# Getting Gig Workers to Do More by Doing Good:

# Field Experimental Evidence from Online Platform Labor Marketplaces

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**Abstract**

This paper examines the effect of employer social responsibility on a stakeholder and a source of human capital that is becoming increasingly important to firms: the contingent or "gig," worker. Using two randomized field experiments in online platform labor marketplaces, I show that a socially responsible message increased prosocially-oriented, but not non-prosocially-oriented, gig workers' willingness to complete extra work. On average, the socially responsible message mediated prosocially-oriented workers' lower willingness to do extra work. A "feel good" mechanism appeared to be driving the response to the socially responsible message. These findings provide insight into gig workers' nonpecuniary motivation, and demonstrate heterogeneity in this type of workers' willingness to do extra work, as well as for socially responsible employers.

## Introduction

The importance of human capital to organizational success has been well-established (Campbell et al. 2012, Coff 1997, Foss and Lindenberg 2013, Huselid et al. 1997, Koch and McGrath 1996). One source of human capital that is becoming increasingly prevalent, yet whose motivation has been under-examined, is the contingent or "gig" worker. A 2016 Deloitte study indicated that 42 percent of executives anticipate an increase in the use of contingent workers in the next three to five years. A 2013 Accenture study predicted that future competitive advantage will hinge on "workers who aren't employees at all."[1] The emergence of the "gig" and "sharing" economies (Sundararajan 2016) that enable companies to access "talent in the cloud" have contributed significantly to the prevalence of this type of worker in both smaller, entrepreneurial organizations as well as larger, established organizations (Kokkodis and Ipeirotis 2015).[2] Yet, there are few studies examining how employer-level characteristics influence the motivation of these non-traditional workers (Martins et al. 2004), whose work experience has been noted to be fundamentally different from those of traditional in-house employees (Bartel et al. 2011, Chesbrough et al. 2012, Gibson and Cohen 2003, Kirkman et al. 2004, Wiesenfeld et al. 2001).[3] One employer-level characteristic whose influence on traditional employee behavior has been explored in recent years is social responsibility (Bode and Singh 2014, Bode et al. 2015, Burbano 2016, Burbano et al. 2016, Carnahan et al., 2016; Gubler et al., 2017, Flammer and Luo 2014; Flammer and Kacpercyk, 2016). However, as proximity to and participation in socially responsible activities have been shown to drive the effects of this employer-level characteristic on traditional employee behavior (Bode et al. 2015, Kim et al. 2010, Brockner et al. 2013), it is unclear that gig workers should be responsive to employer social responsibility.

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[1] Jeff Schwartz, Udo Bohdal-Speigelhoff, Micahel Gretczko, Nathan Sloan. The gig economy. Distraction or disruption? Deloitte University Press, February 29, 2016. Accenture, *Trends Reshaping the Future of HR: The Rise of the Extended Workforce.* 2013.
[2] Also supported by Accenture, *Trends Reshaping the Future of HR: The Rise of the Extended Workforce.* 2013.
[3] These studies have examined a related type of worker, the virtual worker, whose motivation has been pointed out to be different from that of the traditional employee, as well as understudied. Certainly, not all virtual workers are gig workers (virtual workers include full-time employees who telecommute, for example). However, as they fall along the spectrum of workers who could be considered on the border of or outside the boundary of the firm, the research on these workers is relevant to that of gig workers.

By implementing natural field experiments (List 2009) on two multi-sided online labor platforms (Hagui and Wright 2015), I study a causal effect of a socially responsible message on gig workers' willingness to go beyond what is required in their job contract in natural gig worker settings.[4] The settings, Amazon Mechanical Turk (AMT) and Elance, are both online platform labor marketplaces that connect workers with employers' short-term jobs online. Elance (which merged with ODesk and has been rebranded as Upwork since the time of the study) is a particularly relevant platform labor marketplace as it is commonly cited as one of the gig economy platforms that will reshape the nature of companies' workforces.[5] These are thus prime settings in which to study gig workers' response to employer-level characteristics such as social responsibility.

Hiring real gig workers for short-term jobs on these online labor platforms, I randomly assigned whether or not they received information about employer social responsibility, and then observed the effect of this socially responsible message on on-the-job performance. In particular, their willingness to complete extra work. I found that receiving information about their employer's social responsibility caused prosocially-oriented, but not non-prosocially-oriented, workers to complete a higher quantity and quality of extra work unrequired for payment. I also provide suggestive evidence that a "feel good" mechanism drove this response.

In addition to being real-world work settings for many gig workers, numerous attributes of online platform labor marketplace settings make them valuable for the study of the relationship of interest. First, workers complete their work online without interacting with each other. This reduces the likelihood of treatment-effect diffusion from the treatment group to the control group. Second, a researcher can randomly assign information about the (fictitious) employer in these settings, keeping all other potentially confounding factors that could influence worker behavior constant. Since there is no information about social responsibility of the hiring firm available on the Internet or elsewhere, this ensures that workers' perceptions of a well-known firm's social responsibility cannot be influenced by information outside of

[4] IRB approval was obtained for these field experiments.
[5] The Economist. The future of work: There's an app for that. Dec 30, 2014.

the researcher's control. (For example, workers would not find out anything about their employer's social responsibility by googling the name.) This also ensures that a worker's preconceived notions about the employer's reputation or its social responsibility do not confound the results. The use of these research settings thus avoids many of the internal validity challenges that would afflict a field experiment implemented with a well-known company.

By examining the response of gig workers to an employer-level input, this paper contributes to the nascent strategic human capital literature examining the motivation and strategic management of non-traditional workers for organizational effectiveness and competitive advantage (Bartel et al. 2011, Chesbrough and Teece 2012, Gibson and Cohen 2003, Kirkman et al. 2004, Wiesenfeld et al. 2001). It has been noted that there are very few empirical studies examining how employers can effectively motivate and manage non-traditional workers despite the increasing prevalence of this type of worker (Martins et al. 2004). Though some scholars have begun to examine the task- or team-specific characteristics that influence contingent workers' performance, such as task type (Tan et al. 1998, Straus and McGrath 1994), communication context (Zack and McKenney 1995, Weisband and Atwater 1999), and team member characteristics (Ahuja 2003, Ahuja et al. 2003), this paper provides evidence of *employer*-level characteristic influences on non-traditional workers as well.

This paper also more broadly speaks to scholars examining the effects of social responsibility on (traditional) employee behavior (Bode and Singh 2014, Bode et al. 2015, Burbano 2016, Flammer and Luo 2014, Flammer and Kacpercyk 2016). Some of the studies demonstrating a relationship between social responsibility and employee performance have used cross-sectional field data (e.g., Hansen et al. 2011) or individual-level self-reported perception data (e.g., Rupp et al. 2006, Rupp et al. 2013). This paper builds on field and lab experiments that have shown that making the impact of a public service or nonprofit job more salient influences work effort (Chandler and Kapelner 2013, Fehrler and Kosfeld 2014, Grant et al. 2007, Grant 2008, Grant and Hofmann 2011) by examining a related effect in a for-profit context. It also complements real effort experiments implemented with undergraduate student samples aware of participating in experiments, which demonstrated a positive effect on task efficiency of

linking charitable donations to task efficiency (Tonin and Vlassopoulos 2010, 2015) by demonstrating a complementary effect of information about the employer's charitable giving on workers' willingness to complete extra work unrequired for payment. A critical component to this set of natural field experiments (List 2009) is that the sample of non-student workers completing work in their real-world work context are never aware of their participation in a study, which could otherwise lead to social desirability bias.[6] It also complements Burbano (2016), which examined the effect of socially responsible messages on (gig) workers at a different stage in the stakeholder-employer relationship: prospective workers before they are (or are not) hired. Burbano (2016) demonstrates the effect of socially responsible messages on high-permforming gig workers' salary requirements, while this paper demonstrates an effect of socially responsible messages on the extra work prosocially-oriented gig workers are willing to complete for their employer.

By demonstrating that prosocially-motivated gig workers are less willing to go above and beyond for their employer by doing extra work on average, but are most responsive to information about employer corporate philanthropy, this paper contributes to our understanding of how the heterogeneity in gig workers' and non-traditional workers' attitudes influence behavioral responses of import to firm value (Burtch et al. 2016), on which there has been relatively little focus to date (Martins et al. 2004). Taken together with Burbano (2016), which examined a similar input at a different stage of the stakeholder-employer relationship, and found evidence of a different type of worker being most responsive and a different mechanism driving the effect, this suggests the importance of considering the stage of the employee-employer relationship in examining heterogeneity in workers' responses to social responsibility and non-pecuniary inputs more broadly (Bode et al. 2015, Burbano 2016, Evans and Davis 2011, Rider and Tan 2014, Saurmann and Roach 2014). [7]

[6] Natural field experiments examining the effect of social responsibility on employee behavior are uncommon, though scholars have examined how socially responsible product attributes influence consumer behavior (Elfenbein, Fisman and McManus 2012, Hainmueller et al., 2015).

[7] Burbano (2016) found that higher performing workers were more likely to reduce salary requirements in response to a socially responsible message. This paper demonstrates that a different type of worker is most responsive to a socially responsible message in terms of willingness to do extra work: the prosocially-oriented worker.

This paper also has practical implications for managers who have traditionally underestimated the motivational effects of employer social responsibility on gig workers and other non-traditional workers' behavior.

**Literature and Theory**

Applications of signaling theory, prosocial motivation theory (drawing from behavioral economics), and social identity theory (drawing from psychology), suggest that employer social responsibility should influence traditional employees' perceptions of working for an employer. The organizational behavior literature on what has been called "organizational citizenship behavior" or "prosocial organizational behavior" links these perceptions to an important type of employee performance: a willingness to go above and beyond what is contractually required, including doing extra work unrequired for payment.

Some important mediators of social responsibility and employee behavior are missing in the context of gig or contingent work, however, which suggest that gig workers should not be motivated by or responsive to employer social responsibility. On the other hand, inferences from related literature on virtual workers (most gig workers are virtual workers, but not all virtual workers are gig workers) suggest that non-traditional workers such as these should indeed be responsive. Whether gig workers will be motivated by employer social responsibility to do extra work for their employer is thus an empirical question.

**Employer Social Responsibility and Traditional Employee Willingness to Do Extra Work**

The argument has been made that stakeholders gauge an employer's relative merits and develop a perception of its image and reputation by interpreting information (Fombrun and Shanley 1990). Corporate social responsibility (CSR) activities, such as corporate philanthropy, are among those signals from which information is gathered (Waddock and Graves 1997). Charitable activities indicate to stakeholders whether and to what extent the employer is trustworthy (Godfrey et al. 2009, Greening and Turban 2000, Turban and Greening 1996). Prospective employees have been shown to respond to such perceptions (Burbano 2016, Greening and Turban 2000, Turban and Greening 1996), and it has also been

argued that current employees should draw similar inferences from such signals (Rupp et al. 2006, Rupp et al. 2013).

The perception that an employer is trustworthy has been shown to be a driver of an important type of employee performance: a willingness to go above and beyond what is contractually required in a job (e.g., Bolino and Turnley 2003, Niehoff and Moorman 1993)—sometimes called "organizational citizenship behavior," (e.g., Morrison 1994, Organ 1988) or "prosocial organizational behavior" (e.g., Brief and Motowidlo 1986). Since social responsibility influences a driver of this behavior, we would expect to see a causal relationship between social responsibility and employees' willingness to go above and beyond what is formally required by the job or contract, such as completing extra work.

A firm's social responsibility has also been purported to satisfy an employee's need for a meaningful existence (Rupp et al. 2006, Rupp et al. 2013), improving their self-concept (Ashforth and Mael 1989, Brockner et al. 2013, Dutton and Dukerich 1991, Greening and Turban 2000, Turban and Greening 1996). Related to these arguments is the premise that working for a prosocial organization makes the employee feel good, thus generating utility similar to the "warm glow" utility that an individual can garner from behaving prosocially himself or herself (Andreoni 1989, 1990). This feel-good utility should increase an employee's job satisfaction (Ashforth and Mael 1989, Brockner et al. 2013, Dutton and Dukerich 1991, Dutton et al. 1994, Greening and Turban 2000, Mael and Ashforth 1992, Turban and Greening 1996), which in turn has been shown to drive prosocial organizational behavior such as going beyond what is required (Bateman and Organ 1983, Illies et al. 2006, Organ and Ryan 1995).

**Prosocial Orientation**

It has been noted that the utility of working for a socially responsible employer should be higher if the employee sees value congruence with the employer (Evans and Davis 2011). Indeed, as individuals identify with organizations as a way of expressing the personality characteristics that they value (Dutton and Dukerich 1994), morally inclined (Rupp et al. 2013) or prosocially-oriented virtual workers should identify more strongly with an employer that engages in corporate philanthropy. As organizational identity has also been identified as a driver of prosocial organizational behavior (Ashforth and Mael 1989,

Brockner et al. 2013, Dutton and Dukerich 1991, Dutton et al. 1994, Greening and Turban 2000, Mael and Ashforth 1992, Turban and Greening 1996), we would expect these virtual workers to be even more motivated by a corporate philanthropy program than those who are not prosocially oriented, and to exhibit a greater willingness to go beyond what is required.

**Employer Social Responsibility and Non-Traditional Employees**

Proximity to and participation in socially responsible activities have been shown to drive the effects of this employer-level characteristic on traditional employee behavior (Bode et al. 2015, Kim et al. 2010, Brockner et al. 2013). Gig or contingent workers are physically disparate from, and do not participate in socially responsible activities the way that in-house, traditional workers can (e.g., through volunteer programs and other initiatives to involve employees in CSR programs). Extrapolating from this literature thus suggests that gig workers' responses to employer social responsibility should be muted.

On the other hand, literature on the motivation of virtual workers (which would include most contingent, gig workers, but also non-gig workers such as fulltime employees who telecommute or are otherwise physically distant from their employer) (Wiesenfeld et al. 1999, Wiesenfeld et al. 2001) has noted that in a virtual work context that lacks traditional (non-virtual) mechanisms of workplace connection (e.g., facilitated by being in a shared physical space), drivers of trust (Jarvenpaa et al. 1999, Handy 1995) and perceptions of organizational justice or fairness (Hakonen and Lipponen 2008) are central. We would expect this to apply to gig, contingent workers as well. Since employer social responsibility has been linked to these perceptions in traditional employees, and such perceptions are particularly central in the context of virtual work, these perceptions could offset the distance from and lack of participation in employer social responsibility which we would otherwise expect to mute gig workers' willingness to complete extra work unrequired for payment in response to employer social responsibility.

**Empirical Setting**

To empirically examine whether gig workers respond to employer social responsibility with an increased willingness to do extra work, I implement field experiments in the online platform labor marketplaces Amazon Mechanical Turk (AMT) and Elance. AMT jobs, called HITs (an acronym for human intelligence tasks), typically take only a few minutes to complete, with more complex or time consuming tasks broken into a series of smaller HITs. Typical jobs include simple data entry and survey completion. The average effective wage of an AMT worker is $4.80 per hour (Mason and Suri 2012). A benefit of the AMT setting is that it is possible to gather a large sample and exert high control over the randomization process (since all instructions are automated online, and there is no communication between employer and worker during a job). As completion of surveys is common on AMT, it is also a natural context in which to ask questions to begin to study the mechanisms driving results. A downside of the AMT setting is that jobs are very short and remuneration is small, making the generalizability of studies in this setting to virtual jobs more broadly more challenging.

A benefit of the Elance setting is that it is one of the most commonly used job sites for gig workers. Typical jobs take days or weeks to complete, and payment amounts are in the tens or hundreds of dollars. They include such categories as IT and programming, administrative support, design and multimedia, and even engineering and manufacturing. The average hourly wage for U.S. freelancers on Elance is $28, which translates into an annual income of $56,000 (Eha 2013)—comparable to the average annual U.S. household income. A tradeoff of the Elance setting is that it is uncommon to attract or hire hundreds of workers for the same job (which is common on AMT), resulting in a smaller sample size. Surveys are also rarely administered in Elance, so to keep the job being studied typical of other Elance jobs, I did not ask additional survey questions at the end of the experiment to study the mechanisms driving results in this setting. Steps must also be taken to ensure that communication between the employee and employer during the job on Elance does not bias results. I did this by including controls for the degree of positivity in communication between the employee and employer in the analyses that follow.

By implementing field experiments in both settings, I increase the robustness and generalizability of my main results, drawing from Chatterji et al. (2015), who emphasize the value of replicating field experiments in different settings when possible. In what follows, I describe the AMT experiment design, results, and limitations, followed by those of the Elance experiment. IRB approval was obtained for each.

**Field Experiment 1 (AMT)**

**Design**

Acting as a firm, I advertised a data-gathering HIT on AMT for payment of $0.50.[8] Though seemingly low, the payment amount, nature of the job, and description were, by design, constructed to be typical of other AMT jobs at the time. Hired workers were taken to an external survey site to complete the HIT. Workers were given detailed instructions for the job, which consisted of gathering 10 data points from a website and completing a short survey. Workers were given a sample data-entry question and were instructed to enter an answer for feedback.[9]

To construct a proxy for social responsibility treatment, workers were then randomly assigned to one of two conditions: a control group or a CSR treatment group. The control and treatment groups received different messages (see Figure 1 for the exact messages). The treatment group received information about the employer's corporate philanthropy, which is considered to be an important discretionary component of CSR that is commonly associated with employer social responsibility (Lev et al., 2010, Muller and Kraussl, 2011; Wang et al., 2008). The control condition of providing no information used in this study is statistically equivalent to providing generic information about the employer, to providing information about charitable giving behavior more broadly (and not in the context of the employer).[10]

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[8] The job description was titled "Gather 10 data points from a historical weather website and answer a short survey." This study took place in August 2013. The fictitious name of the firm is available from the author upon request. IRB approval was obtained.
[9] Sample question: "In New York City, New York on Jan 1, 2010, what was the Actual Max Temperature (in Fahrenheit)?"
[10] A comparison of amount of extra data points completed amongst 150 MTurk workers randomly assigned to three variations of the control group message showed statistical equivalence in the number of optional data points completed ($p<0.10$ on coefficients of OLS regressions with robust standard errors). The messages for each of the variations of control conditions was as follows: 1) for the generic employer info condition – "In the meantime, we'd like to tell you a bit about our company. At {firm name omitted}, we are a company that provides excellent service to our customers;" 2) for the generic charitable giving condition – "In the meantime, we wanted to share that we found it interesting that donations to charities were up last year in the US."; 3) for the

*Insert Figure 1 here*

After receiving the control or treatment message described in Figure 1, workers received feedback about whether their answer to the sample question was correct and what the correct answer was. Workers were prompted to enter the 10 required data-entry points, then asked if they were willing to complete additional data-entry points, which were optional and not required for payment. Those willing were provided 20 more data-entry queries and could provide answers to none, some, or all of them. Workers were then surveyed to gather information on demographic and other characteristics. They were paid at the end of the job.

**Sample**

Six hundred workers living in the United States, with HIT approval ratings of 95 percent or higher, were recruited on AMT for this field experiment.[11] Thirty-two observations were dropped due to (a) repeat IP addresses, suggesting that a worker may have participated in the experiment more than once; (b) starting but not completing the HIT; or (c) answering that the worker has worked for the hiring employer before.[12] Twenty-nine individuals who did not complete the HIT exited after the random assignment of conditions and there was no statistically significant difference between the control and treatment groups in likelihood of exiting.[13] This suggests that selection bias due to attrition is minimal. The resulting sample size is 568 workers.

Table 1 presents summary statistics for workers in the sample, by condition. Approximately half of the workers were female, the mean age was 30 years, and approximately half of the workers had a

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no-information condition – blank. Mean number of optional data points completed by condition were as follows: 1) for the control company condition mean 7.25, std. dev 9.16, N=55; for generic charitable giving condition mean 7.61, std. dev. 9.36, N=38; for no information condition mean 7.9, std.dev. 9.19, N=56. The statistical equivalence of a no information condition with a generical company and generical giving information condition suggests that the findings reported in this study are not driven by providing some sort of information about the employer (as opposed to no information), or by priming a charitable or giving mindset more generally. More detailed results are available from the author upon request.

[11] This is a common cutoff on AMT to ensure high quality results.

[12] All workers whose AMT IDs were associated with a previous job by the same employer were excluded from completing this job, so it is unlikely that these workers actually worked for this employer before. It is possible that a worker created a new AMT ID, however, so these observations are dropped.

[13] Likelihood of finishing was 0.94 for the control group and 0.96 for the CSR treatment group: $t(595) = -0.96$, $p = 0.34$.

college degree. Approximately three quarters of the workers answered that the reason they complete HITs on MTurk is for the money earned from these HITs, as opposed to it being a productive use of free time or fun. This suggests that, although the payment amount received on AMT is low, the money earned on these HITs is important and relevant for these workers. There were no statistically significant differences ($p > 0.10$) between the mean characteristics listed in Table 1 for the treatment and control groups, suggesting that randomization was successful and that selection bias due to observables is minimal.

*Insert Table 1 here*

**Variable Construction**

*Dependent variables. # optional data points completed* is the number of optional data points (out of 20) that the worker completed, whether or not correctly, and is a proxy for the quantity of extra work completed unrequired for payment. *% optional data points correct* is a proxy for quality of extra work completed, and is equal to the number of unrequired data points correct divided by the number of unrequired data points completed. *% required data points correct* is the proportion of required data points that the worker entered correctly. It measures the quality of work required by the job and for payment.

*Independent variables. CSR message* is a dummy coded 1 if the worker received information about the corporate philanthropy program and 0 otherwise.

*Control and moderating variables.* Control variables include demographic control variables and AMT experience and performance control variables. *HIT approval rating* is a proxy for prior AMT performance and takes the values 95, 96, 97, 98, 99, or 100. *HITs per week buckets* is a proxy for prior AMT experience and is an ordinal variable with the following values: 1 if the worker completed less than 10 HITs per week in the past month, 2 if the worker completed 10 to 49, 3 if the worker completed 50 to 100, and 4 if the worker complete more than 100. *% Required data pts correct* is the proportion of required data points that the worker answered correctly. *Female* is a dummy variable equal to 1 if the worker is female and 0 if the worker is male. *College degree* is a dummy variable equal to 1 if the worker

has a college degree and 0 otherwise. *Volunteer & donate* is a dummy variable equal to 1 if the worker volunteered and donated to charity in the prior year and 0 otherwise, and is a proxy for prosocial orientation.

**Results**

Figure 2 presents the kernel density estimations for the number of optional data points completed, by condition. The treatment group completed more optional data points (mean 7.3 vs. 5.8, t(563) = -2.01, $p < 0.05$) and did so more accurately than the control group (mean proportion of optional data point correct 0.97 vs. 0.93, t(138) = -2.27, $p < 0.05$). This suggests that the socially responsible message caused workers to complete a higher quantity and quality of extra work unrequired for payment on average.[14]

*Insert Figure 2 here*

The results of several regressions exploring the drivers of virtual worker job performance are reported in Table 2. Model 1 shows that workers who received a philanthropy message completed on average 1.49 more optional data points than those who did not ($p < 0.05$). [15] This represents an increase of about 25 percent compared to the control group. Model 2 demonstrates that, even controlling for demographics, prior performance, and prior experience, the effect of the philanthropy message on the number of optional data points completed holds. Prior performance, prior experience, and prior education factors were not predictive of this measure of performance ($p > 0.10$). Gender was notably predictive of this measure of performance ($\beta = 2.51$, $p < 0.01$). Women completed on average 47 percent more optional data points than men. This supports the notion that women are more cooperative and altruistic than men (Hofstede 1980) and, thus, are more likely to go above and beyond for their employer by doing work unrequired by payment or contract (Organ et al. 1995). Workers who volunteered with and donated

[14] The proportion of required data points completed accurately was statistically equivalent for treatment and control groups (mean 0.92 vs. 0.91, t(565) = -0.14, $p > 0.10$).

[15] OLS regression results are reported because of their ease of interpretation. The direction and significance of the coefficients of the variables of interest are robust to the use of Poisson and ordered probit regressions. These are available from the author upon request.

money to charity in the previous year completed marginally less optional data points on average than those who did not volunteer or donate ($\beta$ = -1.67, $p$ < 0.10). There has been disagreement on whether volunteering outside of work is negatively or positively associated with job performance, and under what conditions (Rodell 2013). On the one hand, it has been suggested that devoting resources to one activity leaves fewer resources available for another (Edwards and Rothbard 2000, Greenhaus and Beutell 1985), which would suggest that volunteering should be negatively correlated with employee job performance. On the other hand, it has been suggested that volunteering provides employees with the psychological resources needed to perform better on the job (Kahn 1990), that morally motivated workers are less likely to shirk and, thus, are more productive workers (Brekke and Nyborg 2008), and that prosocial motivation is correlated with higher employee performance (e.g., Grant and Berry 2011), which would suggest that past volunteer and donation history would positively correlate with employee job performance. Model 2 supports the former argument.

Model 3 again shows that individuals who volunteered and donated in the past year completed less unrequired data points, all else equal ($\beta$ = -3.12, $p$ < 0.01). As predicted, they were more responsive to receiving information about their employer's corporate philanthropy program than individuals who had not volunteered or donated ($\beta$ = 2.96, $p$ < 0.10). The social responsibility message almost completely mediated their willingness to do less work on average. The coefficient on CSR Message in Model 3 is no longer statistically significant with the inclusion of the interaction term, which suggests that the effect of the social responsibility message is driven entirely by the prosocially oriented, with the non-prosocially oriented not being responsive to the CSR message.

Models 4, 5, and 6 report logistic regression results with likelihood of completing all 20 optional data points as the dependent variable. According to a marginal effects analysis, the treatment group was seven percent more likely to complete all 20 optional data points than the control group. Models 4 and 5 provide additional support for the hypothesis that gig workers are motivated by an employer's corporate philanthropy program, and Model 6 provides additional support for the argument that prosocially-motivated gig workers are even more motivated by a corporate philanthropy program.

Models 7 and 8 show that corporate philanthropy treatment additionally caused an increase in accuracy of the extra data points completed ($\beta = 0.04$, $p < 0.05$ without control variables and $\beta = 0.04$, $p < 0.05$ with controls). Those in the treatment group completed four percent more of the optional data points correctly than did the control group. The accuracy of required work was also highly correlated with accuracy of optional work ( $\beta = 0.45$, $p < 0.01$)

Models 9 and 10 show that accuracy on the required data points completed was not affected by CSR treatment. Instead, the marginal differences in percent of required data points correct seem to be explained by prior AMT performance (HIT approval rating; $\beta = 0.01$, $p < 0.10$), prior AMT experience ($\beta = 0.01$, $p < 0.05$), and having a college degree ($\beta = 0.03$, $p < 0.10$).

Taken in whole, results in Table 2 provide support that learning about their employer's corporate philanthropy program made virtual workers willing to do more work unrequired for payment and provides marginal support that this effect was even greater for prosocially-oriented workers.

*Insert Table 2 here*

To begin to explore the mechanisms that could be driving these results, in Table 3 I analyzed self-reported survey data collected from individuals in the corporate philanthropy treatment group (who received information about the employer's corporate philanthropy program). These workers were asked to indicate their agreement with the following statements (presented in random order) using a 5-point Likert scale with 1 being Strongly Disagree" and 5 being "Strongly Agree": 1) "Learning about the charitable giving program made me feel good while working with this employer," 2) "The charitable giving program was a signal to me that this employer is trustworthy," 3) "The charitable giving program was a signal to

me that this employer is not greedy, and 4) "The charitable giving program indicated to me that this employer has excess profits."[16]

The direction and statistical significance between the responses to these statements and the number of optional data points completed supports the idea that a feel-good, or what the literature has referred to as a "warm glow," mechanism is driving the behavioral effect on current employees at this stage in the employer-gig employee relationship. Model 1 demonstrates that the feel-good effect influenced willingness to complete extra unrequired work ($\beta = 2.92$, $p < 0.001$). Proxies for signaling about employer trustworthiness, proxied by statements 2 and 3, were uncorrelated with unrequired work completed ($p > 0.10$). Model 5 confirms that, when all of the variables are included in a single regression, only the "feel good" perception is correlated with the number of optional data points completed. This provides suggestive evidence in support of the theoretical argument that a feel-good, warm glow mechanism is driving the willingness to complete unrequired work in this context. Taken together with the opposite mechanism findings of Burbano (2016), who found a signaling-about-employer-trustworthiness mechanism, and not a feel-good or "warm glow" mechanism, to drive prospective employee behavior (willingness to accept lower salaries), this suggests that the mechanism driving behavior varies by stage of the individual in relation to the employer. That is, prospective employees and current employees derive distinct benefits from a firm's socially responsible activities.

*Insert Table 3 here*

It is possible that the proxy for prosocial inclination used in this AMT study, volunteer and donation history, could actually be capturing a characteristic other than prosocial orientation. One could interpret the fact that volunteer and donation history was negatively correlated with amount of extra work completed as contradictory to the notion that individuals who volunteer and donate are prosocially-oriented; one could argue that prosocially-oriented individuals should be on average more prosocial

[16] These were derived from the statements included in Burbano (2016) to test the mechanism driving prospective employee's behavior. As Burbano (2016) examines the effect of socially responsible messaging on prospective employees before they are hired, rather than on employees after they have been hired, a different mechanism could drive the effect on behavior.

toward their employer. To begin to investigate the differential response among individuals who volunteered and donated the prior year, I compared responses to 5-point Likert scale survey questions administered at the end of the experiment. Workers who volunteered and donated in the prior year were more likely to agree or strongly agree that "my employer's commitment to the broader community is important to me" (mean 0.66 vs. 0.54, $t(236) = -2.44$, $p < 0.05$) providing suggestive evidence that they are indeed prosocially-inclined. Workers who volunteered and donated in the prior year were also more likely to agree or strongly agree that "I would work harder for an employer that gives back to the broader community" (mean 0.63 vs. 0.53, $t(233) = -2.13$, $p < 0.05$). This suggests that these workers consciously increased their work effort for an employer that they viewed to be more prosocial, again suggesting that these individuals are likely prosocially-oriented themselves.

Taken together, these survey results suggest that volunteer and donation history was likely an adequate proxy for prosocial inclination. Nonetheless, in the following Elance experiment, to ensure robustness of my findings, I employ a different proxy for prosocial orientation: a prosocial motivation scale adapted from Grant (2008). In the following Elance experiment, I also employ a different control condition. Rather than receiving no information about the employer, the control group received generic information about the employer.

**Field Experiment 2 (Elance)**
**Design**

Acting as a hiring firm, I advertised a job on Elance: data entry into Excel from websites.[17] The job was to fill in an Excel database with at least the top 50 Twitter users per category (for three categories), gathered from a website. This job was designed in collaboration with a real start-up organization that uses Elance for most of its hiring needs, to ensure that the job was one that a real employer on Elance would post and

[17] IRB approval was obtained. The study took place in May 2015. The name of the fictitious firm is available from the author upon request.

which would not seem out of place in indicating the possibility for (but not requirement of) extra work unrequired for payment.[18]

Interested applicants submitted a proposal on the Elance website, including bid amount. All workers who submitted complete proposals and bid less than $100 for the job were hired.[19] After workers were hired, they were asked to click on a link to receive information the hiring company, gather their information, and to receive more detailed instructions about the job. Via this link, participants were first asked a few optional questions about themselves.[20] All workers were then randomly assigned to one of two conditions: (1) a CSR treatment group that received information about the employer's charitable giving program or (2) a control group that received generic information about the employer. (See Figure 3 for the messages corresponding to each condition.) After receiving their messages, workers were given detailed instructions about the job, as well as the website from which to pull information, and an Excel file to fill out (all workers received the same website and Excel file, by design, though they did not know this). In the job instructions, it was noted that, although only the top 50 Twitter users in each of the three categories (150 total) were required for payment, information on more users was always helpful for the hiring company, and would be welcome. There were 1081 possible extra entries on the website.[21] Workers completed the job within two weeks, and submitted their final work product (the filled out Excel file) via Elance. Upon completion of the job, all workers were paid through the Elance payment system. After paying them, they were asked to take an optional one-minute survey.

*Insert Figure 3 here*

[18] I used a slightly modified version of the job description (and language indicating extra work) posted by this start-up organization on Elance the year before this study was conducted, with the organization's approval. Their posting requested the top 50 Twitter users per category for three categories (brands, celebrities, and media) for the country of Colombia. In this study's job description, I indicated that the country and categories would be different for each Elance worker.

[19] The cutoff for acceptable bid amount was determined in consultation with a start-up organization that frequented Elance for its hiring needs. This resulted in not hiring individuals who bid the amounts of $140, $165, $300, $250.01, and $438.36.

[20] They were informed that answering these questions was optional and would not influence their working relationship with the hiring firm.

[21] In cases where workers provided even *more* additional entries from other websites, their responses are coded as the maximum amount available on the website provided (1081), since assessing whether or not those additional entries are helpful to the hirer is not obvious. If those entries are coded as extra additional entries, the results presented in the results section become even stronger.

**Sample**

Ninety-four individuals were offered the job. After dropping those who did not accept the job and observations with duplicate IP addresses (an indication that the job was completed more than once by the same person under different Elance aliases, which would result in treatment contamination), the resulting sample size is 70 observations. None of the workers dropped out of the job after random assignment of conditions.

Table 4 reports summary statistics for the sample by condition. There were no statistically significant differences between the mean characteristics listed in Table 4 for the treatment and control groups except for *living in Central or South America*, suggesting that randomization was successful and that selection bias due to observables is minimal.[22] Based on Elance metrics, workers, on average, earned $2,830 from previous Elance jobs, completed 22 previous Elance jobs, and earned 4.8 stars (out of 5) based on employers' ratings from previous Elance jobs. Forty-nine percent of the workers are women. Based on self-reported data gathered during the survey, the average prosocial orientation rating was 3.2.[23] The mean bid amount for the job amongst hired workers was $35.16.

*Insert Table 4 here*

**Measures**

*Dependent Variable. # unrequired data entries* is the number of unrequired extra data entries completed (i.e., the number of completed data entries above the required 150 entries).

*Independent Variable. Philanthropy message* is a dummy variable coded 1 if the worker received information about the company's intention to be a socially responsible company and 0 otherwise.

[22] This geographic control is thus included in the regressions reported in field experiment 2's Results section.
[23] Prosocial orientation rating is the average of responses to 5-point Likert scale questions commonly used to assess individuals' prosocial motivation taken from Grant (2008); Please indicate how much you agree or disagree with these statements: "I care about benefitting others"; "I want to help others"; "It is important to me to do good for others."

*Control and Mediating Variables.* Control variables which could intuitively influence a worker's willingness to complete extra work beyond what is included in the job contract were constructed from information reported by the applicants (income and a prosocial inclination proxy) and from the Elance proposal submissions (all other characteristics). *Female* is a dummy variable. Gender was classified based on pictures and names on the virtual worker's Elance profile. *Income buckets* is an ordinal variable with the following values: 1 if household income in the previous year was less than $30K, 2 if between $30,000 and $49,9999, 3 if between $50,000 and $69,999, 4 if between $70,000 and $89,9999, and 5 if $90,000 or above. *Bid amount* is a continuous variable indicating the amount bid, and thus paid, for the job. *Earnings from previous Elance jobs* is a continuous variable for the amount earned on Elance prior to completion of the job (in USD). *Performance on previous Elance jobs* indicates the average number of stars (out of 5) awarded to the worker by previous Elance employers and is a proxy for prior work performance. *Proposal quality* is the average of two research assistants' independent assessments of the quality of the proposal submitted (on a scale of 1 to 5). *Correspondence tone* is the average of two research assistants' independent assessments of the degree of positivity in the online communication between the worker and the employer during the course of the job (on a scale of 1 to 5). It is included as a control variable to ensure that communication between the employer and worker during the course of the job did not bias results. *Living in Central or South America* is a dummy variable included due to imperfect randomization of this characteristic across the treatment and control groups.

*Prosocial orientation* is operationalized as the average of responses to 5-point Likert scale questions commonly used to assess individuals' prosocial motivation taken from Grant (2008).[24]

**Results**

Figure 4 presents the kernel density estimations of # *unrequired data entries* for the control and philanthropy treatment groups. The Kolmogorov-Smirnov and Wilson rank-sum (Mann-Whitney) tests

[24] Please indicate how much you agree or disagree with these statements: "I care about benefitting others"; "I want to help others"; "It is important to me to do good for others."

confirm that the distributions of the control and treatment groups are marginally statistically different ($p < 0.10$ and $p < 0.05$, respectively).

*Insert Figure 4 here*

Ordinary least squares (OLS) regression results are reported in Table 5. Model 1 shows that without control variables workers in the treatment group completed a directionally, but not statistically significant, higher number of optional data points than the control group ($\beta = 1.24$, $p > 0.10$). Model 2 includes controls variables which could intuitively influence the number of unrequired entries completed. Workers who earned more and received higher prior performance ratings on previous Elance jobs completed more unrequired data points than those who earned less and received lower performance ratings ($\beta = 0.04$, $p < 0.05$ and $\beta = 139.60$, $p < 0.10$ respectively). This demonstrates that prior Elance experience was predictive of willingness to complete extra work unrequired for payment. *Living in Central and South America* was included due to imperfect randomization of geographic location across the control and treatment groups, but the coefficient on this variable is not significant. Other demographic characteristics and Elance proposal characteristics were not predictive of willingness to complete extra work unrequired for payment either. With inclusion of these controls, information about the corporate philanthropy program resulted in completion of 221 more unrequired data points ($\beta = 221$, $p < 0.10$). This represents an economically significant increase of 68 percent more unrequired data points completed compared to the control group average. The effect of the social responsibility message remains significant in Model 3 when only those control variables shown to be statistically significantly different from zero are included in the regression ($\beta = 184$, $p < 0.05$). This suggests that gig workers are motivated by receiving information about their employer's social responsibility, which causes them to be more willing to complete extra work unrequired for payment.[25]

[25] Corporate philanthropy treatment did not influence accuracy measures for the required (or unrequired) work completed ($p > 0.10$).

Model 4 explores whether a corporate philanthropy message differentially affects the willingness to complete unrequired work amongst those who are more prosocially oriented. It includes, as controls, those prior Elance experience characteristics shown to be predictive of number of unrequired data entries completed. Individuals who scored above the median prosocial rating were more responsive to a corporate philanthropy message than those who scored below the median prosocial rating ($\beta = 329$, $p < 0.10$). This provides moderate support that prosocially-oriented gig workers are more responsive to learning about their employer's social responsibility than gig workers who are not prosocially-oriented.

*Insert Table 5 here*

**Discussion and Conclusions**

Through field experiments implemented in two online labor platform marketplaces, this paper demonstrated that information about an employer's social responsibility increased gig workers' willingness to go beyond what was required for their employer. This effect was driven by prosocial-orientation, and mediated these workers' lower willingness to do extra work on average. This paper contributes to our understanding of the nonpecuniary motivation of a type of worker—the gig or contingent worker—who is becoming increasingly important for firms.

The treatment effect of corporate philanthropy on worker performance evidenced by this paper is a mechanism distinct from those put forth in the formal theoretical CSR literature, where it has been suggested, for example, that there is a labor-market screening effect of CSR with implications for employee performance (e.g., as suggested by Albinger and Freeman 2000, Brekke and Nyborg 2008, Fehrler and Kosfeld 2014). In this paper, any selection effect is controlled for, as the random assignment of conditions takes place after gig workers have selected into working on the job.[26] This paper suggests

[26] Certainly, there is selection into the larger sample of workers hired on AMT or Elance. However, there is no selection into the treatment or control groups; this is controlled for in these studies. The use of field experiments to control for selection and observe causal relationships have been identified as a promising way to move forward our understanding of inputs of interest and antecedents of firm performance (Chatterji et al., 2015) as well as our understanding of socially responsible initiatives (Delmas and Arragon-Correa, 2016).

that, irrespective of the type of performer who selects into working for the employer, information about an employer's corporate philanthropy program can motivate prosocially-oriented gig workers to go above and beyond what is explicitly required in their job description. Whether and how self-selection and treatment effects interact with implications for the overall effect on (gig) employee productivity can be explored in future research.

This paper provides evidence that a feel-good mechanism, rather than a signaling-about-employer-trustworthiness mechanism, drove gig workers' behavioral response to employer social responsibility. This contrasts Burbano's (2016) finding, which examined the effect of socially responsible messages on (gig) workers in a parallel context (MTurk and Elance) at a different stage in the stakeholder-employer relationship: prospective workers before they are (or are not) hired. Burbano (2016) demonstrated that a signaling-about-employer-trustworthiness mechanism, rather than a feel good or "warm glow" mechanism, drove the negative impact of CSR messages on prospective (gig) workers' payment requirements.[27] Burbano (2016) also found that higher performing prospective workers, not the prosocially-oriented, were most responsive to a CSR message. Taken together with these findings, this highlights the importance of considering the stage of the employee-employer relationship in determining the type of individual most affected by social responsibility, as well as the mechanism through which such activities influence employee behavior. Indeed, just as the distinction has been made between internal and external stakeholders in their responses to CSR (Hawn and Ioannou, 2016), this suggests that there are even more fine-grained distinctions in responses to CSR to explore within stakeholder groups, by stage of the stakeholder-firm relationship.

The online labor marketplace settings used in this paper are prime contexts in which to study gig or contingent worker behavior. As the jobs used in these studies were very short-term, for small amounts of pay, and data-entry focused, future work could explore whether and how effects differ when jobs are

[27] Rather than exploring a treatment effect of corporate philanthropy information on *hired employees'* performance behavior as this paper does, Burbano (2016) explores the effect of CSR messages on *prospective* CSR reservation wages. Burbano (2016) explores the effect of different CSR messages on a different DV (reservation wage and bid amount, rather than performance), identifies a different mechanism as driving effects (a signaling-about-employer-treatment-type, rather than feel-good) than this paper does, and finds that a different type of worker (high performing workers, rather than prosocially oriented workers) is most responsive to CSR treatment.

longer term and of a different type (for example, more creative and innovative in nature). The proxy for social responsibility in this paper was information about the employer's corporate philanthropy. As there is certainly heterogeneity in CSR (Kaul and Luo), future work could examine whether or types of social responsibility such as environmental responsibility, diversity initiatives or other manifestations of corporate purpose have differential effects.

Extant work examining the strategic human capital management of related non-traditional workers such as virtual workers has mainly focused on team- and individual-level characteristics that influence the productivity of these workers (Martins et al. 2004). This paper demonstrates that an *employer*-level characteristic can influence the productivity of non-traditional workers, and suggests the promise of exploring the effects of corporate purpose (Gartenberg, Prat, and Serafeim 2016), other types of CSR inputs and other employer-level characteristics on non-traditional workers' productivity. It also suggests the merit of exploring how gig and virtual workers respond to non-pecuniary incentives more broadly. The finding that prosocially-oriented gig workers are most responsive to information about employer social responsibility responds to a call to examine heterogeneous attitudes amongst virtual workers (Martins et al. 2004). Future work could examine whether prosocially-oriented gig and virtual workers respond differently to other non-pecuniary incentives, as well as whether this response varies by degree of virtual-ness and job type.

From a practical perspective, this paper suggests that managers should highlight their firm's social responsibility to gig and contingent workers. Managers have traditionally underestimated the motivational effects of corporate philanthropy and other CSR efforts on gig workers' behavior, instead focusing the marketing of such efforts on non-virtual employees. Indeed, corporate philanthropy programs are commonly highlighted during full-time employee career fairs and other recruiting initiatives, but are rarely highlighted during the recruiting of gig employees. This paper further suggests that the marketing of such efforts to gig virtual employees in electronic print can be effective. As the strategic management of gig workers becomes increasingly important to the firm (Chesbrough and Teece

2012, Gibson and Cohen 2003, Kirkman et al. 2004), tools such as these will become increasingly important to managers.

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## Figures and Tables

**Figure 1. Message received, by condition**
**Experiment 1 (AMT)**

| **Control group (1)** | **Philanthropy treatment group (2)** |
|---|---|
| We are processing your answer. Click on "continue" after the button appears at the bottom right of this page. This should take approximately 15 seconds. Thank you for your patience. | |
| | In the meantime, we would like to tell you about one of our philanthropic programs.<br><br>Charitable Giving Program<br><br>We have a longstanding tradition of giving back to the community.<br><br>In 2012, we donated 1% of our profit to charities doing important work in our community.<br><br>In 2013, we will continue to identify the nonprofit organizations that contribute to the well-being of the broader community.<br><br>The recipients of our 2012 donations were:<br><br>The American Red Cross<br>enables communities to prepare for and respond to natural disasters.<br><br>The Boys and Girls Clubs of America<br>enables young people to reach their full potential.<br><br>The Cancer Research Institute<br>supports and coordinates lab and clinical efforts towards the treatment, control and prevention of cancer.<br><br>The Global Hunger Project<br>works towards the sustainable end of hunger and poverty.<br><br>The Greenpeace Fund<br>increases public awareness and understanding of environmental issues. |

**Figure 2. Kernel densities of number of optional data points completed, by condition**
**Experiment 1 (AMT)**

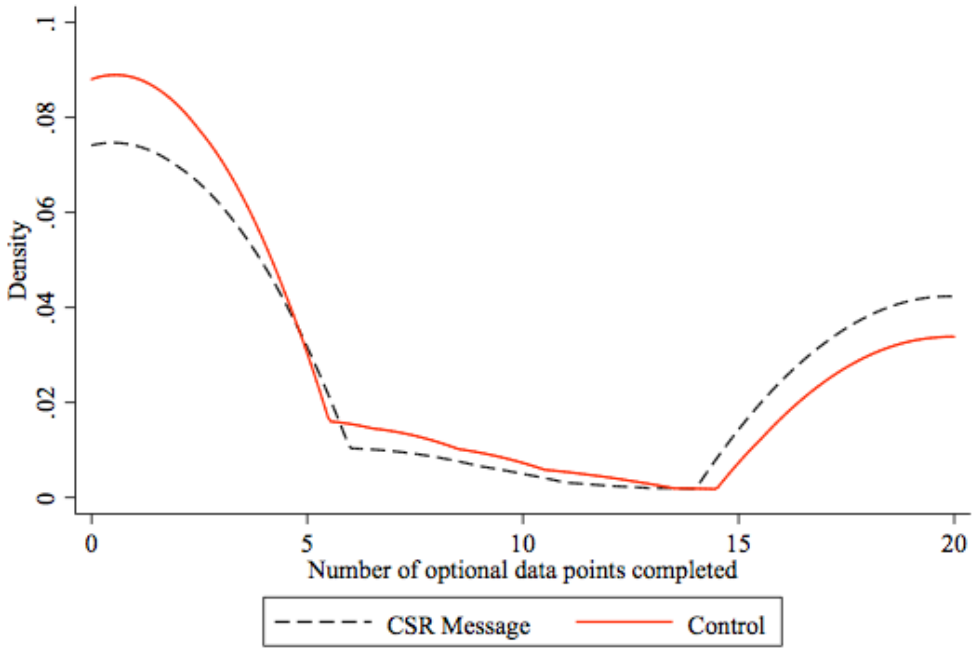

**Figure 3. Message received, by condition**
**Experiment 2 (Elance)**

| **Control group**<br>**(1)** | **Philanthropy treatment group**<br>**(2)** |
|---|---|
| Thank you, we are processing your answers. This will only take 15 seconds.<br>In the meantime, we are very proud of, and wanted to tell you about, | |
| our company.<br><br>{Firm Name Omitted} Incorporated<br><br>Founded in 2014,<br><br>we are a privately owned company that provides a range of services to our clients.<br><br>In 2015, we will continue our important work.<br><br>Our services include but are not limited to:<br><br>Data gathering and analysis<br>seek and synthesize data information.<br><br>Internet research<br>capture and analyze quantitative and qualitative information from the internet.<br><br>Statistical consulting<br>use the art and science of statistics to solve practical problems.<br><br>Forecasting<br>use data to make predictions about events whose outcomes have not yet been observed.<br><br>Pattern recognition<br>analyze patterns and regularities in data. | our charitable giving program.<br><br>{Firm Name Omitted} Incorporated Gives<br><br>We have a tradition of giving back to the communities where our workers live and work.<br><br>In 2014, we donated 1% of our profit to charities doing important work in our community.<br><br>In 2015, we will continue this important work.<br><br>The recipients of our 2014 donations were:<br><br>The American Red Cross<br>enables communities to prepare for and respond to natural disasters.<br><br>The Boys and Girls Clubs of America<br>enables young people to reach their full potential.<br><br>The Cancer Research Institute<br>supports and coordinates lab and clinical efforts towards the treatment, control and prevention of cancer.<br><br>The Global Hunger Project<br>works towards the sustainable end of hunger and poverty.<br><br>The Greenpeace Fund<br>increases public awareness and understanding of environmental issues. |

**Figure 4. Kernel densities of number of additional entries, by condition**
**Experiment 2 (Elance)**

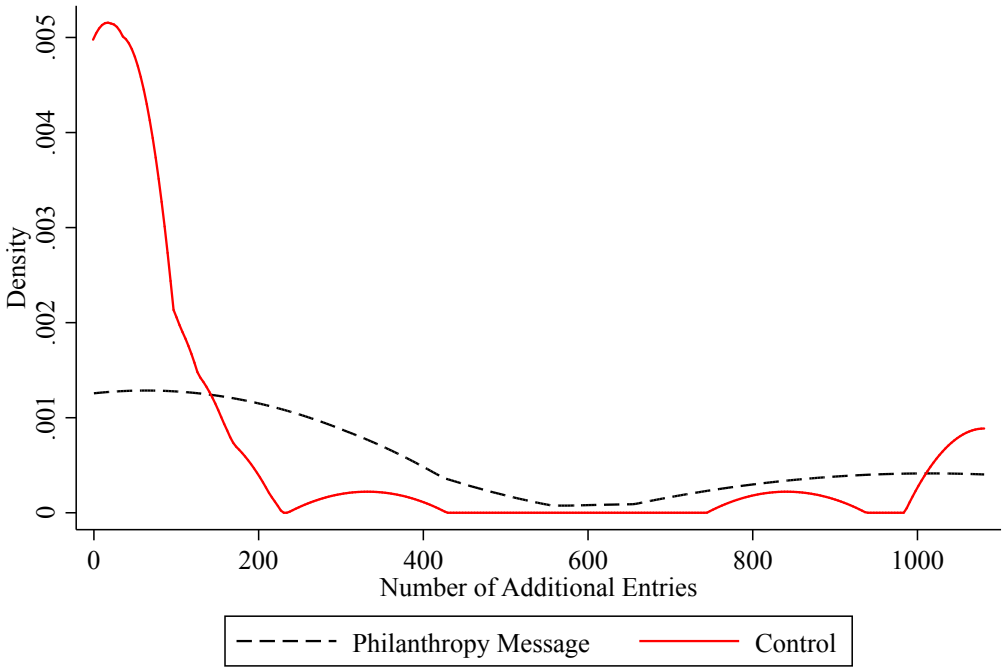

**Table 1. Worker characteristics: summary statistics, by condition (randomization balance) Experiment 1 (AMT)**

| | Control | Philanthropy Treatment | p-value of null that difference of means equals 0 |
|---|---|---|---|
| ***Demographic characteristics*** | | | |
| Female (Y=1, N=0) | 0.47 | 0.42 | 0.22 |
| | (0.50) | (0.50) | |
| Age | 30.30 | 30.28 | 0.98 |
| | (10.16) | (10.17) | |
| College degree (Y=1. N=0) | 0.47 | 0.53 | 0.18 |
| | (0.50) | (0.50) | |
| Income (<$30K=1, $30-60K=2, >$60K=3) | 1.96 | 1.91 | 0.45 |
| | (0.81) | (0.81) | |
| White (Y=1, N=0) | 0.76 | 0.75 | 0.66 |
| | (0.42) | (0.43) | |
| Black (Y=1, N=0) | 0.07 | 0.09 | 0.39 |
| | (0.25) | (0.28) | |
| Hispanic (Y=1, N=0) | 0.06 | 0.05 | 0.55 |
| | (0.25) | (0.22) | |
| Asian (Y=1, N=0) | 0.13 | 0.15 | 0.53 |
| | (0.33) | (0.35) | |
| Democrat (Y=1, N=0) | 0.43 | 0.44 | 0.77 |
| | (0.50) | (0.50) | |
| Republican (Y=1, N=0) | 0.14 | 0.17 | 0.41 |
| | (0.35) | (0.37) | |
| Independent (Y=1, N=0) | 0.35 | 0.31 | 0.37 |
| | (0.48) | (0.46) | |
| ***AMT experience characteristics*** | | | |
| HITs per week in the last month (<10 = 1, 10-49=2, 50-100=3, >100=4) | 2.51 | 2.52 | 0.94 |
| | (1.02) | (1.03) | |
| HIT approval rate (between 95 and 100) | 98.90 | 99.01 | 0.21 |
| | (1.15) | (0.96) | |
| Primary reason complete HITs on AMT (Y=1, N=0): | | | |
| "The money I earn on MTurk is my primary source of income." | 0.14 | 0.16 | 0.48 |
| | (0.35) | (0.37) | |
| "The money I earn on MTurk is not my primary source of income, but is the main reason I complete HITs on MTurk." | 0.55 | 0.58 | 0.52 |
| | (0.50) | (0.49) | |
| "It is a productive use of my free time." | 0.28 | 0.24 | 0.27 |
| | (0.45) | (0.43) | |
| "It is fun." | 0.03 | 0.02 | 0.56 |
| | (0.17) | (0.14) | |
| ***Prosocial inclination*** | | | |
| Volunteered with and donated money to a charity or nonprofit in previous year (Y=1, N-0) | 0.25 | 0.20 | 0.59 |
| | (0.43) | (0.42) | |

N=568, except for HIT approval rate (N=544). Based on independent sample t-tests, robust to use of chi-square tests for categorical variables.

**Table 2. Regression results**
**Experiment 1 (AMT)**

| Regression Type: | OLS | | | Logit | | | OLS | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Dependent variable: | # Optional data points completed (out of 20) | | | Likelihood of completing all 20 optional data points | | | % Optional data points correct | | % Required data points correct | |
| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 | Model 8 | Model 9 | Model 10 |
| CSR message | 1.49** | 1.80** | 1.10 | 0.39** | 0.50** | 0.33 | 0.04** | 0.04** | 0.00 | 0.00 |
| | (0.74) | (0.75) | (0.87) | (0.19) | (0.20) | (0.22) | (0.02) | (0.02) | (0.01) | (0.01) |
| Female | | 2.51*** | 2.45*** | | 0.64*** | 0.62*** | | -0.02 | | 0.01 |
| | | (0.80) | (0.80) | | (0.21) | (0.21) | | (0.02) | | (0.01) |
| Volunteer & donate | | -1.67* | -3.12*** | | -0.52** | -1.02** | | -0.00 | | 0.00 |
| | | (0.88) | (1.09) | | (0.26) | (0.40) | | (0.02) | | (0.01) |
| (CSR message) x (Volunteer & donate) | | | 2.96* | | | 0.87* | | | | |
| | | | (1.74) | | | (0.51) | | | | |
| HIT approval rating | | -0.37 | -0.45 | | -0.13 | -0.15 | | -0.01 | | 0.01* |
| | | (0.37) | (0.37) | | (0.09) | (0.09) | | (0.01) | | (0.01) |
| HITs per week buckets | | -0.33 | -0.34 | | 0.00 | 0.00 | | -0.01 | | 0.01** |
| | | (0.36) | (0.36) | | (0.09) | (0.10) | | (0.01) | | (0.01) |
| College degree | | -0.66 | -0.74 | | -0.13 | -0.15 | | 0.01 | | 0.03* |
| | | (0.78) | (0.77) | | (0.21) | (0.21) | | (0.01) | | (0.01) |
| % Required data pts correct | | 3.35 | 3.42 | | 0.64 | 0.67 | | 0.45*** | | |
| | | (2.48) | (2.47) | | (0.74) | (0.73) | | (0.14) | | |
| Constant | 5.82*** | 36.09 | 43.88 | -1.16*** | 9.67 | 11.94 | 0.93*** | 1.97*** | 0.91*** | -0.57 |
| | (0.50) | (37.07) | (37.02) | (0.14) | (9.11) | (9.22) | (0.02) | (0.55) | (0.01) | (0.84) |
| Other demographics | No | Yes | Yes | No | Yes | Yes | No | Yes | No | Yes |
| N | 568 | 544 | 544 | 568 | 544 | 544 | 241 | 233 | 568 | 544 |

Estimated coefficients of regressions are reported, with robust standard errors in parentheses. *Significant at 10%, ** significant at 5%, *** significant at 1%

**Table 3. Regression results. DV: Number optional data points completed**
**Experiment 1 (AMT)**

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---|---|---|---|---|---|
| Makes me feel good (1) | 2.92*** | | | | 4.27*** |
| | (1.07) | | | | (1.27) |
| Signal employer trustworthy (2) | | -0.12 | | | -1.52 |
| | | (1.09) | | | (1.49) |
| Signal employer not greedy (3) | | | 0.16 | | -0.65 |
| | | | (1.09) | | -1.41 |
| Indicates employer has excess profit (4) | | | | -1.18 | -1.68 |
| | | | | (1.29) | (1.34) |
| Constant | 5.81*** | 7.36*** | 14.90*** | 7.58*** | 6.54*** |
| | (0.75) | (0.75) | (0.67) | (0.62) | (0.84) |
| N | 287 | 287 | 287 | 287 | 287 |

Independent variables are indicator variables equal to 1 if the participant agreed or strongly agreed with the statement, and 0 if the participant neither agreed nor disagreed, disagreed, or strongly disagreed with the statement. The statements are: (1) "Learning about the charitable giving program made me feel good while working with this employer," (2) "The charitable giving program was a signal to me that this employer is trustworthy," (3) "The charitable giving program was a signal to me that this employer is not greedy," and (4) "The charitable giving program indicated to me that this employer has excess profits."

**Table 4. Worker characteristics: summary statistics, by condition (randomization balance) Experiment 2 (Elance)**

| | Control | Philanthropy Treatment | p-value of null that difference of means equals 0 |
|---|---|---|---|
| Female | 0.46 | 0.51 | 0.63 |
| | (0.51) | (0.51) | |
| Bid amount | 34.91 | 35.41 | 0.89 |
| | (17.27) | (14.72) | |
| Income (1=less than $30K; 2=$30-49.9K; | 1.12 | 1.11 | 0.97 |
| 3=$50-69.9K; 4=$70-89.9K; 5=$90K+) | (0.41) | (0.40) | |
| Number of previous Elance jobs completed | 25.09 | 18.17 | 0.41 |
| | (42.02) | (26.81) | |
| Earnings from previous Elance jobs (USD) | 3515.71 | 2144.94 | 0.21 |
| | (5377.45) | (3555.07) | |
| Performance on previous Elance jobs (out of 5 stars) | 4.87 | 4.80 | 0.64 |
| | (0.16) | (0.84) | |
| Proposal quality (scale of 1-5) | 3.67 | 3.42 | 0.33 |
| | (1.00) | (1.08) | |
| Living in Asia | 0.83 | 0.77 | 0.55 |
| | (0.38) | (0.43) | |
| Living in Central or South America | 0.09 | 0.00 | 0.08 |
| | (0.28) | 0.00 | |
| Living in Europe | 0.06 | 0.11 | 0.39 |
| | (0.24) | (0.32) | |
| Living in US or Canada | 0.03 | 0.00 | 0.31 |
| | (0.17) | 0.00 | |
| Living in Africa | 0 | 0.06 | 0.15 |
| | (0.16) | (0.22) | |
| Prosocial orientation (scale of 1-5) | 4.31 | 4.12 | 0.31 |
| | (0.59) | (0.89) | |

Means are reported with standard deviations in parentheses in Columns 1 and 2.
In Column 3, chi-squared test results are reported for Female and geographic location variables. Independent sample t-test results are reported for all other variables. Statistical significance is robust to the use of alternate statistical tests.
N=70, except for Income (N=69).

**Table 5. OLS Regression results**
**Experiment 2 (Elance)**
**DV: Number of unrequired data entries completed**

| | Model 1 | Model 2 | Model 3 | Model 4 |
|---|---|---|---|---|
| CSR message | 124.67 | 221.10* | 183.53** | -1.50 |
| | (183.43) | (117.80) | (88.35) | (120.92) |
| Female | | -19.01 | | |
| | | (115.16) | | |
| Income buckets | | -26.09 | | |
| | | (136.68) | | |
| Bid amount | | -1.87 | | |
| | | (3.50) | | |
| Earnings from previous Elance jobs | | 0.04** | 0.04** | 0.04*** |
| | | (0.02) | (0.01) | (0.01) |
| Performance on previous Elance jobs | | 139.60* | 146.15*** | 125.53*** |
| | | (82.09) | (28.57) | (29.99) |
| Number of previous Elance jobs | | -0.78 | | |
| | | (2.49) | | |
| Proposal quality | | 44.11 | | |
| | | (39.14) | | |
| Correspondence tone | | -68.17 | | |
| | | (79.18) | | |
| Living in Central or South America | | -30.70 | | |
| | | (154.46) | | |
| Above median prosocial rating | | -111.64 | | -78.00 |
| | | (103.83) | | (125.13) |
| (CSR message) x (Above median prosocial rating) | | | | 328.55* |
| | | | | (185.69) |
| Constant | 183.43*** | -521.05 | 653.73*** | -508.14** |
| | (60.83) | (510.56) | (162.82) | (192.07) |
| N | 70 | 69 | 70 | 70 |

Estimated coefficients of OLS regressions are reported, with robust standard errors in parentheses.
*Significant at 10%, **significant at 5%, *** significant at 1%.