Spring 2022

How the Level of Firm Support for Employee Volunteering Affects Employee Work Productivity and Altruistic Behavior Inside the Firm

Xiaomei Xiong

How the Level of Firm Support for Employee Volunteering Affects Employee Work Productivity and Altruistic Behavior Inside the Firm

by

Xiaomei Xiong

Bachelor of Arts
Xi'an International Studies University, 2010

Master of Science
University of Missouri-Kansas City, 2016

Submitted in Partial Fulfillment of the Requirements

For the Degree of Doctor of Philosophy in

Business Administration

The Darla Moore School of Business

University of South Carolina

2022

Accepted by:

Andrew Newman, Major Professor

Timothy Brown, Committee Member

Scott Jackson, Committee Member

Marlys Lipe, Committee Member

Ivo Tafkov, Committee Member

Tracey L. Weldon, Interim Vice Provost and Dean of the Graduate School

DEDICATION

I dedicate my dissertation to my mom who is in heaven. For her endless love, fearless spirit, and kind heart.

ACKNOWLEDGMENTS

I am very grateful to Drew Newman for all the guidance and support he has provided as my dissertation chair. I am also grateful to the other members of my dissertation committee, Tim Brown, Scott Jackson, Marlys Lipe, and Ivo Tafkov, for all their helpful comments and suggestions. I thank James Cannon, Jeremy Douthit, Devon Erickson, Robert Grasser, Ranjani Krishnan, Eva Labro, Carolyn Levine, Bob Lipe, Michael Majerczyk, Rachel Martin, Lindsay McManus, Brian Mittendorf, Jason Rasso, Lynn Rees, Donna Bobek Schmitt, Spenser Seifert, Timothy Shields, Chad Simon, Chad Stefaniak, Bryan Stikeleather, Qizheng Yu, Scott Vandervelde, Aaron Zimbelman and workshop participants at the University of South Carolina, University of Delaware, Utah State University, and the Journal of Management Accounting Research (JMAR)'s Online Rookie Camp for their helpful feedback. I gratefully acknowledge research support from the Darla Moore School of Business at the University of South Carolina.

ABSTRACT

Employee volunteering refers to employees giving time to volunteer for charitable causes with explicit support from their employer. Offering support for employee volunteering is one of the fastest-growing areas of employee benefits. Using a laboratory experiment, I examine the effectiveness of individual employee volunteering programs in motivating employees' altruistic behavior *outside* the firm, as well as their work productivity and altruistic behavior *inside* the firm. I predict and find that the level of firm support for employee volunteering not only affects employees' volunteering engagement *outside* the firm, but also affects employees' work productivity *inside* the firm. Moreover, I predict and find that although the presence of firm support for employee volunteering spills over to positively influence employee altruistic behavior *inside* the firm, the level of firm support is less consequential. The findings of my study suggest that individual employee volunteering programs can serve as an effective management control tool that leads to multidimensional benefits beyond Corporate Social Responsibility (CSR) objectives, and thus provide useful insights to firms when designing their employee volunteering programs.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

Employee volunteering refers to employees giving time to volunteer for charitable causes with explicit support from their employer. Offering support for employee volunteering is one of the fastest-growing areas of employee benefits (Grant 2012; Rodell, Breitsohl, Schröder, and Keating 2016; Glassdoor 2017; Society for Human Resource Management 2019; Knox 2020). To promote and guide employee volunteering, many companies (e.g., Aetna, Allstate, Dell, ExxonMobil, Google, Microsoft, PwC, Salesforce, and Verizon) have formal policies in place outlining how much volunteer time-off (VTO) employees can take in a year and the amount of firm-sponsored matching grants employees can claim for charities where they spend their volunteer hours. For example, Salesforce employees are eligible to take up to 56 hours of VTO per year to volunteer for charities that are personal to them (Salesforce 2021). Similarly, in addition to VTO, Microsoft supports employee volunteering via its Volunteer Match Program ($25 per volunteer hour), which resulted in its U.S. employees volunteering more than 750,000 hours in 2020 and Microsoft, in turn, donated $221 million to various charitable organizations (Microsoft 2020).

In this study, I investigate how variation across the level of firm support for individual employee volunteering *outside* the firm affects employee volunteering engagement, as well as their work behavior *inside* the firm. Given management accountants' responsibility for the design of control systems and employee incentives

(Bonner and Sprinkle 2002; Merchant and Van der Stede 2017), my study aims to provide insights into the effectiveness of offering these employee volunteering programs as a form of informal control across three consequential outcomes: 1) employee volunteering engagement *outside* the firm; 2) employee work productivity; and 3) employee altruistic behavior *inside* the firm.

Employee volunteering is a topic of growing importance in organizations around the globe (Rodell et al. 2016; Bengtson 2020; Deloitte 2020). In the U.S. alone, it contributes $5 billion annually to charities (America's Charities 2020). A recent survey indicates that 60% of U.S. companies offer VTO and an additional 21% plan to offer it in the next two years (America's Charities 2020).[1] 40% of Fortune 500 companies offer volunteer matching grants in addition to VTO to promote employee volunteering (Corporate Giving and Matching Gift Statistics 2021). Employee volunteering programs generally come in two forms: individual-based volunteering and group-based volunteering. Individual-based employee volunteering is different from structured group-based volunteering (e.g., Corporate Volunteer Day) such that the employee (as opposed to the employer) selects volunteering activities that are personal to them, instead of feeling compelled to engage in firm-planned volunteering that is often aligned with the company's public relations or marketing initiatives. In this study, I focus on the behavioral consequences of individual-based employee volunteering that gives employees the choice to voluntarily engage.

[1] VTO is often provided above and beyond regular vacation benefits and personal time off (PTO) as an extra employee benefit. VTO allows employees to schedule their own volunteer activities during working hours while still getting paid. By definition, VTO is paid time off to volunteer such that the employer (as opposed to employees) bear the opportunity cost associated with volunteering.

Many companies such as PwC and Salesforce have begun to prioritize individual employee volunteering (America's Charities 2020; PwC Volunteers 2020; Salesforce 2022). According to a Glassdoor survey, 75% of the Millennial workforce expects their employer to participate in social good, either through monetary donations or volunteering programs (Glassdoor 2017). Although offering support for employees' monetary donations has declined over the past five years, offering support for employee volunteering has increased by 5% during the same period (Society for Human Resource Management 2019). Because of the time, skill, and expertise involved, employees themselves also tend to view volunteering as a more important and more meaningful form of workplace giving than monetary donations (Grant 2012; Glassdoor 2017). Moreover, recent archival evidence suggests that the presence of employee volunteering programs can improve firm-level financial performance for up to six years (Knox 2020). Because of the abovementioned benefits, employee volunteering may be particularly valuable to firms' long-term success.

Despite the increased popularity and possible long-term benefits of supporting employee volunteering at the firm level, little is understood about its behavioral implications at the individual level, namely, employee volunteering engagement, work productivity, and altruistic behavior. Causal evidence regarding the behavioral consequences of employee volunteering is nearly absent (Jones, Newman, Shao, and Cooke 2019, p. 294). Existing research related to employee volunteering has focused primarily on the intended external benefits such as recruiting (e.g., Backhaus, Stone, and Heiner 2002), corporate reputation (e.g., Jones and Willness 2013; Lins, Servaes, and Tamayo 2017; Hartzmark and Sussman 2019), and consumer attraction (e.g., Elfenbein,

Fisman, and McManus 2012). However, little is understood about the potential internal consequences of firm support for individual employee volunteering, especially on employees' work productivity and altruistic behavior inside the firm (Cardinaels, Ruan, and Yin 2020; Newman, Tafkov, and Zhou 2020; Douthit, Martin, and McAllister 2021). The focus of my study is to examine whether providing support for individual employee volunteering can also serve as a management control tool that leads to multiple motivational benefits beyond recruitment and Corporate Social Responsibility (CSR) objectives documented in prior research (e.g., Backhaus et al. 2002; Lins et al. 2017; Hartzmark and Sussman 2019), and thus move forward our understanding about these employee volunteering programs from a standard CSR tool to a motivational tool.

To investigate the behavioral consequences of providing varying levels of firm support for employee volunteering, I focus on a setting where employees receive salaried compensation and firms' support for employee volunteering varies across two levels: 1) time support only (i.e., providing VTO only); or 2) dual support of time and money (i.e., providing a matching grant in addition to VTO). I also consider a baseline setting where employees have no opportunity to volunteer during their regular work time (i.e., the firm does not provide VTO nor offer a matching grant).

I posit that firms' support for employee volunteering can function as a management control tool affecting employee behaviors across three meaningful outcomes. First, I predict that by "putting your money where your mouth is," providing a matching grant in addition to VTO will signal a higher level of firm support for employee volunteering, and thus induce higher employee motivation to engage in individual volunteering. Thus, relative to providing VTO only, providing dual support of time and

money (VTO + matching grant) will positively affect employees' volunteering engagement *outside* the firm. Second, drawing on theories of reciprocity (Gouldner 1960; Uhl-Bien and Maslyn 2003; Christ, Sedatole, and Towry 2012) and moral satisfaction (Kahneman and Knetsch 1992; Balakrishnan, Sprinkle, and Williamson 2011), I predict that as the level of firm support for employee volunteering increases, employees' work productivity *inside* the firm will also increase. Third, drawing on moral consistency theory (Gneezy, Imas, Brown, Nelson, and Norton 2012; Susewind and Hoelzl 2014; Mullen and Monin 2016) and mental accounting (Thaler 1999; Rajagopal and Rha 2009), I predict the presence of firm support for employee volunteering externally will spill over to positively influence employee altruistic behavior internally. However, I expect that the level of firm support is less consequential for this positive spillover effect.

I test my predictions via a multi-stage experiment with a real effort task. In addition to a fixed salary, I manipulate volunteering support at three levels: 1) no support (VTO absent), 2) time support (VTO present), and 3) dual support of time and money (VTO + matching grant).[2] The experiment consists of two stages. In the first stage, participants work on the real effort task for three rounds. In the two VTO conditions, participants have an opportunity to give some of their regular work time to volunteer for a charity of their choice during the middle round with (or without) a matching grant. In the second stage, participants have an opportunity to help a coworker with the same real effort task. The purpose of the second stage task is to capture time-based employee altruism *inside* the firm.

[2] For the sake of brevity, I often refer to "firm support for employee volunteering" as "volunteering support".

Consistent with my predictions, I find that the level of volunteering support not only affects employees' volunteering engagement outside the firm, but also spills over to influence employee behavior *inside* the firm. Specifically, my results show that first, providing a higher level of volunteering support (VTO + matching grant) is effective in promoting employee volunteering engagement in terms of time employees spend on volunteering and their volunteering output, compared to only providing VTO. Second, although VTO by itself does not impact employee work productivity compared to when VTO is absent, providing extra monetary support for employee volunteering in the form of a matching grant significantly boosts their work productivity *inside* the firm. Furthermore, my results show that although the presence of firm support for employee volunteering spills over to positively influence employee altruistic behavior *inside* the firm, the level of firm support is less consequential.

My study offers important insights for firms regarding implementing and managing employee volunteering programs, as well as contributes to multiple streams of literature. First, my study extends the emerging accounting literature on charitable incentives that has primarily focused on the performance effects of varying forms of monetary donations (Balakrishnan et al. 2011; Douthit et al. 2021; Johnson, Khim, and Tian 2021). My study introduces employee volunteering programs as an alternative form of charitable incentive (i.e., time-based vs. money-based donations) and provides initial evidence regarding when and how the level of volunteering support can matter. Second, by documenting the effects that differing levels of volunteering support have on individual employees, my study extends existing volunteering research (Jones 2010; Rodell 2013; Newman et al. 2020; Cardinaels et al. 2020; Knox 2020) by providing clear

causal evidence regarding the relation between firm's volunteering support levels for charitable causes *outside* the firm and employee work behavior *inside* the firm. Prior research related to employee volunteering has focused on the factors that affect the likelihood of employee participation (e.g., DeVoe and Pfeffer 2007, 2010; Grant 2012; Rodell 2013; Newman et al. 2020). Using a common type of compensation (i.e., salary), my study extends this line of literature to examine the performance outcomes of volunteering support for external charities, as well as internal performance outcomes in terms of work productivity and employee altruistic behavior toward a coworker. My results suggest that volunteering support can serve as an effective management control tool to influence multiple outcomes of employee behavior. Lastly, by examining the spillover effects of employee volunteering externally on employee behaviors internally, my study complements prior CSR literature that has primarily focused on external benefits of corporate philanthropy (e.g., Elfenbein et al. 2012; Kitzmueller and Shimshack 2012; Lins et al. 2017; Hartzmark and Sussman 2019).

From a practical perspective, my study provides an initial examination of the performance effects of varying forms of employee volunteering programs which are an emerging type of employee benefit and management control. Informal controls such as tone at the top, shared values, or cultural norms have the advantage of being relatively unobtrusive, compared to other forms of management controls (e.g., performance evaluation, monitoring). My findings suggest that employee volunteering programs can have multidimensional benefits that extend their value beyond traditional CSR objectives, and thus provide useful insights for management accountants who have responsibility over incentive and control system design (Bonner and Sprinkle 2002; Merchant and Van

der Stede 2017). As firms implement and manage employee volunteering programs, my study highlights the relevance of considering how these programs affect both external and internal business objectives. Specifically, my results suggest that providing a matching grant in addition to VTO is needed for promoting employee volunteering engagement and boosting their work productivity, but not for the positive spillover of internal altruism. The findings of my study can facilitate firms' decisions about how to react to this growing trend of workplace giving and provide useful insights regarding the internal and external benefits versus internal costs when designing these employee volunteering programs.

CHAPTER 2

THEORY AND HYPOTHESES

Management control involves managers taking steps to motivate desired employee behavior (Merchant and Van der Stede 2017). In addition to formal controls such as financial incentives and performance evaluations, firms often rely on informal controls such as cultural norms that are built on shared values, written or unwritten, to govern employees' behaviors. Firm culture can be shaped in many ways, both in words (e.g., value statements, codes of conduct) and in firm actions (e.g., work design, employee benefits), and is likely to affect multiple aspects of employees' behavior. I posit that firms' support for employee volunteering can function as cultural control influencing employee behaviors across multiple outcomes. Given my focus on firms' support for employee volunteering, I first theorize how the level of firm support affects employee behavior *outside* the firm (e.g., volunteering engagement), followed by theory on how it can affect multiple aspects of employee behavior *inside* the firm (e.g., work productivity and altruistic behavior).

The Level of Volunteering Support and Employee Volunteering Engagement

The first purpose of my study is to examine whether and how providing different levels of volunteering support affects employees' altruistic behavior *outside* the firm via volunteering engagement. Although current compensation trends suggest that offering support for employee volunteering is one of the fastest-growing areas of employee benefits (Glassdoor 2017; Bengtson 2020; Deloitte 2020), surprisingly little is understood

about the effectiveness of these volunteering programs on employee volunteering engagement.

Recent accounting research focuses on the effects of work design (e.g., incentive scheme and task difficulty) on employees' altruistic behavior *outside* the firm and suggests that work design can facilitate or hinder individual employee volunteering (Newman, Tafkov, and Zhou 2020). Relatedly, a theoretical framework proposed by Rodell et al. (2016) suggests that employees' perceived autonomy in terms of work time and pay structure likely influences their decisions about time use, because the economic value of their time can vary depending on these work design factors. Providing time off for volunteering is likely to weaken the economic considerations associated with employee time use (DeVoe and Pfeffer 2007), thus, allowing individuals to weigh the social benefits associated with volunteering more heavily and more freely. As a result, I expect providing VTO will promote employees' engagement in volunteering activities.[3]

Further, I expect that compared to providing VTO only, providing extra monetary support in addition to time support (VTO + matching grant) will have extra benefits in terms of promoting employee volunteering engagement. First, by "putting their money where their mouth is," dual support in the form of time and money signals a higher level of explicit firm support for employee volunteering, and thus should generally induce higher employee motivation to engage in firm approved behavior by acting in line with firm's value (Tonin and Vlassopoulos 2015). Second, by adding a financial incentive to an existing social incentive, providing a matching grant in addition to VTO magnifies the

[3] Volunteering engagement could manifest in multiple ways such as likelihood to volunteer, time spent on volunteering, or volunteering output. For the sake of brevity, I keep my discussion of volunteering engagement in this section at the theoretical level and examine the various forms of manifestations further in my Results section.

perceived positive impact on the beneficiaries, thus making employees more aware of the positive impact their actions have on others (e.g., the charities). Such quantifiable impact and awareness likely further increase the utility and subjective meaning employees place on altruistic behavior *outside* the firm. Thus, my first hypothesis is as follows:

H1: Employee volunteering engagement is higher when VTO is present and the firm provides a matching grant, than when only VTO is present.

The Level of Volunteering Support and Employee Behavior Inside the Firm

While firms seek to design employee volunteering programs to best support external CSR objectives, they ultimately need to understand and be aware of the consequences these programs might have on internal business objectives. Therefore, in this section, I theorize how the level of volunteering support can affect two types of employee behavior inside the firm: employee work productivity and altruistic behavior *inside* the firm.

Employee Work Productivity

An emerging stream of accounting research studies the effectiveness of charitable incentives on employee effort focusing primarily on monetary donations (Balakrishnan et al. 2011; Tonin and Vlassopoulos 2015; Douthit et al. 2021; Johnson et al. 2021). Overall, this research finds consistent evidence suggesting that workplace giving to charitable causes can increase firm-related employee effort across different forms of monetary donations (e.g., direct corporate giving, employee earning a bonus for charities, corporate matching of employees' charitable donations). For example, Balakrishnan et al. (2011) find that firms can benefit from money-based corporate giving because by donating a portion of employees' contribution to charities, employees contribute more to

the firm. Similarly, Tonin and Vlassopoulos (2015) find that charitable donations result in a 13% increase in employee productivity, and the motivational value comes from the presence of charitable incentives rather than their magnitude. Most recently, Douthit et al. (2021) find that corporate matching of employees' donations induces even more effort than direct corporate giving.

Although prior research generally documents a positive effect of giving money, it is premature to assume that the results based on monetary donations will automatically hold for time-based donations. People generally make decisions about time and money differently, because compared to money, time is more perishable, less fungible, and impossible to store for a later use (Okda and Hoch 2004). Thus, when employees give time to charities via VTO, the value they place on, and the utility they derive from time-based giving will likely differ from that of money-based giving documented in prior research (e.g., Balakrishnan et al. 2011; Douthit et al. 2021).

From an economic standpoint, the *time-insensitive* nature of salaried compensation is likely to make giving time to volunteer seem "less costly" to employees, because this time is already guaranteed to be compensated by the employer who bears the opportunity cost associated with employee volunteering. From a psychological perspective, providing VTO under salaried compensation likely communicates two things to employees. One, the employer is committed to supporting charitable causes that are personally important to employees. Two, the employer trusts them to manage their own work time. Behavioral theory of reciprocity suggests that when employees feel trusted, they are likely to reciprocate with higher levels of trust and effort (Gambetta 1988; Christ, Sedatole, and Towry 2012). Moreover, from employees' perspective, VTO likely

induces higher moral satisfaction, and thus increases the meaning they ascribe to their work, and consequently their motivation to perform inside the firm (Kahneman and Knetsch 1992; Aguilera, Rupp, Williams, and Ganapathi 2007; Balakrishnan et al. 2011; Tonin and Vlassopoulos 2015). Accordingly, it is reasonable to expect that providing VTO under salaried compensation will motivate higher employee effort *inside* the firm relative to no volunteering support, even though there is no economic incentive to increase effort. Formally, I present the following hypothesis:

H2a: Employee work productivity is higher when VTO is present than when VTO is absent.

Perceived firm support is important to employees' understanding of what the employer values (Balakrishnan et al. 2011; Korschun, Bhattacharya, and Swain 2014; Douthit et al. 2021). Adding a matching grant in addition to VTO communicates more strongly to employees that the firm shares their social values and supports their moral aspirations with greater firm commitment. From a management control perspective, shared values also have the advantage of being relatively unobtrusive, compared to other forms of cultural controls (e.g., codes of conduct). That is, employees are less likely to think of the shared value with the employer as a type of "control." From a social exchange perspective, reciprocity suggests that individuals are likely to reciprocate and reward a kind action with an equivalent level of return (e.g., Gouldner 1960; Uhl-Bien and Maslyn 2003). Thus, providing dual support of time and money is likely to more strongly convey to employees that the employer is kind to them, and thus induce a higher level of reciprocity with the employer. Similarly, dual support of time and money is likely to further enhance employees' moral satisfaction related to their work and increase

their motivation to perform *inside* the firm. Taken together, I predict that as the level of firm support for employee volunteering increases, employees' motivation to perform *inside* the firm will also increase. Formally, I state the following hypothesis:

H2b: Employee work productivity is higher when VTO is present and the firm provides a matching grant than when only VTO is present.

Employee Altruistic Behavior Inside the Firm

The last purpose of my study is to examine the potential spillover effects from employees' volunteering externally on their altruistic behavior internally. While altruistic behavior outside the firm can have CSR-related benefits (e.g., corporate reputation, customer attraction, recruiting), altruistic behavior toward other employees inside the firm can also play a critical role in internal business operations (e.g., William and Anderson 1991; P. Podsakoff, Whiting, N. Podsakoff, and Blume 2009; Black 2020). However, internal altruistic behavior can be difficult to motivate because extra-role performance cannot be perfectly anticipated, monitored, or measured, and thus contracted in advance (Holmstrom 1979; Holmstrom and Milgrom 1991; Sprinkle 2003; Hecht, Tafkov, and Towry 2012). In this section, I develop theory to predict how the level of volunteering support for charitable causes outside the firm can spill over to affect employees' altruistic behavior toward coworkers.[4]

Employees form their understanding of firm culture based on their job design and work environment and then incorporate this information into how they approach their

[4] Altruistic behavior towards coworkers and altruistic behavior towards the firm are two distinct constructs (Williams and Anderson 1991; Lee and Allen 2002). In this study, my focus is on the altruistic behavior towards other coworkers. The extent to which such altruism also benefits the firm is beyond the scope of my study.

work (e.g., Grant 2007; Balakrishnan et al. 2011; Black, Newman, Stikeleather, and Waddoups 2019). For example, Balakrishnan et al. (2011) document that employees take the level of firm giving as a cue for the firm's prosocial identity and adjust their work behavior accordingly. Compared to when VTO is absent, providing VTO sends a positive signal of the firm's prosocial identity by sharing the opportunity cost associated with employee volunteering (i.e., forgone work time and output). In such a work context, employees' tendency to help others is more likely to be activated, and thus employees are more likely to embrace the firm's prosocial identity by acting consistently and altruistically toward another employee.[5] Similarly, Merchant and Van der Stede (2017) state that one of the distinctive advantages of firm culture over other types of controls is that once activated, cultural controls can have lasting influence on other aspects of employee behavior.

Further, moral consistency theory (Susewind and Hoelzl 2014; Mullen and Monin 2016) suggests that employee volunteering likely activates positive spillover from charitable activities *outside* the firm to altruistic behavior *inside* the firm. Prior research (Gneezy et al. 2012; Mullen and Monin 2016) suggests that costly initial altruistic behavior such as spending time and effort to volunteer for a charitable cause is more likely to be perceived as diagnostic about the self, leading employees to embrace the prosocial value indicated by that behavior in subsequent actions, resulting in moral

[5] This prediction is based on behavioral theory, given that I am interested in a setting that allows me to clearly test the behavioral effects of firms offering varying levels of volunteering support. From an economic standpoint, employees face no immediate economic benefit for helping a fellow coworker, while there is often a cost associated with helping (e.g., forgone leisure time, time could be spent working for oneself). To the extent that employees face stronger economic incentives to act self-servingly, this could change the relative weight they place on social versus economic motives. Ultimately, how employees would trade-off economic versus social motives and factors that influence this tradeoff are empirical questions beyond the scope of the current study.

consistency. Because of the time and effort involved, VTO is likely to prime employees to view themselves as altruistic individuals (Gneezy et al. 2012), and thus increase their tendency to help others. Taken together, the above discussion suggests that compared to when VTO is absent, providing firm support for VTO externally likely spills over to positively influence employees' altruistic behavior internally. Formally stated, my next hypothesis is as follows:

H3a: Employees' altruistic behavior inside the firm is higher when VTO is present than when VTO is absent.

Finally, I expect that providing extra monetary support in addition to time support (VTO + matching grant) is unlikely to have extra benefits in terms of promoting employee altruistic behavior *inside* the firm, compared to VTO only; although such extra benefits are expected in terms of employee volunteering engagement (H1) and work productivity (H2b). First, mental accounting (Thaler 1999) suggests that individuals combine associated outcomes into the same mental account and evaluate them jointly. The closer the association between outcomes, the greater the likelihood the outcomes will be evaluated jointly. Altruistic behavior inside the firm often involves time (e.g., helping a coworker or undertaking an additional task that is often time-consuming but not directly rewarded). Given that people create and maintain mental accounts for time as they do for money (Rajagopal and Rha 2009), when individuals already spend time from the same "altruistic mental account" to help others externally via volunteering, their mental budget left for time-based internal altruistic behavior is likely to be smaller, even if this account is activated by VTO. Thus, once activated, their altruistic behavior *inside* the firm is unlikely to continue to increase as the level of firm support for employee volunteering

increases (i.e., employees' "altruistic mental account" satiates).[6] Accordingly, I predict that the presence of volunteering support, but not the level of volunteering support will positively impact employees' altruistic behavior *inside* the firm. I state my last hypothesis as follows:

H3b: There is no difference in employee altruistic behavior inside the firm when VTO is present and the firm provides a matching grant compared to when only VTO is present.

To summarize, I predict that relative to providing VTO only, providing a matching grant in addition to VTO will positively affect employees' volunteering engagement *outside* the firm, as well as employee work productivity *inside* the firm. However, regarding employee altruistic behavior inside the firm, I expect that although the presence of volunteering support can serve as an activation tool, and thus spill over to positively influence employee behavior, the level of firm support is less consequential.

[6] Reciprocity is unlikely to influence employees' altruistic behavior towards a coworker because in my study, the first mover of the kind action is the firm rather than the coworker (Rabin 1993; Douthit et al. 2021).

CHAPTER 3

METHOD

Experimental Design and Task Description

To test my hypotheses, I conduct a laboratory experiment using a 1 × 3 between-subjects design.[7] I manipulate firm support for employee volunteering at three levels: VTO absent, VTO present, and VTO + matching grant. The experiment consists of two stages. In the first stage, participants individually work on a real-effort task (described below) for three rounds with each round lasting five minutes. Volunteering happens in the middle round, as described later. In the second stage, participants have an opportunity to help a coworker with their task for up to five minutes. The second stage of the experiment occurs after the completion of the first stage and is entirely voluntary. In addition to a $5.00 show-up fee, participants receive a fixed wage of $5.00 for completing the task.

For the primary real-effort task, I adapt a version of the letter search task where participants count the number of times a specific "search letter" appears within a letter box (Sprinkle, Williamson, and Upton 2008; Webb, Williamson, and Zhang 2013; Kachelmeier, Thornock, and Williamson 2016; Choi, Clark, and Presslee 2019; Newman, Tafkov, Waddoups, and Xiong 2021). Figure 3.1 shows an example of the letter search task. I use a 1 x 1 letter grid (thus the correct answer is always either "0" or "1") to

[7] The experimental design received approval from the University's Institutional Review Board.

facilitate a finer measure of performance while limiting task strategies beyond exerting effort (Choi et al. 2019). I also include a three-second penalty for each incorrect answer to further discourage participants from pursuing a guessing strategy rather than exerting effort. A timer in the top right corner of the computer screen counts down the time remaining for each of the five-minute rounds. The top left corner of the computer screen shows participants, in real-time, the number of boxes they have correctly completed in each round.

I manipulate firm support for employee volunteering at three levels. In the VTO present condition, participants are told that the employer they work for supports employee volunteering. Thus, during the second round of the first-stage task, they can take time off from their regular work time to volunteer for a charity of their choice. Specifically, instead of working, they can choose to take up to five minutes (in one-minute intervals) to volunteer for a charity of their choice. The charitable activity is typing personal messages (on a blank digital greeting card) to encourage kids in a children's hospital, thank food bank heroes who help Americans who are struggling with hunger, or thank animal rescue heroes who are fighting against cruelty to animals (See Figure 3.2 and Figure 3.3).[8] In the VTO + matching grant condition, participants are told that in addition to VTO, the employer matches each minute they volunteer with a $0.25 donation to the same charity (See Figure 3.4). [9] [10] In the VTO absent condition,

[8] The word limit is set to 140 characters per greeting card and participants can write as many cards as they wish within their chosen volunteering time.

[9] I set the matching grant at $0.25 per minute because it is easy for participants to process. In practice, the matching grant for VTO ranges from $15 to $25 per hour (Volunteer Grant Basics 2021), which is similar to $0.25 per minute. In addition, $0.25 is lower than employees' average pay of $0.33 per minute ($5 for a 15-minute work period), thus making it less likely to backfire and cause potential negative employee responses (Douthit, Mao, and Martin 2022).

[10] All the volunteering work (380 greeting cards) and matching grants ($34.75) were sent to the corresponding charities.

participants do not receive any of this information about the charities nor are they given the opportunity to volunteer during their allotted work time. Instead, to hold constant the presence of a choice as well as the opportunity to opt out of some of their available work time across conditions, participants in the VTO absent condition are given the opportunity to take a break for up to five-minutes (in one-minute intervals) during the second round by either 1) sitting quietly, 2) reading jokes, or 3) playing a word game.

For the second stage task, I adapt a modified version of the dictator game which provides participants an opportunity to help a coworker with the letter search task (See Figure 3.5 for an example).[11] The purpose of the second stage task is to capture time-based employee altruism inside the firm. The second stage task lasts up to five minutes and is entirely voluntary. Specifically, after the completion of the first stage primary task, participants are told that they can 1) finish early by skipping the second stage task altogether and proceeding directly to the post experimental questionnaire; 2) help a coworker who is also completing the study in the same session; or 3) work for themselves to improve their overall performance on the letter search task.[12] Those who choose to help internally have up to five minutes (in one-minute intervals) to help a coworker with their letter search task (See Figure 3.6).

[11] The dictator game is often used to measure altruistic behavior in a laboratory environment (e.g., Carpenter, Connolly, and Myers 2008; Simpson and Willer 2008; Engel 2011; Filkowski, Cochran, and Hass 2016). The dictator game is composed by two players: the dictator and the receiver. The dictator is generally endowed with a pool of resources (e.g., five minutes). Her task is to decide how much, if any, of this pool of resources to pass to the receiver. Thus, the dictator has the decision rights over time spent on self-interests versus altruism.

[12] The order of these three choices is randomized to avoid any order effect.

Participants and Procedures

In total 142 undergraduate students from business classes at a large public university in the United States participate in the experiment across six sessions. Participants, on average, are 19.27 years old and have 25.01 months of work experience. 46 percent of the participants are female. There are no significant differences across conditions for age, gender, GPA, or work experience (untabulated; all $p > 0.169$, two-tailed).[13]

I run two 45-minute sessions per condition and randomly pre-determine which condition is used for each session. Upon arrival, participants are assigned a unique 5-character participant ID which is used to receive individual feedback throughout the experiment and claim final payout. The flow of the experimental procedures is presented in Figure 3.7. Prior to the first stage task, participants receive instructions on their computers regarding the procedure, the real-effort task, their opportunity to volunteer during their allotted work time in the first stage (based on their experimental conditions), and their pay structure. Participants are asked to follow the instructions as the experimenter reads them aloud. Next, participants complete a 60-second practice period to familiarize themselves with the primary letter search task and then read background information about the charities (Humane Society International, St. Jude Children's

[13] Further, there are no significant differences across conditions for participants' personal prosocial identity (untabulated; $F = 1.475$, $p = 0.232$, two-tailed). To measure participants' prosocial identify, I use an established three-item measure (Grant, Dutton, and Rosso 2008) in which participants rate their agreement with the following three statements on a 7-point Likert scale (-3 = *strongly disagree*, +3 = *strongly agree*): 1) I see myself as helpful; 2) I see myself as caring; and 3) I regularly help others. A factor analysis using the three Likert scale responses revealed that one factor, with Eigenvalue of 2.34, explaining 78 percent of the variance, with Cronbach's alpha = 0.86. Thus, I use the average score across the three measures to test participants' personal prosocial identity across the three conditions.

Research Hospital, and Feeding America) if applicable.[14] Then, participants are required to correctly answer several comprehension-quiz questions to ensure their understanding of the instructions. In the VTO present and VTO + matching grant conditions, participants are asked to indicate whether they would like to spend some of their allotted work time to volunteer for one of the charities (See Figure 3.2 and Figure 3.4 for more details). If so, they choose which charity and how long they are willing to volunteer for the charity (ranging from one to five minutes), before proceeding to the first stage of the primary work period. Similarly, those in the VTO absent condition indicate whether they want to take a break during the second round and if so, how long and what type of break they prefer (i.e., sitting quietly, reading jokes, or playing a word game).[15]

The second stage of the experiment occurs upon completion of the first stage of the three-round primary task. In the second stage, participants have the opportunity to choose to help a coworker. Participants are told that each minute they spend working on the letter search task during the second stage will result in a small increase to a coworker's $10 take-home pay.[16] However, their helping choice is independent of

[14] Prior to running my main experiment, I conduct an out-of-sample survey with 42 participants from a similar participant pool to determine three charitable causes to include in my experiment. Participants rate their likelihood to volunteer for each charity on a scale from 1 to 7 (1 = *Unlikely to volunteer*, 7 = *Very likely to volunteer*) for six charities that currently offer workplace giving partnership opportunities with companies: St. Jude Children's Research Hospital, Feeding America, Humane Society International, Foster Kids Charity, Meals on Wheels, the Salvation Army. The three charities for which participants are most likely to volunteer are: 1) Humane Society International (with an average rating of 5.71); 2) St. Jude Children's Research Hospital (with an average rating of 5.52), and 3) Feeding America (with an average rating of 5.24). These three charity ratings are significantly higher than the other three alternatives (all $p < 0.033$). Thus, I include these three charities in my VTO manipulation to proxy for the availability of multiple choices in practice while still making it manageable in an experimental setting.

[15] Those who opt-in to volunteering (taking a break) during their allotted work time are taken to a separate window at the start of the second round to volunteer (take a break) instead of working. When their chosen volunteer (break) time is over, participants are automatically directed back to the primary task screen and continue working on the letter search task for any time remaining in the second round before proceeding to the third and last round of the first stage task.

[16] I purposefully did not reveal the $0.25 per minute rate to participants to 1) reduce potential noise related to the relative positive impact of external vs. internal altruistic activities influencing participant behavior; 2)

whether they will be helped by someone else. I make this clear to rule out reciprocity concerns and to ensure that my manipulation of volunteering support is influencing internal altruistic behavior instead of strategic considerations (e.g., implicit coordination).[17] Alternatively, participants can finish early or work for themselves to improve their overall performance on the letter search task. After the second stage task, participants complete the post experimental questionnaire where process variables and demographic information are collected. Finally, participants receive their compensation.

Dependent Variables

The dependent variable used to test Hypothesis 1 is participants' volunteering engagement, measured by their tendency to volunteer, time spent volunteering, and volunteering output in terms of the number of greeting cards sent to charities. The dependent variable used to test Hypotheses 2a and 2b is employee work productivity, measured by dividing the total number of correct letter boxes participants complete during the first stage by the number of minutes participants spend on the letter search task, net of any time spent volunteering / taking a break (Webb et al. 2013). In order to compare across conditions, I standardize the employee work productivity measure to account for differences in the amount of time participants spend working (e.g., 10 minutes vs. 15 minutes) during the first stage. The dependent variable used to test Hypotheses 3a and 3b is participants' altruistic behavior inside the firm, measured by their tendency to help a coworker and the time they spent helping a coworker during the second stage altruism task.

generalize to work settings in which the specific impact of helping may not be readily known or directly measurable.

[17] Without being known by participants, I adopt the "pay it forward" altruistic chain in which the help provided by a participant benefits another participant with the very next participant ID.

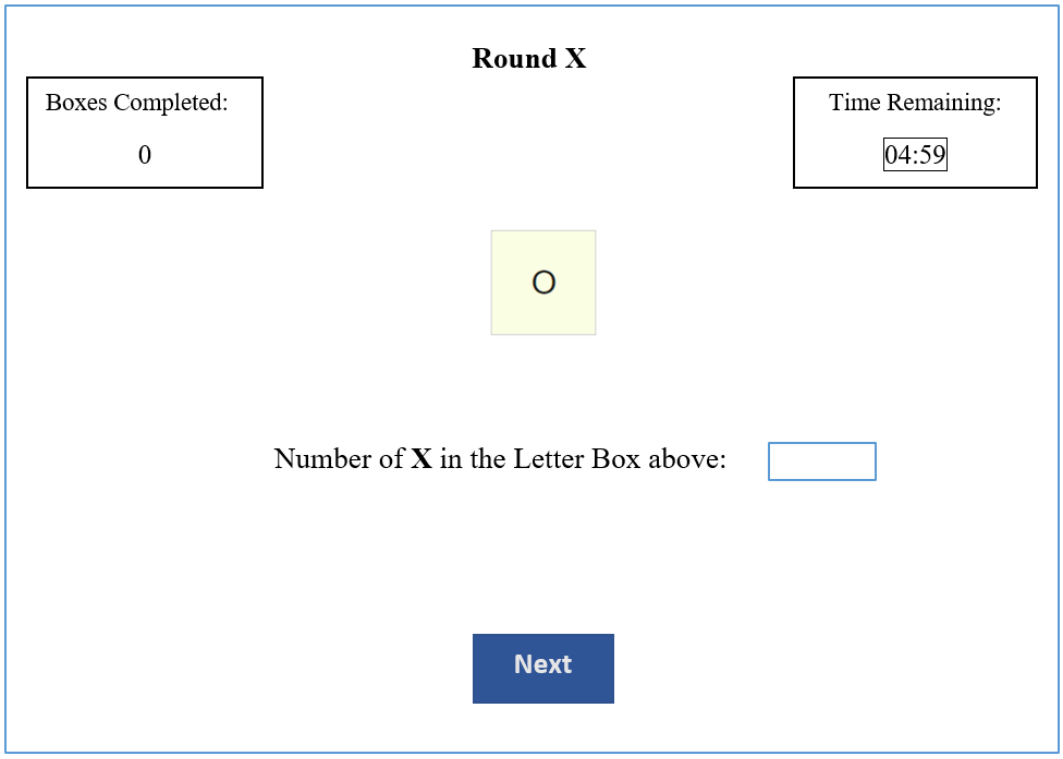
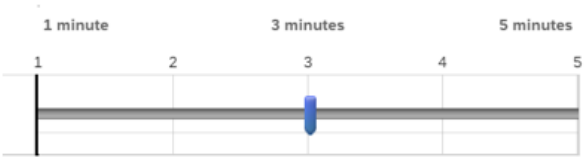


FIGURE 3.1: The First Stage – Primary Letter Search Task

The Company you work for supports employee volunteering. Thus, during Round 2, **you can take time off your regular work time to volunteer for a charity of your choice**. Specifically, you can take up to 5 minutes (in 1-minute intervals) to volunteer, which is the entire length of Round 2.

1. **Would you like to spend time volunteering during Round 2 of your work period?**
   - ○ **Yes.** I would like to spend time volunteering.
   - ○ **No.** I would like to use the time to continue working.

2. **Out of the 5 minutes in Round 2, how long would you like to volunteer?** *(Only if choose yes on the previous question)*



3. **Which charity would you like to volunteer for?** *(Only if choose yes on Question 1)*?

Humane Society International | St. Jude Children's Research Hospital | Feeding America

Those who choose not to give time to volunteer will remain on the primary production screen as shown in Appendix 1.

When participants' chosen volunteer time is over, they are automatically directed back to the primary production screen and continue working on the letter search task.

FIGURE 3.2: Manipulation of VTO Present

(If St. Jude Children's Research Hospital is Chosen)

Send personal greeting cards to encourage children in the St. Jude Children's Research Hospital using the free cheer cards below!

Choose your favorite design below and personalize your message. Then, we will print the cards and deliver them to patients' rooms upon completion of the study.

[In addition, The Company will match each minute you volunteer with a $0.25 donation to the Hospital.]

If you don't know anyone in the hospital right now, but want to brighten a child's day, simply write "***A Special Patient***" in the patient name field. We will deliver your cards to the kids in the hospital.

When you are ready, please click the **"Start Volunteering"** button to begin.

Start Volunteering

Participants will see the corresponding example of the volunteer task based on the charity they choose.

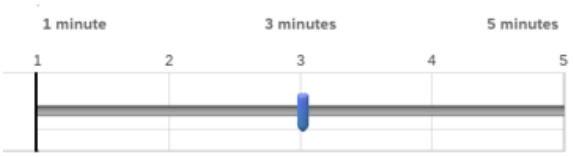
FIGURE 3.3: Example of the Volunteer Task

The Company you work for supports employee volunteering. Thus, during Round 2, **you can take time off your regular work time to volunteer for a charity of your choice**. Specifically, you can take up to 5 minutes (in 1-minute intervals) to volunteer, which is the entire length of Round 2.

In addition, with The Company's **Volunteer Matching Grant program**, your volunteering can make an even greater impact for the charity of your choice. Specifically, **The Company will match each minute you volunteer with a $0.25 donation to the same charity** (e.g., 1 minute = $0.25; 3 minutes = $0.75; 5 minutes = $1.25).

1. **Would you like to spend time volunteering during Round 2 of your work period?**
   - ○ **Yes.** I would like to spend time volunteering.
   - ○ **No.** I would like to use the time to continue working.

2. **Out of the 5 minutes in Round 2, how long would you like to volunteer?** *(Only if choose yes on the previous question)*



3. **Which charity would you like to volunteer for?** *(Only if choose yes on Question 1)*?

Humane Society International | St. Jude Children's Research Hospital | Feeding America

Those who choose not to give time to volunteer will remain on the primary production screen as shown in Appendix 1.

When participants' chosen volunteer time is over, they are automatically directed back to the primary production screen and continue working on the letter search task.

FIGURE 3.4: Manipulation of VTO + Matching Grant

Thank you for completing the production task for The Company!

(This part of the instructions appears on participants' computer screen after their completion of the first stage letter search task.)

You now have a choice for how to spend the next 5 minutes. You can:

1. **Finish early** by proceeding to a short questionnaire and complete today's session.

2. **Help a coworker** who is also completing the study in this session.
   - You will be doing the same task as before.
   - **Every minute** you spend working on the task will result in a **small increase** to a **coworker's $10 take-home pay.**
   - If you choose to help, it does **not** mean someone will help you. In fact, your helping choice is independent of whether or not you will be helped by someone else.

3. **Work for yourself** to improve your overall performance on the letter search task.
   - You will be doing the same task as before.
   - You will **not** earn any additional money for this activity.

(The order of these three options is randomly displayed to participants.)

1. **Please choose how would you like to proceed ?**
   - o Finish early by proceeding to a short questionnaire and complete today's session.
   - o Help a coworker with their letter search task.
   - o Work for myself to improve my overall performance on the letter search task.

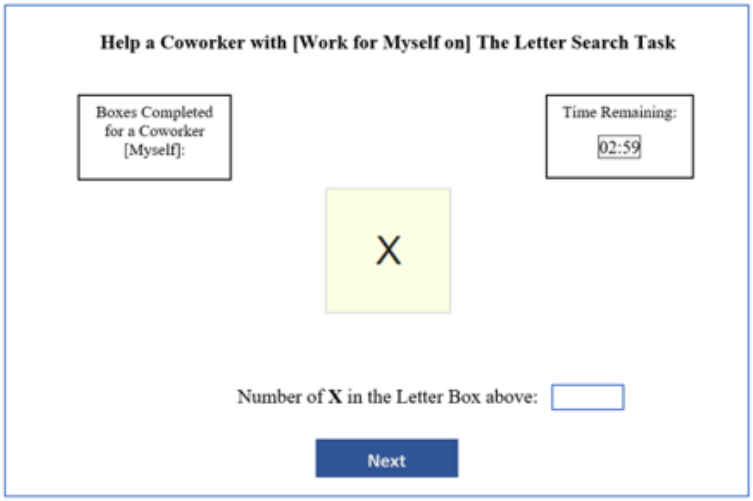
(The order of these options follows the preceding random display results.)

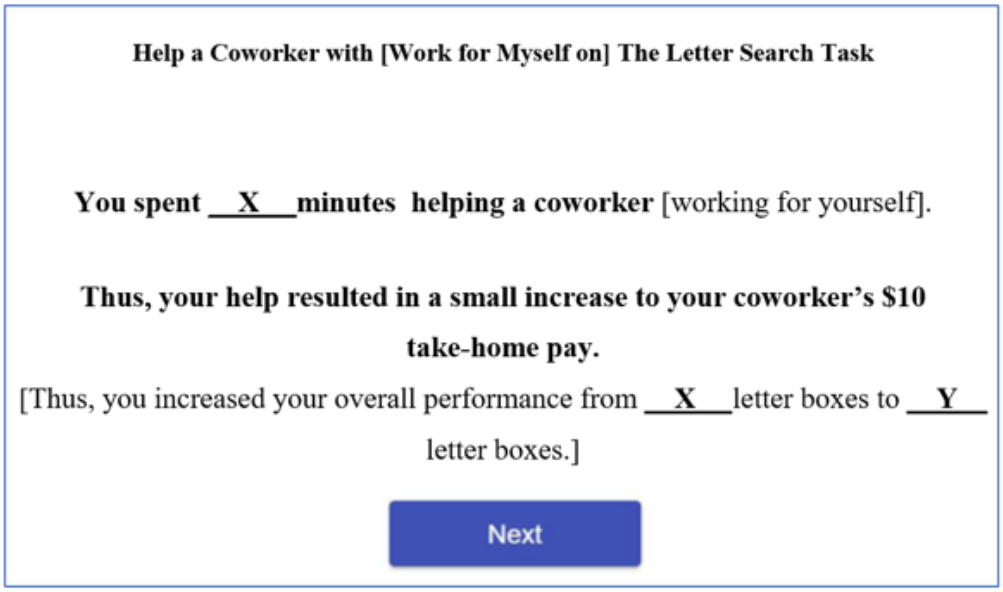
2. **How long would like to work to help a coworker [work for yourself]?** Please drag the slider to indicate your preferred time to help [work]. *(Only if choose to work or help on the previous question)*

FIGURE 3.5: The Second Stage: Altruism Task – Part A

You now have__X__minutes to help a coworker [work for yourself].

When your chosen helping [working] time is over, you will be automatically advanced to a short questionnaire and then finish the study. *(Only if choose yes on the previous question)*





Participants who choose to finish early will skip this screen.

FIGURE 3.6: The Second Stage: Altruism Task – Part B

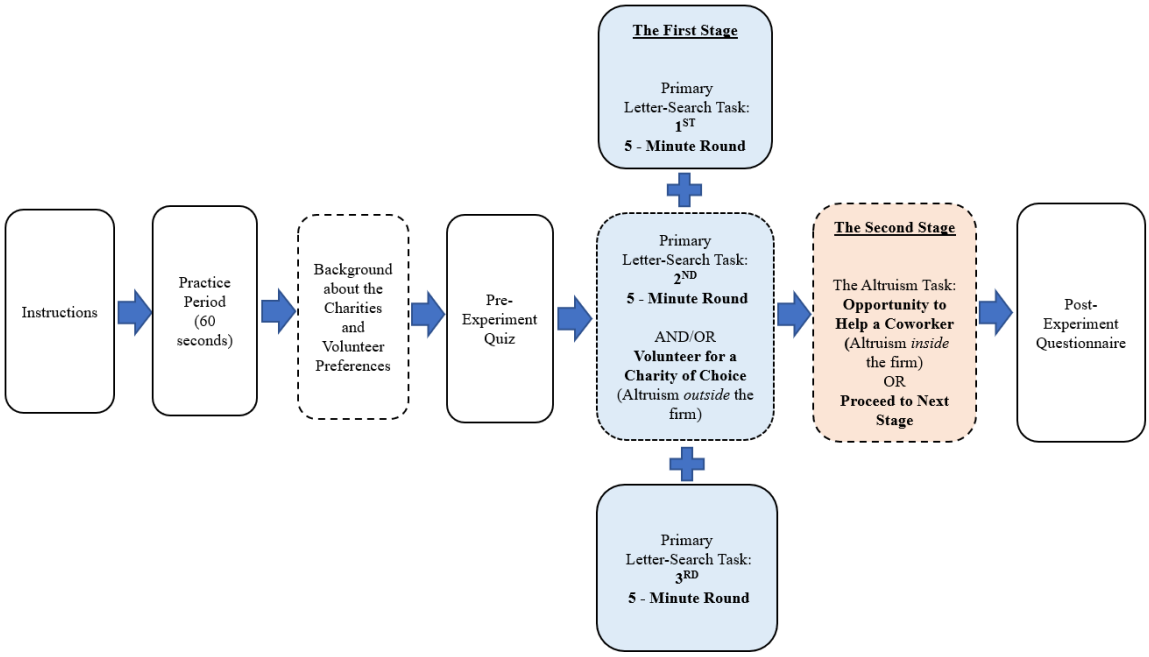


FIGURE 3.7: Experimental Procedure

CHAPTER 4

RESULTS

Descriptive Statistics

I first discuss descriptive statistics for my three dependent variables and then test my hypotheses. Table 4.1 provides a list of all variables used in this section. For expositional consistency with my theoretical development, I refer to participants as "employees" throughout the Results section.

Consistent with the pattern I predict in H1, Panel A of Table 4.2 shows that increasing the level of firm support for employee volunteering appears to increase employees' volunteering engagement in terms of their tendency to volunteer (78% vs. 75%), time (in minutes) spent on volunteering (3.86 vs. 3.31), average volunteering output (6.53 vs. 3.58), and per minute volunteering output (1.81 vs. 0.96), in the number of greeting cards sent to charity. Figure 4.1 presents a graphical representation of these results.

Regarding employee behaviors inside the firm, Panel A of Table 4.3 provides descriptive results for employee work productivity across the three conditions. Consistent with H2b, providing a higher level of firm support for employee volunteering (VTO + matching grant) appears to motivate higher employee work productivity inside the firm compared to only providing VTO (VTO present), when considering all employees (50.71 vs. 48.01), and especially when only considering those who chose to volunteer (51.26 vs. 48.36). However, inconsistent with H2a, VTO by itself does not seem to impact

employee work productivity compared to when VTO is absent when considering all employees (48.01 vs. 49.47), or only those who chose to volunteer (48.36 vs. 48.94). Figure 4.2 presents a graphical representation of these results.

Further, consistent with the pattern of spillover effect I predicted in H3a, Panel A of Table 4.4 shows that there appears to be a positive spillover from the firm's volunteering support externally to employees' altruistic behavior internally across two meaningful outcomes: 1) their tendency to help a coworker (60% vs. 35%), and 2) time they spend helping a coworker (2.19 vs. 1.35). Lastly, consistent with the pattern I predicted in H3b, providing a matching grant seems to have less of a positive effect when it comes to employee altruistic behavior inside the firm, both in terms of 1) their tendency to help a coworker (70% vs. 60%), and 2) time spent helping a coworker (2.76 vs. 2.19). Figure 4.3 presents a graphical representation of these results. Overall, except for H2a, these descriptive results appear consistent with my theoretical predictions.

Tests of Hypotheses - Employee Volunteering Engagement (H1)

I now formally test whether providing a higher level of volunteering support (VTO + matching grant) is effective in promoting employee volunteering engagement, compared to providing VTO only (H1). Consistent with the positive effect predicted in H1, Panel B of Table 4.2 shows that compared to when only VTO is present, employee volunteering engagement is significantly higher in two meaningful ways when the firm also provides a matching grant. One, although providing a matching grant did not significantly increase employees' tendency to volunteer (78% vs. 75%, $t = 0.370$, $p = 0.356$);[18] employees who do volunteer spend significantly more time volunteering (3.86

[18] All reported p-values are two-tailed for non-directional predictions and one-tailed for directional predictions.

vs. 3.31, t = 2.057, p = 0.022). Two, employees who do volunteer not only generate significantly more volunteering output for charities on average (6.53 vs. 3.58, t = 1.727, p = 0.044), but also generate significantly more volunteering output per minute (1.81 vs. 0.96, t = 1.589, p = 0.058). Figure 4.4 provides an example of the volunteering output for each of the three charities. As illustrated in Figure 4.4, participants took the volunteering activities seriously and wrote thoughtful messages to the charities. Taken together, these results provide support for H1, suggesting that adding a matching grant is effective in promoting employee volunteering.

A potential alternative explanation is that employees use VTO as a chance to take a break from their productive task. To rule out this alternative explanation, the VTO absent condition allows employees to take a break. Additional analysis shows that in the VTO absent condition, only 35% of employees take a break even when given the choice to do so, which is significantly lower than the 75% (78%) of employees who volunteer during the allotted time in the VTO present (VTO + matching grant) condition (untabulated; all $p < 0.001$). To further rule out the possibility that employees view VTO as a chance to take a break from their regular work, I ask them to rate their agreement with the statement "I would be less likely to take a break (volunteer for a charity) as my work becomes more enjoyable" on a 7-point Likert scale (-3 = strongly disagree, +3 = strongly agree). Compared to the midpoint, untabulated results show that when VTO is absent, employees are significantly less likely to take a break as their work becomes more enjoyable (mean = 1.83, t = 7.504, $p < 0.001$). However, when VTO is present, employees are not less likely to volunteer as their work becomes more enjoyable (mean =

-0.67, t = -2.770, p = 0.004). This is true regardless of whether the firm provides a matching grant in addition to VTO (mean = -0.78, t = -2.685, p = 0.005) or not. Taken together, these results rule out the alternative explanation that employees use VTO as a chance to take a break from their work or they will only volunteer when their work is less enjoyable.

Tests of Hypotheses - Employee Work Productivity (H2a and H2b)

My next set of hypotheses focuses on employee work productivity inside the firm. H2a predicts that employee work productivity is higher when VTO is present than when VTO is absent. In contrast to this prediction, Panel B of Table 4.3 shows that compared to when VTO is absent, employee work productivity is similar (48.01 vs. 49.47, t = 1.051, p = 0.148) when the firm provides only VTO. This result does not change when examining only employees who chose to volunteer when VTO is present (48.36 vs. 48.94, t = 0.284, p = 0.389). Thus, H2a is not supported, suggesting that VTO by itself does not impact employee work productivity compared to when VTO is absent.[19]

H2b predicts that employee work productivity is higher when VTO is present and the firm provides a matching grant, relative to when only VTO is present. Panel C of Table 4.3 shows that compared to when only VTO is present, employee work productivity for all employees is marginally higher (50.71 vs. 48.01, t = 1.444, p = 0.076)

[19] A potential explanation for the null result of H2a is that the option to take a break in the *VTO absent* condition also invokes a reciprocal response, although this design choice allows me to hold the mental break option constant across all conditions. To better understand this null result, I examine the 2 reciprocity measures which ask participants to rate "To what extent did the opportunity to take a break [volunteer for charity] in Round 2 affect the effort you exert on the production task" in Round 1 and Round 3 respectively (*-3 = greatly decreased; +3 = greatly increased*). Untabulated results show that although participants' average reciprocity ratings are significantly above the mid-point 0 in both conditions, there is no difference in the average reciprocity measures between the *VTO absent* and the *VTO present* condition (0.55 vs. 0.81, t = 1.362, p = 0.176). This result suggests that participants also positively reciprocated in the *VTO Absent* condition when the firm gave them the option to take a break.

when the firm also provides a matching grant. This result is even more pronounced when examining only employees that chose to volunteer in the VTO + matching grant condition (51.26 vs. 48.36, t = 1.662, p = 0.050).[20] Taken together, these results provide support for H2b, suggesting that providing extra support for employee volunteering externally in the form of a matching grant boosts employees' work productivity internally.

Tests of Hypotheses - Employee Altruistic Behavior Inside the Firm (H3a and H3b)

Lastly, I examine whether the firm's support for employee volunteering externally spills over to affect employee altruistic behavior internally. H3a predicts that employees' altruistic behavior inside the firm is higher when VTO is present than when VTO is absent. Consistent with this prediction, Panel B of Table 4.4 shows that compared to when VTO is absent, employees' helping behavior toward their coworkers is significantly higher in two meaningful ways when the firm provides VTO. One, providing VTO significantly increases employees' tendency to help their coworkers (60% vs. 35%, t = 2.506, p = 0.007). Two, employees also spend significantly more time helping their coworkers (2.19 vs. 1.35, t = 2.035, p = 0.022).[21] Further, Panel B of Table 4.5 shows that those results are even more pronounced when examining only the employees who chose

[20] H2a and H2b results do not change if I only examine employee work productivity in the post-VTO period (i.e., Round 3). Specifically, untabulated results show that there is no significant difference in employee work productivity in the post-VTO period between the *VTO absent* condition and the *VTO present* condition for all employees (50.92 vs. 50.15, t = 0.493, p = 0.311) or only for those who actually volunteered /took a break (50.39 vs. 50.51, t = 0.055, p = 0.478). However, there is a significant difference in employee work productivity between the *VTO present* condition and *VTO + matching grant* condition for all employees (50.15 vs. 52.78, t = 1.374, p = 0.086) or only those who actually volunteered (50.51 vs. 53.46, t = 1.620, p = 0.055).

[21] My results are inferentially identical if I use helping output (i.e., the average number of correct letter boxes participants complete for a coworker) as the dependent measure for employees' altruistic behavior *inside* the firm. Specifically, in addition to being more likely help to help a coworker and spend more time to help a coworker, participants in the *VTO present* condition also produce significantly more output for their coworkers (untabulated; 114.35 vs. 76.67, t = 1.644, p = 0.052) than those in the *VTO absent* condition.

to volunteer externally during the first stage. Taken together, the above results provide support for H3a, suggesting that providing support for employee volunteering externally can spillover to positively influence employee altruistic behavior internally.

H3b predicts that there is no difference in employee altruistic behavior inside the firm when VTO is present and the firm provides a matching grant compared to when only VTO is present (i.e., the level of volunteering support does not matter when it comes to the positive spillover effect on employee altruistic behavior internally). Consistent with this prediction, Panel C of Table 4.4 shows that compared to when only VTO is present, employees' helping behavior toward their coworkers is not significantly greater when the firm provides a matching grant in addition to VTO. Specifically, providing an extra matching grant: 1) does not significantly increase employees' tendency to help their coworkers (70% vs. 60%, $t = 0.923$, $p = 0.358$); and 2) does not significantly increase the time employees spend helping their coworkers (2.76 vs. 2.19, $t = 1.337$, $p = 0.185$).[22] Panel C of Table 4.5 shows that these results hold even when examining only the employees that chose to volunteer during the first stage. Taken together, the above results provide support for H3b, suggesting that although the presence of volunteering support spills over to positively influence employees' internal altruistic behavior, the level of firm support is less consequential.

To better understand these results, I measure employees' moral consistency by asking those employees who volunteered in the first stage task to rate their agreement

[22] Again, my results are inferentially identical if I use helping output (i.e., the average number of correct letter boxes participants complete for a coworker) as the dependent measure for employees' altruistic behavior *inside* the firm. Specifically, in addition to having a similar tendency to help a coworker and spend a similar amount of time on helping a coworker, participants in the *VTO + matching grant* condition also did not generate significantly more output for their coworkers (untabulated; 152.48 vs. 114.35, $t = 1.595$, $p = 0.114$) than those in the *VTO present* condition.

with the statement “To what extent did the time you spent volunteering affect your willingness to help a coworker on their letter search task?” on a 7-point Likert scale (-3 = greatly decreased, +3 = greatly increased). Consistent with my theoretical expectation that costly initial altruistic behavior such as volunteering for a charity will result in moral consistency behavior, untabulated results show that the time employees spent on volunteering externally significantly increased their willingness to help a coworker on the second stage task (untabulated; $t = 7.961$, $p < 0.001$). However, whether or not the firm provides a matching grant does not make a difference (untabulated; 1.17 vs. 1.11, $t = 0.193$, $p = 0.848$).

Further, to capture employees’ perceptions of the firm’s prosocial identity, I use a two-item measure (Cassar and Meier 2017) via which employees rate their agreement with the following two statements on a 7-point Likert scale (-3 = strongly disagree, +3 = strongly agree): 1) I think The Company cares about charitable causes; and 2) I think The Company is kind to its employees. Using the average score across the two measures, untabulated results show that consistent with my expectation that employees take the level of firm support as a cue for the firm’s prosocial identity, when VTO is present, employees perceive a significantly higher prosocial identity of the firm compared to when VTO is absent (untabulated; 1.03 vs. 1.80, $p < 0.001$). Moreover, providing a matching grant in addition to VTO does not significantly alter employees’ perception of the firm’s prosocial identity relative to when only VTO is present (untabulated; 2.04 vs. 1.80, $p = 0.288$). Collectively, the analyses above suggest that the positive spillover effect from external volunteering to internal altruistic behavior is driven by moral consistency and employees’ perception of the firm’s prosocial identity.

Overall Performance

Lastly, to provide insights into the overall performance implications of providing varying levels of firm support for employee volunteering on employee work behavior inside the firm, I examine employees' overall performance in terms of total correct output generated from both stages (i.e., first stage primary task and second stage altruism task). Untabulated results show that there is no significant difference in overall performance across all three conditions (791.58 vs. 736.33 vs. 768.67, $p \geq 0.172$), despite the opportunity cost of time incurred for volunteering outside the firm rather than working inside the firm during the primary task. From a firm's perspective, this is an important insight because my results suggest that taking into account the potential spillover effects of employee volunteering on extra-role work behavior (such as helping a coworker), there may not be a significant productivity loss as intuition would suggest regarding the opportunity cost of time incurred for VTO. While at the same time, there are well-established benefits associated with corporate philanthropy (e.g., Elfenbein et al. 2012; Kitzmueller and Shimshack 2012; Lins et al. 2017; Hartzmark and Sussman2019).

TABLE 4.1: Variable Definitions

Variable	Definition
Tendency to Volunteer	The percentage of employees who choose to volunteer in Round 2 in the *VTO Present* and the *VTO + Matching Grant (VTO Absent*) condition.
Time Spent Volunteering	Average time in minutes employees spend on volunteering in the VTO Present and the VTO + Matching Grant condition.
Total Volunteering Output	The number of greeting cards with personal message employees write to encourage kids in a children's hospital, thanking food bank heroes who help Americans who are struggling with hunger, or thanking animal rescue heroes who are fighting against cruelty to animals.
Per Minute Volunteering Output	The number of greeting cards with personal message employees write to charities per minute.
Employee Work Productivity	Dividing the total number of correct letter boxes employees complete during the first stage by the number of minutes participants spend on the letter search task in the first stage, net of any time they spend volunteering/taking a break.
Tendency to Help	The percentage of employees choose to help a coworker in the second stage.
Time Spent on Helping	Average time in minutes employees spend helping a coworker in the second stage.
Helping Output	Average number of correct letter boxes employees complete for a coworker during the second stage.

TABLE 4.2: Employee Volunteering Engagement

Panel A: Descriptive Statistics – Mean (Std. Deviation)

Dependent Variable	VTO Present	VTO + Matching Grant
Tendency to Volunteer	75% (0.44) n = 48	78% (0.42) n = 46
Time Spent Volunteering	3.31 (1.04) n = 36	3.86 (1.25) n = 36
Total Volunteering Output	3.58 (3.75) n = 36	6.53 (9.52) n = 36
Per Minute Volunteering Output	0.96 (0.81) n = 36	1.81 (3.12) n = 36

Panel B: Tests of Hypothesis (H1)

VTO Present versus **VTO + Matching Grant**	df	Mean Difference	t	p-value
Tendency to Volunteer	92	3%	0.370	0.356
Time Spent Volunteering	70	0.56	2.057	0.022
Total Volunteering Output	70	2.94	1.727	0.044
Per Minute Volunteering Output	70	0.85	1.589	0.058

See Table 4.1 for variable definitions.

TABLE 4.3: Employee Work Productivity

Panel A Descriptive Statistics – Mean (Std. Deviation)

Dependent Variable	VTO Absent	VTO Present	VTO + Matching Grant
Employee Work Productivity (All Employees)	49.47 (6.70) n = 48	48.01 (6.95) n = 48	50.71 (10.88) n = 46
Employee Work Productivity (Employees Volunteered/ Took a Break Only)	48.94 (6.45) n = 17	48.36 (7.13) n = 36	51.26 (7.69) n = 36

Panel B Tests of Hypotheses (H2a)

VTO Present versus **VTO Absent**	df	Mean Difference	t	p-value
Employee Work Productivity (All Employees)	94	1.46	1.051	0.148
Employee Work Productivity (Employees Volunteered/ Took a Break Only)	51	0.58	0.284	0.389

Panel C Tests of Hypotheses (H2b)

VTO Present versus **VTO + Matching Grant**	df	Mean Difference	t	p-value
Employee work productivity (All Employees)	92	2.71	1.444	0.076
Employee work productivity (Employees Volunteered/ Took a Break Only)	70	2.91	1.662	0.050

See Table 4.1 for variable definitions.

TABLE 4.4: Employee Altruistic Behavior Inside the Firm - All Employees

Panel A: Descriptive Statistics – Mean (Std. Deviation)

Dependent Variable	VTO Absent	VTO Present	VTO + Matching Grant
Tendency to Help	35% (0.48) n = 48	60% (0.49) n = 48	70% (0.47) n = 46
Time Spent Helping	1.35 (1.98) n = 48	2.19 (2.03) n = 48	2.76 (2.13) n = 46

Panel B: Tests of Hypothesis (H3a)

VTO Present versus VTO Absent	df	Mean Difference	t	p-value
Tendency to Help	94	25%	2.506	0.007
Time Spent Helping	94	0.83	2.035	0.022

Panel C: Tests of Hypothesis (H3b)

VTO Present versus VTO + Matching Grant	df	Mean Difference	t	p-value
Tendency to Help	92	9%	0.923	0.358
Time Spent Helping	92	0.57	1.337	0.185

See Table 4.1 for variable definitions.

TABLE 4.5: Employee Altruistic Behavior Inside the Firm-Volunteered/Took a Break Only

Panel A: Descriptive Statistics – Mean (Std. Deviation)

Dependent Variable	VTO Absent	VTO Present	VTO + Matching Grant
Tendency to Help	29% (0.47) n = 17	67% (0.48) n = 36	75% (0.44) n = 36
Time Spent Helping	0.88 (1.58) n = 17	2.39 (2.00) n = 36	2.94 (2.07) n = 36

Panel B: Tests of Hypothesis (H3a)

VTO Present versus VTO Absent	df	Mean Difference	t	p-value
Tendency to Help	51	37%	2.663	0.005
Time Spent Helping	51	1.51	2.723	0.004

Panel C: Tests of Hypothesis (H3b)

VTO Present versus VTO + Matching Grant	df	Mean Difference	t	p-value
Tendency to Help	70	8%	0.770	0.444
Time Spent Helping	70	0.56	1.157	0.251

See Table 4.1 for variable definitions.

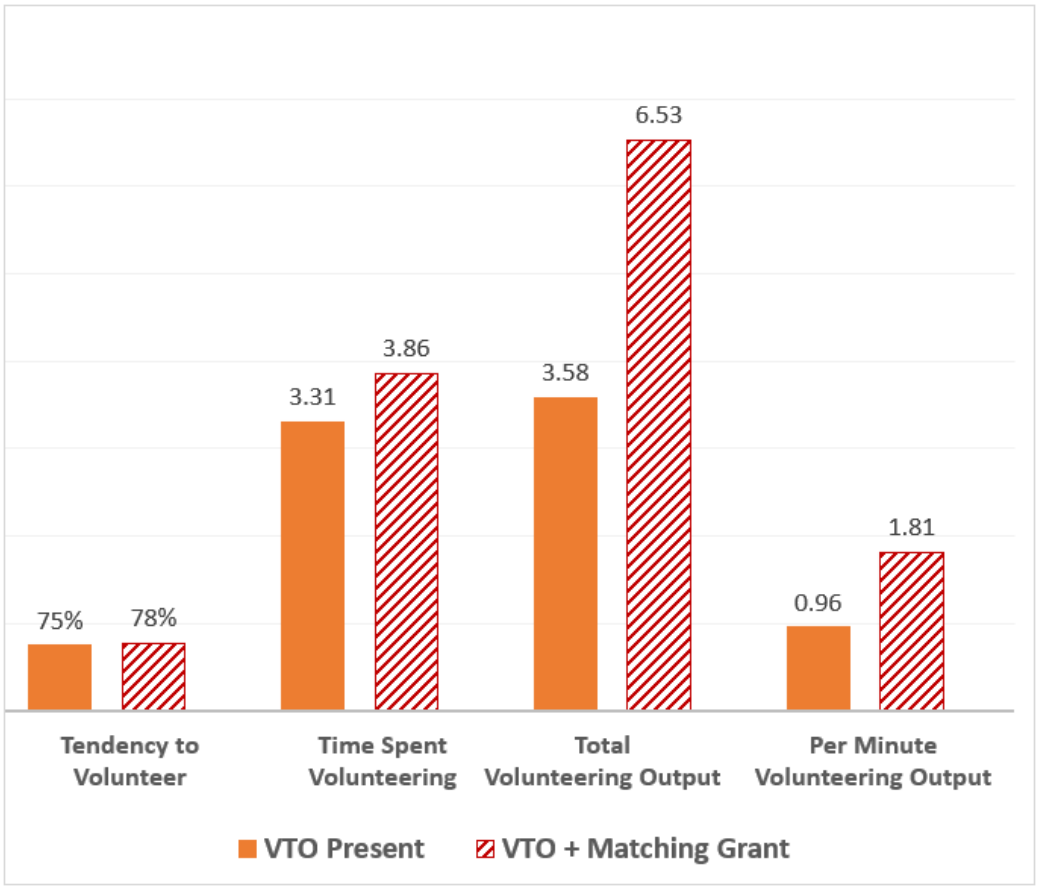


FIGURE 4.1: Employee Volunteering Engagement

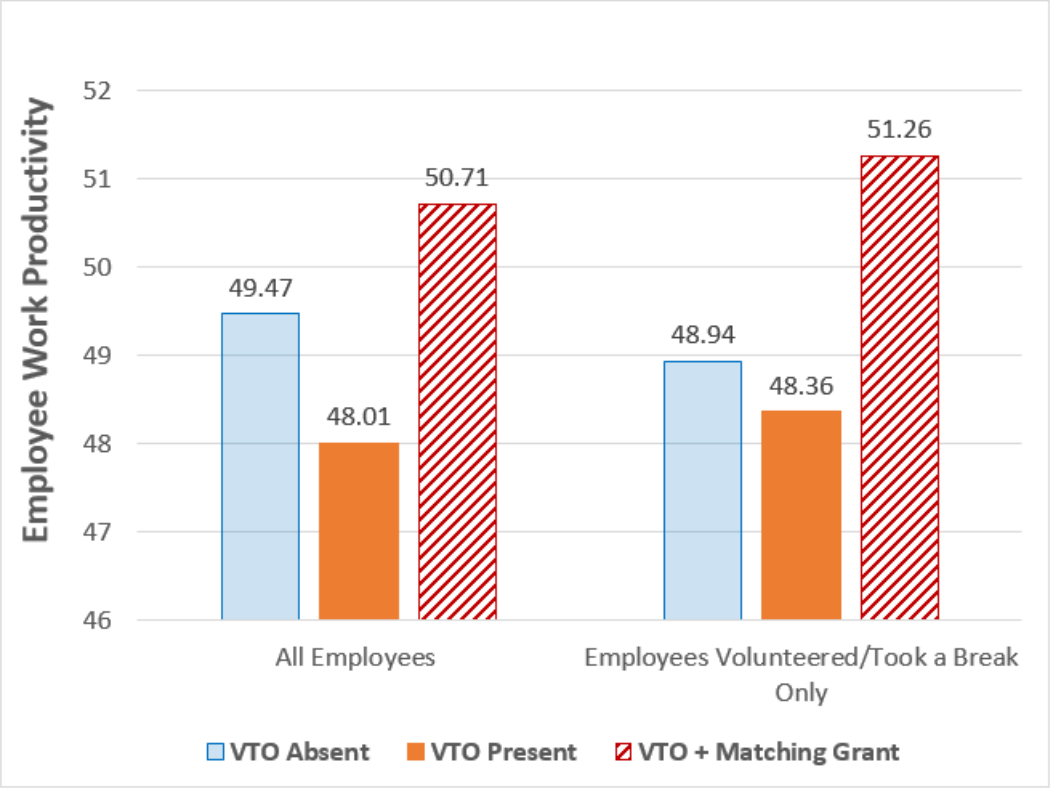
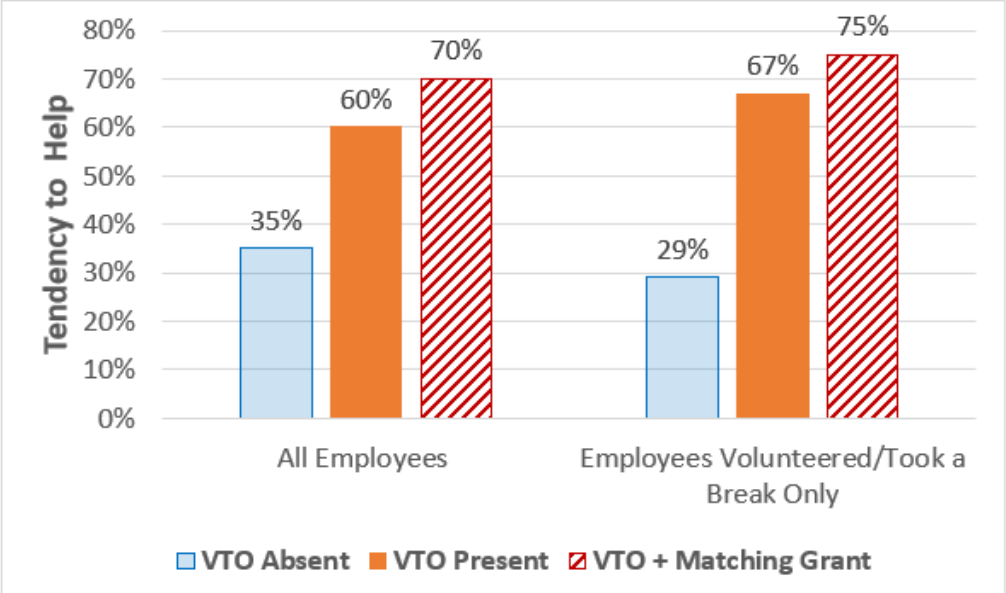


FIGURE 4.2: Employee Work Productivity across Three Levels of Volunteering Support

Panel A: Tendency to Help



Panel B: Time Spent on Helping

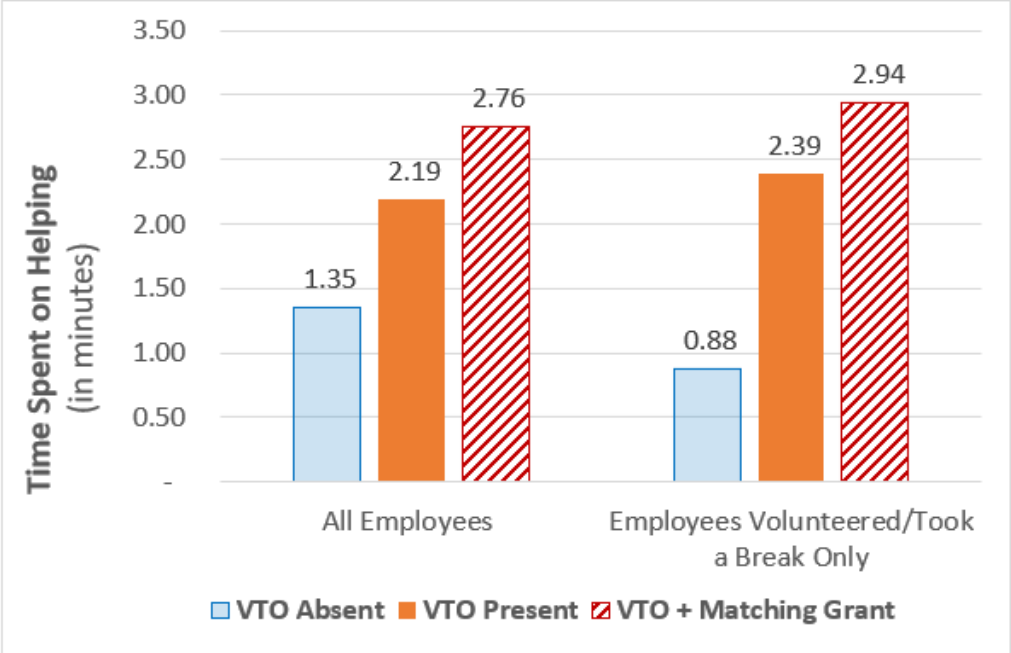


FIGURE 4.3: Employee Altruistic Behavior across Three Levels of Volunteering Support

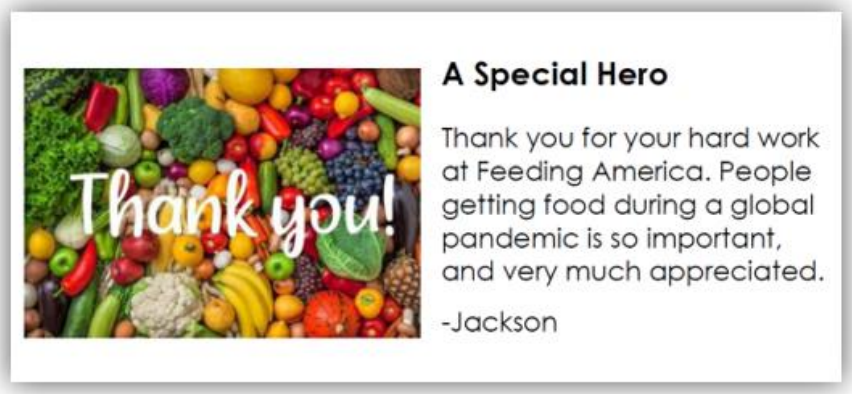
St. Jude Children's Research Hospital 	
Humane Society International 	
Feeding America 	

Figure 4.4 Examples of Volunteering Output

CHAPTER 5

CONCLUSION

Offering support for employee volunteering is one of the fastest-growing areas of employee benefits (Grant 2012; Rodell et al. 2016; Glassdoor 2017; Society for Human Resource Management 2019; Knox 2020). Yet, little is understood about the potential performance consequences of firm support for employee volunteering. In a setting where employees receive salaried compensation, I examine how employees' work productivity and altruistic behavior *inside* the firm, as well as their volunteering engagement, are influenced by the level of support (no support vs. VTO only vs. VTO + matching grant) a firm provides for employee volunteering *outside* the firm. Drawing upon behavioral theories, I predict and find that the level of firm support for employee volunteering not only affects employees' volunteering engagement *outside* the firm, but also affects employees' work productivity *inside* the firm. Moreover, I predict and find that although the presence of firm support for employee volunteering spills over to positively influence employee helping behavior *inside* the firm, the level of firm support is less consequential.

Specifically, my results show that first, providing a higher level of volunteering support (VTO + matching grant) is effective in promoting employee volunteering engagement. Second, VTO by itself does not impact employee work productivity, compared to when VTO is absent. However, providing extra monetary support for employee volunteering in the form of a matching grant significantly boosts their work productivity *inside* the firm. Furthermore, my results show that although the presence of

volunteering support spills over to positively influence employee altruistic behavior *inside* the firm, the level of firm support does not make a significant difference. Collectively, my results suggest that providing a matching grant in addition to VTO is effective for promoting employee volunteering engagement and boosting their work productivity, but not for the positive spillover of altruism inside the firm.

The results of my study offer important insights regarding implementing and managing employee volunteering programs by showing that individual employee volunteering programs can have multidimensional benefits that extend their value beyond a CSR tool. My study also contributes to multiple streams of literature. First, it extends the emerging accounting literature on charitable incentives that has primarily focused on the performance effects of varying forms of monetary donations (Balakrishnan et al. 2011; Douthit et al. 2021; Johnson et al. 2021). My study introduces employee volunteering programs as an alternative form of charitable incentive (i.e., time-based vs. money-based donations) and provides initial evidence regarding the additive effects of providing dual support of time and money. Second, by documenting the effects varying levels of volunteering support have on individual employees, my study extends existing volunteering research (Jones 2010; Rodell 2013; Newman et al. 2020; Cardinaels et al. 2020; Knox 2020) by providing clear causal evidence regarding the relation between firm's volunteering support for charitable causes *outside* the firm and employee work behaviors *inside* the firm. My study advances our understanding of the potential effectiveness of individual employee volunteering programs by showing that volunteering support can serve as an effective management control to influence employee behavior across three consequential outcomes: 1) employee volunteering engagement

outside the firm; 2) employee work productivity; and 3) employee altruistic behavior *inside* the firm. Lastly, by examining the spillover effects of employee volunteering programs on employee behaviors internally, my study complements prior CSR literature that has primarily focused on external benefits of corporate philanthropy (e.g., Elfenbein et al. 2012; Lins et al. 2017; Hartzmark and Sussman 2019).

My study suggests several opportunities for future research. For instance, my study focuses on the performance implications (namely volunteering engagement, work productivity and employee altruistic behavior) of providing varying levels of support for employee volunteering. Because there are other forms of volunteering support (e.g., training, volunteer recognition) and other meaningful performance outcomes (e.g., employee retention, whistleblowing, cooperation), future research could examine the robustness of my results when other forms of volunteering support are provided and / or the extent to which these forms of volunteering support affect other dimensions of relevant performance outcomes. Additionally, since I am interested in a setting that allows me to clearly test the behavioral effects of varying levels of volunteering support, I use a fixed salary as the incentive contract in my experiment. Future research could examine the effects of volunteering support in settings where incentive contracts are more complex (e.g., individual performance-based, tournaments). Moreover, my study uses a single-agent setting to examine the behavioral effects of individual employee volunteering. Since some firms organize group volunteering activities (e.g., Corporate Volunteer Day), future research could explore the extent to which my findings generalize to multi-agent settings and settings where the volunteering activities are chosen by the firm rather than by individual employees.

REFERENCES

Aguilera, R. V., D. E. Rupp, C. A. Williams, and J. Ganapathi. 2007. Putting the S back in corporate social responsibility: A multilevel theory of social change in organizations. *Academy of Management Journal* 32 (3): 836–863.

America's Charities 2020. Facts & statistics on workplace giving, matching gifts, and volunteer programs. Available at: https://www.charities.org/facts-statistics-workplace-giving-matching-gifts-and-volunteer-programs

Backhaus, K. B., B. A. Stone, and K. Heiner. 2002. Exploring the relationship between corporate social performance and employer attractiveness. *Business and Society* 41 (3): 292–318.

Balakrishnan, R., G. Sprinkle, and M. Williamson. 2011. Contracting benefits of corporate giving: An Experimental Investigation. *The Accounting Review* 86 (6): 1887–1907.

Bengtson, B. 2020. Reimagine your corporate volunteer program. *Harvard Business Review*. Available at: https://hbr.org/2020/12/reimagine-your-corporate-volunteer-program

Black, P. 2020. *The effect of peer-to-peer recognition systems on helping behavior: The influence of rewards and group affiliation.* Working Paper. Auburn University.

Black, P. W., A. H. Newman, B. R. Stikeleather, and N. J. Waddoups. 2019. Performance feedback type and employees' subsequent willingness to help other employees. *Journal of Management Accounting Research* 31 (3): 25–39.

Bonner, S. E., and G. B. Sprinkle. 2002. The effects of monetary incentives on effort and task performance: theories, evidence, and a framework for research. *Accounting, Organizations and Society* 27 (4): 303–345.

Cardinaels, E., Q. Ruan, and H. Yin. 2020. When does employee giving spill over into subsequent ethics? the role of the organization of employee giving program. Working paper. Tilburg University, KU Leuven, and Nanyang Technology University.

Carpenter, J., C. Connolly, and C. K. Myers. 2008. Altruistic behavior in a representative dictator experiment. *Experimental Economics* 11 (3): 282–298.

Cassar, L., and S. Meier. 2017. Intentions for doing good matter for doing well: The (negative) signaling value of prosocial incentives. *National Bureau of Economic Research*.

Choi, W., J. Clark, and A. Presslee. 2019. *Testing the effect of incentives on effort intensity using real-effort tasks*. Working paper, University of Wisconsin-Madison, Nanyang Technological University, and University of Waterloo.

Christ, M. H., K. L. Sedatole, and K. L. Towry. 2012. Sticks and carrots: The effect of contract frame on effort in incomplete contracts. *The Accounting Review* 87 (6): 1913–1938.

Corporate Giving and Matching Gift Statistics. 2020. *Double the Donation*. Available at: https://doublethedonation.com/tips/matching-grant-resources/matching-gift-statistics/

Deloitte. 2020. *The Deloitte Global Millennial Survey 2020*. Available at: https://www2.deloitte.com/global/en/pages/about-deloitte/articles/millennialsurvey.html

DeVoe, S. E., and J. Pfeffer. 2007. Hourly payment and volunteering: The effect of organizational practices on decisions about time use. *Academy of Management Journal* 50 (4): 783–798.

DeVoe, S. E., and J. Pfeffer. 2010. The stingy hour: How accounting for time affects volunteering. *Personality and Social Psychology Bulletin* 36 (4): 470–483.

Douthit, J., P. Martin, and M. McAllister. 2021. Charitable contribution matching and effort-elicitation. *The Accounting Review* forthcoming.

Douthit, J., Z. Mao, and P. Martin 2022. *Tend to one's own house: The effect of firm CSR on employee effort*. Working paper. University of Arizona, and University of Pittsburgh.

Elfenbein, D. W., R. Fisman, and B. McManus. 2012. Charity as a substitute for reputation: Evidence from an online marketplace. *Review of Economic Studies* 79 (4): 1441–1468.

Engel, C. 2011. Dictator games: A meta study. *Experimental Economics* 14 (4): 583–610.

Filkowski, M. M., R. N. Cochran, and B. W. Haas. 2016. Altruistic behavior: Mapping responses in the brain. *Neuroscience and Neuroeconomics* 5: 65–75.

Gambetta, D. 1988. *Can we trust? In Trust: Making and breaking cooperative relations*, edited by Gambetta, D., 213–237. Cambridge, MA: Basil Blackwell.

Glassdoor 2017. Glassdoor survey finds four in five Americans believe employers have an important voice in politics and society. Available at: https://www.glassdoor.com/about-us/corporate-activism-survey

Gneezy, A., A. Imas, A. Brown, L. D. Nelson, and M. I. Norton. 2012. Paying to be nice: Consistency and costly prosocial behavior. *Management Science* 58 (1): 179–187.

Gouldner, A. W. 1960. The norm of reciprocity: A preliminary statement. *American Sociological Review* 25: 161–177.

Grant, A. M. 2007. Relational job design and the motivation to make a prosocial difference. *Academy of Management Review* 32 (2): 393–417.

Grant, A. M., J. E. Dutton, and B. D. Rosso. 2008. Giving commitment: Employee support programs and the prosocial sensemaking process. *Academy of Management Journal* 51 (5): 898–918.

Grant, A. 2012. Giving time, time after time: Work design and sustained employee participation in corporate volunteering. *Academy of Management Review* 37 (4): 589–615.

Hartzmark, S. M., and A. B. Sussman. 2019. Do investors value sustainability? A natural experiment examining ranking and fund flows. *The Journal of Finance* 74 (6): 2789–2837.

Hecht, G., I. D. Tafkov, and K. L. Towry. 2012. Performance spillover in a multitask environment. *Contemporary Accounting Research* 29 (2): 563–589.

Holmstrom, B. 1979. Moral hazard and observability. *The Bell Journal of Economics* 74–91.

Holmstrom, B., and P. Milgrom. 1991. Multitask principal-agent analyses: Incentive contracts, asset ownership, and job design. *Journal of Law, Economics, & Organization* 7: 24–52.

Johnson, J., K. Khim, and Y. Tian. 2021. *The effect of charitable prosocial contracts versus cash contracts on employee effort and misreporting*. Working paper. University of Central Florida.

Jones, D. A. 2010. Does serving the community also serve the company? Using organizational identification and social exchange theories to understand employee responses to a volunteerism programme. *Journal of Occupational and Organizational Psychology* 83: 857–878.

Jones, D. A., and C. R. Willness. 2013. Corporate social performance, organizational reputation, and recruitment. In K. Y. T. Yu & D. Cable (Eds.), *The Oxford handbook of recruitment*. 298–313. New York: Oxford University Press.

Jones, D. A., A. Newman, R. Shao, and F. L. Cooke. 2019. Advances in employee-focused micro-level research on corporate social responsibility: Situating new contributions within the current state of the literature. *Journal of Business Ethics* 157 (2): 293–302.

Kachelmeier, S. J., T. A. Thornock, and M. G. Williamson. 2016. Communicated values as informal controls: Promoting quality while undermining productivity? *Contemporary Accounting Research* 33 (4): 1411–1434.

Kahneman, D., and J. L. Knetsch. 1992. Valuing public goods: The purchase of moral satisfaction. *Journal of Environmental Economics and Management* 22 (1): 1197–1207.

Kitzmueller, M., and J. Shimshack. 2012. Economic perspectives on corporate social responsibility. *Journal of Economic Literature* 50 (1): 51–84.

Knox, B. D. 2020. Employee volunteer programs are associated with firm-level benefits and CEO incentives: Data on the ethical dilemma of corporate social responsibility activities. *Journal of Business Ethics* 162 (2): 449–472.

Korschun, D., C. B. Bhattacharya, and S. D. Swain. 2014. Corporate social responsibility, customer orientation, and the job performance of frontline employees. *Journal of Marketing* 78 (3): 20–37.

Lee, K., and N. J. Allen. 2002. Organizational citizenship behavior and workplace deviance: The role of affect and cognitions. *Journal of Applied Psychology* 87 (1): 131–142.

Lins, K. V., H. Servaes, and A. Tamayo. 2017. Social capital, trust, and firm performance: The value of corporate social responsibility during the financial crisis. *The Journal of Finance* 72 (4): 1785–1824.

Merchant, K. A., and W. A. Van der Stede. 2017. *Management Control Systems: Performance Measurement, Evaluation and Incentives*. 4th Edition. Pearson Education.

Microsoft 2020. *Reimagining a better future together: 2020 Microsoft Corporate Social Responsibility Report*.

Mullen, E., and Monin, B. 2016. Consistency versus licensing effects of past moral behavior. *Annual Review of Psychology* 67: 363-385.

Newman, A. H., I. D. Tafkov, and F. H. Zhou. 2020. The effects of incentive scheme and task difficulty on employees' altruistic behavior outside the firm. *Contemporary Accounting Research* 37 (3): 1512–1535.

Newman, A. H., I. D. Tafkov, N. G. Waddoups, and X. G. Xiong. 2021. *The Effect of Reward Frequency on Performance for Cash Rewards and Tangible Rewards*. Working paper, University of South Carolina, Georgia State University, and University of Denver.

Okada, E. M., and S. J. Hoch. 2004. Spending time versus spending money. *Journal of Consumer Research* 31 (2): 313–323.

Podsakoff, N. P., S. W. Whiting, P. M. Podsakoff, and B. D. Blume. 2009. Individual-and organizational-level consequences of organizational citizenship behaviors: A meta-analysis. *Journal of Applied Psychology* 94 (1): 122–141.

PwC Volunteers 2020. Our PwC Volunteers. Available at: https://www.pwc.com/gx/en/about/corporate-responsibility/community-engagement/pwc-volunteers.html

Rabin, M. 1993. Incorporating fairness into game theory and economics. *The American Economic Review* 83 (5): 1281–1302.

Rajagopal, P., and J. Y. and Rha. 2009. The mental accounting of time. *Journal of Economic Psychology* 30 (5): 772–781.

Rand, D. G., A. Peysakhovich, G. T. Kraft-Todd, G. E. Newman, O. Wurzbacher, M. A. Nowak, and J. D. Greene. 2014. Social heuristics shape intuitive cooperation. *Nature Communications* 5 (1): 1–12.

Rodell, J. B. 2013. Finding meaning through volunteering: Why do employees volunteer and what does it mean for their jobs? *Academy of Management Journal* 56 (5): 1274–1294.

Rodell, J. B., H. Breitsohl, M. Schröder, and D. J Keating. 2016. Employee volunteering: A review and framework for future research. *Journal of Management* 42 (1): 55–84.

Salesforce 2021. Time Off and Leaves. Available at: https://www.getsalesforcebenefits.com/en/your-benefits/work-life/time-off-and-leaves

Salesforce 2022. Citizen Philanthropy: Volunteer Time Off. Available at: https://www.salesforce.com/company/philanthropy/citizen-philanthropy-strategic-programs/.

Simpson, B., and R. Willer. 2008. Altruism and indirect reciprocity: The interaction of person and situation in prosocial behavior. *Social Psychology Quarterly* 71 (1): 37–52.

Society for Human Resource Management 2019. SHRM Employee Benefits 2019. Available at: https://www.shrm.org/hr-today/trends-and-forecasting/research-and-surveys/pages/benefits19.aspx

Sprinkle, G. B. 2003. Perspectives on experimental research in managerial accounting. *Accounting, Organizations and Society* 28: 287–318.

Sprinkle, G. B., M. G. Williamson, and D. R. Upton. 2008. The effort and risk-taking effects of budget-based contracts. Accounting, Organizations and Society 33 (4): 436–452.

Susewind, M., and Hoelzl, E. 2014. A matter of perspective: Why past moral behavior can sometimes encourage and other times discourage future moral striving. *Journal of Applied Social Psychology* 44 (3): 201–209.

Thaler, R. H. 1999. Mental accounting matters. *Journal of Behavioral Decision Making* 12: 183–206.

Tonin, M., and M. Vlassopoulos. 2015. Corporate philanthropy and productivity: Evidence from an online real effort experiment. *Management Science* 61 (8): 1741–2011.

Uhl-Bien, M., and J. M. Maslyn. 2003. Reciprocity in manager-subordinate relationships: Components, configurations, and outcomes. *Journal of Management* 29 (4): 511–532.

Volunteer Gran Basics. 2021. Double the Donation. Available at: https://doublethedonation.com/tips/volunteer-grant-basics/

Webb, R. A., M. G. Williamson, and Y. Zhang. 2013. Productivity-target difficulty, target-based pay, and outside-the-box thinking. *The Accounting Review* 88 (4): 1433–1457.

Williams, L. J., and S. E. Anderson. 1991. Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management* 17 (3): 601–617.