488 | 19.0% | 27.5% (3.2%) | 529 |
| p-value of Difference | 0.03 | 0.86 | | 0.38 | 0.88 | |
| p-value: Difference between women with Children under 13 and All Other Groups | 0.96 | 0.22 | | 0.14 | 0.14 | |

Notes: Estimates are generated using an inattention-corrected maximum likelihood logit model using data from the UAS. Standard errors calculated using the delta method are in parentheses. Respondents are considered to be in an irregular-schedule job if their employer sets their schedule and their schedule varies from week to week. They are considered to have a flexible-schedule job if they are able to set their own schedule. The fraction of each group in flexible-schedule and irregular-schedule jobs is conditional on employment.

Table 12. Relationship between Job Choice and Applicant Characteristics
Dependent Variable: Chose More-Flexible Job

| | | | | | | |
|-------------------------------------|---------------------|-------------------|-------------------|------------------|---------------------|-------------------|
| Female | 0.133*** (0.028) | | | | 0.132*** (0.031) | |
| Black | | 0.001 (0.029) | | | -0.008 (0.033) | |
| Hispanic | | -0.002 (0.040) | | | 0.019 (0.045) | |
| Other Race/Do Not Want To Report | | 0.059 (0.037) | | | 0.020 (0.043) | |
| Some College | | | -0.004 (0.032) | | 0.002 (0.033) | |
| College Degree or More | | | 0.024 (0.037) | | 0.032 (0.038) | |
| ACT Questions Correct | | | | 0.001 (0.015) | 0.000 (0.015) | |
| Above Median Age | | | | | 0.014 (0.024) | -0.018 (0.029) |
| Mean of Dependent Variable | 0.444 | 0.444 | 0.437 | 0.437 | 0.444 | 0.439 |
| Observations | 1,564 | 1,641 | 1,301 | 1,301 | 1,641 | 1,247 |
| R-Squared | 0.028 | 0.016 | 0.021 | 0.021 | 0.014 | 0.035 |

Notes: Each column presents the results of a regression of an indicator for whether a worker chose the more-flexible of the jobs presented on the characteristics in the left-most column. Applicants from the Flexible Schedule, Flexible Number of Hours, Work from Home, Combined Flexible, and Employer Discretion treatments who were presented a choice in which the more-flexible job was offered at a lower wage are included. The more-flexible job in the Employer Discretion treatment is the baseline job. All regressions include a control for the difference in the wages offered. *** denotes the coefficient is significant at the 1% level.

Appendix Figure 1. Job Advertisement

Phone Survey Associate ([city, state])

The [center] is currently recruiting phone survey interviewers to join our call center team in [city].

This is not a sales or telemarketing position.

Please follow the link [link] to apply to this opportunity. We do not accept applications through email.

Essential Functions

Make phone calls in order to implement phone surveys

Desired Skills

Good communication skills

Ability to work with others

Used to basic computer and/or mobile applications

- Principals only. Recruiters, please don't contact this job poster.
- do NOT contact us with unsolicited services or offers

compensation: \$11.00 - \$16.00¹ dollars/hour

employment type: employee's choice

¹ Notes: This was \$11.00 - \$16.00 in some cities and \$14.00 to \$19.00 in others.

Appendix Figure 2. Welcome Message

Tell us which of the following two positions you prefer. The type of work is the same in both jobs. Please click on each job title in order to review the work descriptions.

It is important that you read the position descriptions carefully so you can indicate your preference below.

Positions

 Phone Survey Associate Position #309 (click for description)

This is a phone survey position.

The position is 40 hours per week.

This is a M-F 9 am - 5 pm position. The work is exclusively on-site in downtown Albany. This position pays 19.00 dollars per hour.

 Phone Survey Associate Position #468 (click for description)

This is a phone survey position.

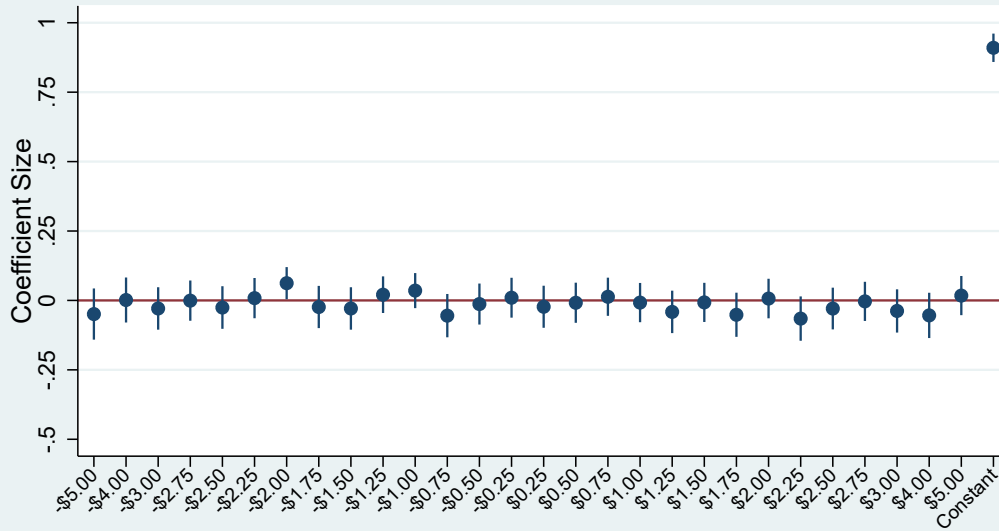
The position is 40 hours per week.

You can make your own schedule. This can be a M-F 9 am - 5 pm schedule or other days and times. The work is exclusively on-site in downtown Albany. This position pays 18.00 dollars per hour.

If you were selected for both positions, which one would you prefer? Write your preferred position number in the box below. (Regardless of your choice, you will be considered for all open positions. Your choice will not affect whether you receive a job offer. It will only be reviewed after hiring decisions have been made.) If you are not interested in either position, simply click on "No thanks, this isn't for me."

Notes: The name of the center is redacted.

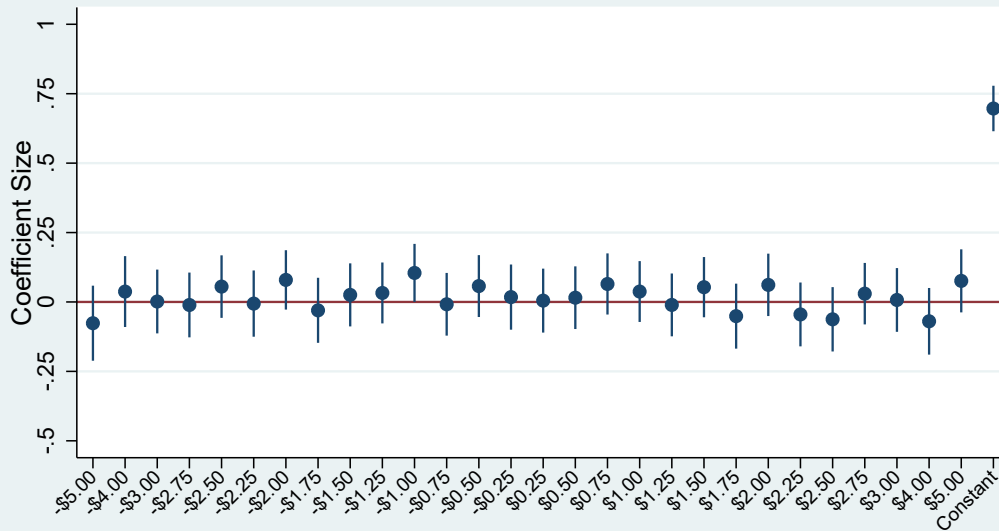
Appendix Figure 3. Probability of Choosing a Job Option by Wage Gap



Wage Gap Dummies

Notes: The figure plots the coefficients from a regression of a dummy for choosing one of the two job options on dummies for the wage gap between the more- and less-flexible jobs. Data from the Flexible Schedule, Flexible Number of Hours, Work from Home, Combined Flexible, and Employer Discretion treatments are included. Applicants are included if they were presented with the job options. The omitted category is a \$0 wage gap. Vertical bars show the 95% confidence interval.

Appendix Figure 4. Probability of Submitting Subsequent Demographic Information by Wage Gap



Wage Gap Dummies

Notes: The figure plots the coefficients from a regression of a dummy for submitting the demographic information after the job choice on dummies for the wage gap between the more- and less-flexible jobs. Data from the Flexible Schedule, Flexible Number of Hours, Work from Home, Combined Flexible, and Employer Discretion treatments are included. The omitted category is a \$0 wage gap. Vertical bars show the 95% confidence interval.

Appendix Figure 5. WTP for Flexible Number of Hours

Uncorrected for Inattention



Appendix Figure 6. WTP to Work from Home

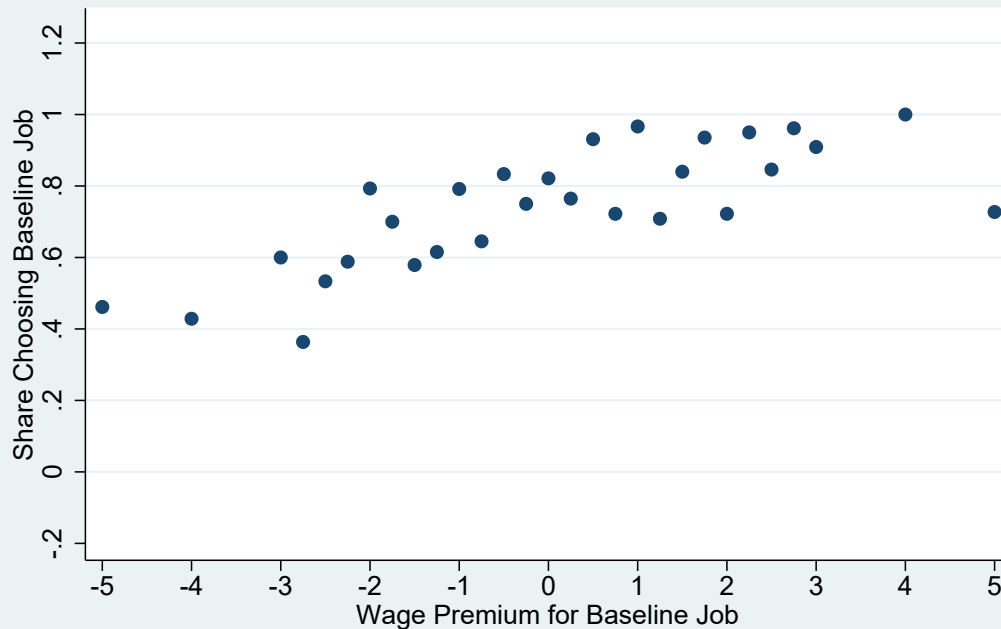
Uncorrected for Inattention



Appendix Figure 7. WTP for Combined Flexible Job
Uncorrected for Inattention



Appendix Figure 8. WTP to Avoid Employer Discretion
Uncorrected for Inattention



Appendix Table 1. Randomization Assessment: Workers who Made a Job Choice Only
p-values from Regressions of Covariates on Wage Gap Dummies

| | Flexible Schedule | Flexible Number of Hours | Work from Home | Combined Flexible | Employer Discretion |
|----------------------------------|----------------------|--------------------------------|-------------------|----------------------|------------------------|
| Age | 0.705 | 0.310 | 0.633 | 0.676 | 0.255 |
| Female | 0.770 | 0.812 | 0.157 | 0.564 | 0.488 |
| White | 0.527 | 0.730 | 0.159 | 0.669 | 0.825 |
| Black | 0.360 | 0.093 | 0.097 | 0.752 | 0.989 |
| Hispanic | 0.012 | 0.295 | 0.297 | 0.726 | 0.252 |
| Other Race/Do Not Want to Report | 0.838 | 0.106 | 0.635 | 0.758 | 0.768 |

Notes: This table replicates Table 3, where the sample is limited to individuals who chose one of the two positions presented. Each cell reports the p-value of an F-statistic from a separate regression of the demographic characteristic indicated by the row on dummies for the difference in offered wages between the baseline M-F 9 am - 5 pm job and the job indicated by the column. There are 640 applicants in the Flexible Schedule treatment, 663 in the Flexible Number of Hours treatment, 608 in the Work from Home treatment, 694 in the Combined Flexible treatment, and 640 in the Employer Discretion treatment.

Appendix Table 2. Descriptive Statistics by Treatment

| | Flexible Schedule | Flexible Number of Hours | Work from Home | Flexible Combination | Employer Discretion | p-value of difference |
|----------------------------------|----------------------|--------------------------------|-------------------|-------------------------|------------------------|--------------------------|
| Age | 32.9 | 33.2 | 33.3 | 33.5 | 32.2 | 0.23 |
| Female | 75% | 77% | 77% | 76% | 73% | 0.50 |
| <i>Race/Ethnicity</i> | | | | | | |
| White | 41% | 42% | 42% | 39% | 37% | 0.28 |
| Black | 31% | 32% | 33% | 32% | 33% | 0.93 |
| Hispanic | 14% | 12% | 11% | 13% | 13% | 0.57 |
| Other Race/Don't Want to Respond | 14% | 14% | 14% | 16% | 17% | 0.46 |
| <i>Education</i> | | | | | | |
| Less than High School | 2% | 1% | 1% | 2% | 3% | 0.69 |
| High School | 29% | 29% | 26% | 31% | 32% | 0.29 |
| Some College | 47% | 46% | 46% | 47% | 43% | 0.67 |
| College Degree | 22% | 21% | 24% | 20% | 23% | 0.59 |
| Advanced Degree | 2% | 3% | 3% | 2% | 1% | 0.10 |
| Observations | 640 | 663 | 608 | 694 | 640 | 3,245 |

Notes: The first five columns of data show the mean of the demographic characteristic indicated by the row for applicants in the treatment indicated by the column. The final column shows the p-value from a test that the means are equal across treatments.

Appendix Table 3. Willingness to Pay for Alternative Work Arrangements
Breakpoint Method

| | Mean | Standard Deviation | <u>Quantiles</u> | | | Observations |
|---|-------------------|-----------------------|-------------------|-------------------|------------------|--------------|
| | | | 25th | 50th | 75th | |
| <u>A. Willingness to Pay for Worker Flexibility</u> | | | | | | |
| Flexible Schedule | \$1.75 (3.36) | \$3.43 (4.11) | \$0.00 (0.82) | \$0.00 (0.26) | \$2.14 (3.07) | 640 |
| Flexible Number of Hours | -\$0.01 (0.96) | \$1.96 (1.52) | -\$1.72 (0.66) | -\$0.28 (0.29) | \$1.17 (1.18) | 663 |
| Work from Home | \$1.72 (2.52) | \$2.04 (3.20) | \$0.00 (0.60) | \$1.06 (0.48) | \$2.80 (3.52) | 608 |
| Combined Flexible | \$1.42 (1.57) | \$2.30 (2.14) | -\$0.74 (0.65) | \$1.02 (0.39) | \$2.77 (1.80) | 694 |
| <u>B. Willingness to Pay to Avoid Employer Discretion</u> | | | | | | |
| Employer Discretion | \$3.53 (2.18) | \$3.16 (2.39) | \$1.39 (0.54) | \$3.43 (1.63) | \$5.48 (3.42) | 640 |

Notes: This table replicates Table 4, where instead of using a maximum likelihood logit model, the estimates are generated using the breakpoint model, corrected for inattention. This model is described in Section 3 of the text. Bootstrapped standard errors based on 500 samples are in parentheses. The estimates from the bootstrap runs are capped at 5 times the maximum point estimate across all five main treatments for the respective statistic (mean, standard deviation, or quantile).

Appendix Table 4. Willingness to Pay for Alternative Work Arrangements
Uncorrected for Inattention

| | Mean | Standard Deviation | <u>Quantiles</u> | | | Observations |
|---|-------------------|-----------------------|-------------------|-------------------|------------------|--------------|
| | | | 25th | 50th | 75th | |
| <u>A. Willingness to Pay for Worker Flexibility</u> | | | | | | |
| Flexible Schedule | \$0.59 (0.23) | \$4.51 (0.54) | -\$2.14 (0.34) | \$0.59 (0.23) | \$3.32 (0.45) | 640 |
| Flexible Number of Hours | -\$0.13 (0.22) | \$4.87 (0.56) | -\$3.07 (0.41) | -\$0.13 (0.22) | \$2.82 (0.40) | 663 |
| Work from Home | \$1.44 (0.40) | \$6.38 (1.20) | -\$2.42 (0.55) | \$1.44 (0.40) | \$5.31 (1.03) | 608 |
| Combined Flexible | \$1.26 (0.34) | \$6.60 (1.02) | -\$2.73 (0.53) | \$1.26 (0.34) | \$5.26 (0.84) | 694 |
| <u>B. Willingness to Pay to Avoid Employer Discretion</u> | | | | | | |
| Employer Discretion | \$3.74 (0.49) | \$5.43 (0.79) | \$0.45 (0.28) | \$3.74 (0.49) | \$7.03 (0.93) | 640 |

Notes: This table replicates Table 4, where the estimates are generated without correcting the data for inattention before the maximum likelihood logit estimation. Bootstrapped standard errors based on 500 samples are in parentheses.

Appendix Table 5. WTP Estimates for Alternative Work Arrangements
All Jobs Limited to 20 Hours per Week

| | Mean | Standard Deviation | <u>Quantiles</u> | | | Observations |
|---|------------------|-----------------------|-------------------|------------------|------------------|--------------|
| | | | 25th | 50th | 75th | |
| <u>A. Willingness to Pay for Worker Flexibility</u> | | | | | | |
| Flexible Schedule | \$0.55 (0.50) | \$1.45 (1.51) | -\$0.33 (0.73) | \$0.55 (0.50) | \$1.43 (1.28) | 176 |
| Flexible Number of Hours | \$0.39 (0.37) | \$1.79 (0.86) | -\$0.70 (0.46) | \$0.39 (0.37) | \$1.47 (0.77) | 182 |
| Work from Home | \$0.89 (0.37) | \$2.87 (0.95) | -\$0.84 (0.63) | \$0.89 (0.37) | \$2.63 (0.73) | 193 |
| Combined Flexible | \$1.24 (0.49) | \$1.85 (1.03) | \$0.12 (0.59) | \$1.24 (0.49) | \$2.36 (0.95) | 181 |
| <u>B. Willingness to Pay to Avoid Employer Discretion</u> | | | | | | |
| Employer Discretion | \$2.64 (0.69) | \$4.33 (1.01) | \$0.02 (0.43) | \$2.64 (0.69) | \$5.26 (1.23) | 178 |

Notes: This table replicates Table 4, where both the baseline treatment and the alternative treatments are 20 hours per week. The Flexible Number of Hours treatment allows the worker to choose the number of hours worked up to 20 hours per week.

Appendix Table 6. Descriptive Statistics: Experimental Sample and March CPS
Weighted and Unweighted Estimates

| | CPS | Experiment | | |
|----------------------------------|----------------|------------|--|---------------------------------|
| | Hourly Workers | Unweighted | Weighted Using Pre-Experiment Demographics | Weighted Using All Demographics |
| Female | 50% | 76% | 50% | 49% |
| Age | 39.4 | 33.0 | 38.5 | 38.7 |
| <i>Race</i> | | | | |
| White | 59% | 41% | 59% | 61% |
| Black | 13% | 32% | 13% | 13% |
| Hispanic | 20% | 13% | 21% | 19% |
| Other Race/Do Not Want to Report | 8% | 13% | 8% | 7% |
| <i>Education</i> | | | | |
| Less than High School | 12% | 2% | 2% | 13% |
| High School | 33% | 28% | 26% | 29% |
| Some College | 23% | 46% | 44% | 23% |
| College Degree | 27% | 22% | 25% | 28% |
| More than College | 5% | 2% | 3% | 7% |
| Observations | 7,567 | 3,245 | 3,046 | 2,441 |

Notes: The first column of data shows descriptive statistics for hourly workers in the March 2016 CPS. The second, third, and fourth columns of data show descriptive characteristics for the experimental sample, with different weights. Pre-experiment demographics are collected before the job options are presented. These weights are constructed using race categories, a female dummy, age, and age*race, age*female, and female*race interaction terms. The weights in the final column are generated using these characteristics and educational attainment categories. Sample weights are capped at a maximum of 10 standard deviations above the sample mean weight. This restriction affects 2 observations in the third column of data and 5 observations in the fourth.

Appendix Table 7. Willingness to Pay for a 40 Hour-per-Week Job
Uncorrected for Inattention

| | Mean | Standard Deviation | 25th | <u>Quantiles</u> 50th | 75th | Observations |
|--|-------------------|-----------------------|--------------------|--------------------------|-------------------|--------------|
| <u>A. WTP for a 40 Hour-per-Week Job</u> | | | | | | |
| <u>Relative to</u> 20 Hour-per-Week Job | \$8.03 (2.12) | \$13.37 (3.55) | -\$0.05 (0.64) | \$8.03 (2.12) | \$16.11 (4.21) | 728 |
| 50 Hour-per-Week Job | \$0.86 (0.75) | \$8.84 (4.02) | -\$4.49 (3.11) | \$0.86 (0.75) | \$6.22 (1.81) | 751 |
| <u>B. Shadow Value of Time</u> | | | | | | |
| 20 Hour-per-Week Job | -\$0.06 (4.24) | | -\$16.23 (8.43) | -\$0.06 (4.24) | \$16.10 (1.29) | 728 |
| 50 Hour-per-Week Job | \$19.45 (3.00) | | -\$1.97 (12.46) | \$19.45 (3.00) | \$40.88 (7.25) | 751 |

Notes: The table replicates Table 6, where the estimates are generated without correcting the data for inattention before the maximum likelihood logit estimation. Standard errors calculated using the delta method are in parentheses.

Appendix Table 8. Effect of Commuting Time on WTP for Alternative Work Arrangements

| | Flexible Schedule | Flexible Number of Hours | Work from Home | Combined Flexible | Employer Discretion |
|--|----------------------|--------------------------------|-------------------|----------------------|------------------------|
| Mean WTP for Applicants Who Live in the Same Zip Code As the Job | \$0.04 (0.36) | \$0.40 (0.42) | \$1.14 (0.59) | \$0.63 (0.51) | \$3.14 (0.65) |
| Additional WTP for an Additional One Hour per Day of Commuting Time | \$0.76 (0.59) | -\$0.88 (0.52) | \$0.28 (0.85) | \$0.91 (0.82) | \$0.68 (0.92) |
| Observations | 632 | 645 | 597 | 690 | 632 |

Notes: The table shows mean willingness to pay estimates from an inattention-corrected maximum likelihood logit model using data from the experiment. Commuting time is calculated as twice the driving time between an applicant's zip code and the zip code of the job at 8 am Monday morning, as estimated by Google Maps. Bootstrap standard errors based on 500 samples are in parentheses.

Appendix Table 9. Willingness to Pay for Alternative Work Arrangements
Robustness to Alternative Inattention Measures

| | Mean | Standard Deviation | Quantiles | | | Observations |
|--|-------------------|-----------------------|-------------------|-------------------|------------------|--------------|
| | | | 25th | 50th | 75th | |
| <u>A. Inattention Estimate from Incorrect Recall of Choice</u> | | | | | | |
| <u>Willingness to Pay for</u> | | | | | | |
| Flexible Schedule | \$0.26 (0.14) | \$0.64 (0.59) | -\$0.13 (0.30) | \$0.26 (0.14) | \$0.65 (0.45) | 640 |
| Flexible Number of Hours | -\$0.22 (0.21) | \$2.31 (0.45) | -\$1.61 (0.31) | -\$0.22 (0.21) | \$1.18 (0.37) | 663 |
| Work from Home | \$1.42 (0.33) | \$5.01 (0.85) | -\$1.62 (0.46) | \$1.42 (0.33) | \$4.45 (0.74) | 608 |
| Combined Flexible | \$1.21 (0.31) | \$3.84 (0.68) | -\$1.12 (0.39) | \$1.21 (0.31) | \$3.54 (0.61) | 694 |
| <u>Willingness to Pay to Avoid</u> | | | | | | |
| Employer Discretion | \$3.51 (0.44) | \$3.92 (0.60) | \$1.13 (0.28) | \$3.51 (0.44) | \$5.88 (0.75) | 640 |
| <u>B. Inattention Estimate from Choice of Unavailable Position</u> | | | | | | |
| <u>Willingness to Pay for</u> | | | | | | |
| Flexible Schedule | \$0.51 (0.21) | \$2.52 (0.44) | -\$1.01 (0.27) | \$0.51 (0.21) | \$2.04 (0.40) | 640 |
| Flexible Number of Hours | -\$0.18 (0.21) | \$2.98 (0.48) | -\$1.98 (0.34) | -\$0.18 (0.21) | \$1.63 (0.38) | 663 |
| Work from Home | \$1.38 (0.31) | \$3.79 (0.75) | -\$0.92 (0.43) | \$1.38 (0.31) | \$3.68 (0.64) | 608 |
| Combined Flexible | \$1.22 (0.31) | \$4.20 (0.72) | -\$1.33 (0.41) | \$1.22 (0.31) | \$3.77 (0.64) | 694 |
| <u>Willingness to Pay to Avoid</u> | | | | | | |
| Employer Discretion | \$3.41 (0.42) | \$2.90 (0.47) | \$1.66 (0.29) | \$3.41 (0.42) | \$5.17 (0.65) | 640 |

Notes: Each panel replicates Table 4, using a different measure of inattention. Panel A bases the inattention measure on the fraction of applicants who, when asked to recall which job option they chose, responded incorrectly. The inattention rate varies by treatment. Panel B bases the inattention measure on the fraction of applicants who chose a position which explicitly instructed applicants not to choose it (13.0% of applicants). This is uniform across treatments. Robust standard errors based on the delta method are in parentheses.

Appendix Table 10. Willingness to Pay for Alternative Work Arrangements
Robustness: Limited to Different Subsamples

| | Mean | Standard Deviation | 25th | <u>Quantiles</u> | | Observations |
|---|-------------------|-----------------------|-------------------|-------------------|------------------|--------------|
| | | | | 50th | 75th | |
| <u>A. Applicants who Completed the Application Only</u> | | | | | | |
| Flexible Schedule | \$0.29 (0.19) | \$0.57 (0.87) | -\$0.06 (0.47) | \$0.29 (0.19) | \$0.64 (0.64) | 484 |
| Flexible Number of Hours | -\$0.25 (0.23) | \$2.14 (0.98) | -\$1.55 (0.62) | -\$0.25 (0.23) | \$1.05 (0.66) | 527 |
| Work from Home | \$1.22 (0.34) | \$1.75 (0.98) | \$0.16 (0.55) | \$1.22 (0.34) | \$2.28 (0.79) | 485 |
| Combined Flexible | \$1.04 (0.32) | \$2.02 (0.75) | -\$0.18 (0.44) | \$1.04 (0.32) | \$2.27 (0.65) | 548 |
| Employer Discretion | \$3.43 (0.50) | \$2.76 (1.14) | \$1.76 (0.57) | \$3.43 (0.50) | \$5.10 (1.06) | 494 |
| <u>B. Unemployed Workers Only</u> | | | | | | |
| Flexible Schedule | \$0.26 (0.30) | \$2.95 (1.27) | -\$1.53 (0.74) | \$0.26 (0.30) | \$2.05 (0.90) | 292 |
| Flexible Number of Hours | -\$0.51 (0.35) | \$2.91 (1.31) | -\$2.27 (0.83) | -\$0.51 (0.35) | \$1.26 (0.90) | 309 |
| Work from Home | \$1.16 (0.36) | \$1.40 (0.69) | \$0.31 (0.43) | \$1.16 (0.36) | \$2.01 (0.64) | 299 |
| Combined Flexible | \$0.48 (0.45) | \$2.44 (1.22) | -\$1.00 (0.68) | \$0.48 (0.45) | \$1.96 (1.01) | 320 |
| Employer Discretion | \$3.93 (0.64) | \$4.16 (0.78) | \$1.41 (0.38) | \$3.93 (0.64) | \$6.46 (1.06) | 320 |
| <u>C. Excluding Workers with Part-Time Jobs</u> | | | | | | |
| Flexible Schedule | \$0.41 (0.24) | \$2.94 (1.31) | -\$1.37 (0.71) | \$0.41 (0.24) | \$2.19 (0.94) | 532 |
| Flexible Number of Hours | -\$0.40 (0.24) | \$2.53 (1.04) | -\$1.93 (0.60) | -\$0.40 (0.24) | \$1.13 (0.74) | 537 |
| Work from Home | \$1.36 (0.31) | \$1.77 (0.85) | \$0.28 (0.54) | \$1.36 (0.31) | \$2.43 (0.66) | 493 |
| Combined Flexible | \$0.87 (0.34) | \$2.40 (0.85) | -\$0.58 (0.49) | \$0.87 (0.34) | \$2.32 (0.72) | 554 |
| Employer Discretion | \$3.53 (0.45) | \$2.79 (0.91) | \$1.84 (0.55) | \$3.53 (0.45) | \$5.23 (0.84) | 538 |

Notes: Each panel replicates the results in Table 4, limiting the included observations to different subsamples. Panel A limits the sample to applicants who finished the application, Panel B limits the sample to unemployed applicants, and Panel C limits the sample to applicants who are either unemployed or in full-time jobs. Estimates are based on an inattention-corrected maximum likelihood logit model using data from the experiment. Bootstrapped standard errors based on 500 samples are in parentheses.

Appendix Table 11. Description of Supplemental Treatments

| <u>Treatment Name</u> | <u>Position Description</u> | <u>Sample Size</u> |
|--------------------------------------|--|--------------------|
| Irregular Hours, Consistent Schedule | <p>The position is 40 hours per week.</p> <p>The work schedule in this position will be the same from week to week. You will be given your work schedule before the job begins. The hours can be morning through evening, weekdays and weekends, but not nights. The work is exclusively on-site in downtown [city]. This position pays [wage] dollars per hour.</p> | 626 |
| Weekend Schedule | <p>The position is 40 hours per week.</p> <p>This is a Thursday-Monday (including weekends) 9 am - 5 pm position. The work is exclusively on-site in downtown [city]. This position pays [wage] dollars per hour.</p> | 209 |
| Afternoon/Evening Schedule | <p>The position is 40 hours per week.</p> <p>This is a Monday-Friday 12 pm - 8 pm position. The work is exclusively on-site in downtown [city]. This position pays [wage] dollars per hour.</p> | 195 |
| Morning Schedule | <p>The position is 40 hours per week.</p> <p>This is a Monday-Friday 7 am - 3 pm position. The work is exclusively on-site in downtown [city]. This position pays [wage] dollars per hour.</p> | 202 |
| 2 nd Shift | <p><i>2nd Shift (Alternative):</i></p> <p>The position is 40 hours per week.</p> <p>This is a Monday-Friday 3 pm - 11 pm position. The work is exclusively on-site in downtown [city]. This position pays [wage] dollars per hour.</p> <p><i>1st Shift (Base Option):</i></p> <p>The position is 40 hours per week.</p> <p>This is a Monday-Friday 7 am - 3 pm position. The work is exclusively on-site in downtown [city]. This position pays [wage] dollars per hour.</p> | 192 |

Appendix Table 12. Willingness to Pay for Alternative Work Arrangements by Gender

| | Mean | Standard Deviation | Quantiles | | | Observations |
|---|--------------------|-----------------------|---------------------|--------------------|--------------------|--------------|
| | | | 25th | 50th | 75th | |
| <u>A. Willingness to Pay for Flexible Schedule</u> | | | | | | |
| Female | \$0.58 (0.34) | \$1.83 (1.24) | -\$0.53 (0.59) | \$0.58 (0.34) | \$1.69 (1.01) | 456 |
| Male | \$0.16 (0.34) | \$3.29 (1.04) | -\$1.84 (0.69) | \$0.16 (0.34) | \$2.15 (0.73) | 153 |
| Difference (Female - Male) | \$0.42 (0.48) | -\$1.46 (1.57) | \$1.31 (0.90) | \$0.42 (0.48) | -\$0.46 (1.21) | 609 |
| <u>B. Willingness to Pay for Flexible Number of Hours</u> | | | | | | |
| Female | -\$0.19 (0.28) | \$2.49 (1.18) | -\$1.71 (0.68) | -\$0.19 (0.28) | \$1.32 (0.85) | 491 |
| Male | -\$0.34 (0.36) | \$1.42 (1.05) | -\$1.20 (0.68) | -\$0.34 (0.36) | \$0.51 (0.78) | 147 |
| Difference (Female - Male) | \$0.15 (0.46) | \$1.08 (1.57) | -\$0.50 (0.93) | \$0.15 (0.46) | \$0.80 (1.16) | 638 |
| <u>C. Willingness to Pay for Work from Home</u> | | | | | | |
| Female | \$1.59 (0.40) | \$1.53 (1.18) | \$0.66 (0.78) | \$1.59 (0.40) | \$2.51 (0.85) | 441 |
| Male | \$0.68 (0.42) | \$1.94 (1.31) | -\$0.50 (0.71) | \$0.68 (0.42) | \$1.86 (1.06) | 135 |
| Difference (Female - Male) | \$0.91 (0.58) | -\$0.41 (1.71) | \$1.16 (1.04) | \$0.91 (0.58) | \$0.66 (1.32) | 576 |
| <u>D. Willingness to Pay for Combined Flexible Job</u> | | | | | | |
| Female | \$1.56 (0.48) | \$2.83 (1.44) | -\$0.16 (0.83) | \$1.56 (0.48) | \$3.27 (1.13) | 496 |
| Male | \$0.03 (0.44) | \$0.97 (0.72) | -\$0.56 (0.48) | \$0.03 (0.44) | \$0.62 (0.73) | 158 |
| Difference (Female - Male) | \$1.52** (0.62) | \$1.86 (1.67) | \$0.40 (0.95) | \$1.52** (0.62) | \$2.65** (1.39) | 654 |
| <u>E. Willingness to Pay to Avoid Employer Discretion</u> | | | | | | |
| Female | \$4.27 (0.78) | \$3.24 (1.02) | \$2.30 (0.64) | \$4.27 (0.78) | \$6.23 (1.26) | 453 |
| Male | \$2.11 (0.54) | \$3.76 (0.89) | -\$0.17 (0.44) | \$2.11 (0.54) | \$4.39 (0.99) | 168 |
| Difference (Female - Male) | \$2.16** (0.98) | -\$0.51 (1.40) | \$2.47*** (0.78) | \$2.16** (0.98) | \$1.85 (1.66) | 621 |

Notes: Estimates are generated using an inattention-corrected maximum likelihood logit model using data from the experiment. Bootstrapped standard errors based on 500 samples are in parentheses. For the gender difference (female - male) estimates, **, *** denote significance at the 5%, and 1% levels, respectively.

Appendix Table 13. Willingness to Pay for Alternative Work Arrangements by Subgroup

| | A. Experiment Data | | | | Mean WTP to Avoid Employer Discretion | B. UAS Data | |
|--------------------------------------|--------------------|--------------------------|-------------------|-----------------------------------|--|--|-------------------|
| | Mean WTP for | | | Mean WTP for Flexible Schedule | | Mean WTP to Avoid Employer Discretion | |
| | Flexible Schedule | Flexible Number of Hours | Work From Home | | | | Combined Flexible |
| All | \$0.48 (0.24) | -\$0.22 (0.22) | \$1.33 (0.29) | \$1.17 (0.32) | \$3.41 (0.47) | 2.5% (0.3%) | 29.3% (1.7%) |
| <i>Race/Ethnicity</i> | | | | | | | |
| White | \$0.61 (0.29) | -\$0.20 (0.30) | \$1.60 (0.31) | \$1.54 (0.54) | \$3.04 (0.54) | 2.4% (0.4%) | 29.1% (1.8%) |
| Non-White | \$0.30 (0.34) | -\$0.39 (0.32) | \$0.97 (0.53) | \$0.85 (0.42) | \$3.65 (0.72) | 2.8% (1.1%) | 29.7% (4.8%) |
| p-value of Difference | 0.45 | 0.65 | 0.29 | 0.32 | 0.51 | 0.76 | 0.91 |
| <i>Education</i> | | | | | | | |
| Less than a College Degree | \$0.34 (0.28) | -\$0.21 (0.28) | \$0.88 (0.39) | \$0.91 (0.38) | \$3.79 (0.73) | 1.9% (0.4%) | 28.8% (2.6%) |
| College Degree or More | \$0.55 (0.25) | -\$1.38 (0.55) | \$2.63 (1.02) | \$1.52 (0.54) | \$2.69 (0.64) | 3.5% (0.6%) | 29.8% (2.1%) |
| p-value of Difference | 0.58 | 0.06 | 0.11 | 0.36 | 0.25 | 0.02 | 0.77 |
| <i>Income</i> | | | | | | | |
| Below Median Income (\$67,500) | | | | | | 1.7% (0.4%) | 27.2% (2.4%) |
| At or Above Median Income (\$67,500) | | | | | | 3.1% (0.5%) | 31.3% (2.4%) |
| p-value of Difference | | | | | | 0.02 | 0.24 |
| <i>Age</i> | | | | | | | |
| Below Median Age (30) | \$0.32 (0.32) | -\$0.24 (0.35) | \$0.72 (0.45) | \$0.85 (0.59) | \$3.41 (0.73) | 1.7% (0.7%) | 24.2% (4.6%) |
| At or Above Median Age (30) | \$0.67 (0.34) | -\$0.12 (0.30) | \$1.65 (0.52) | \$1.45 (0.37) | \$3.25 (0.55) | 2.7% (0.4%) | 30.2% (1.8%) |
| p-value of Difference | 0.45 | 0.80 | 0.17 | 0.37 | 0.85 | 0.20 | 0.23 |
| <i>ACT WorkKeys Questions</i> | | | | | | | |
| Below Median Score (3) | \$0.23 (0.35) | -\$0.30 (0.50) | \$0.59 (19.52) | \$0.64 (11.01) | \$3.26 (1.11) | | |
| At or Above Median Score (3) | \$0.64 (0.26) | -\$0.27 (0.26) | \$1.34 (0.34) | \$1.42 (0.39) | \$3.71 (0.64) | | |
| p-value of Difference | 0.36 | 0.97 | 0.97 | 0.94 | 0.72 | | |

Notes: Cells present the mean willingness to pay for (or to avoid) the arrangement indicated by the column for the subsample indicated by the row. Estimates are based on an inattention-corrected maximum likelihood logit model. Bootstrapped standard errors from 500 samples are in parentheses.