



Prosocial Bonuses Increase Employee Satisfaction and Team Performance

Lalin Anik **Lara B. Aknin**
Michael I. Norton **Elizabeth W. Dunn**
Jordi Quoidbach

Working Paper

13-095

May 7, 2013

Copyright © 2013 by Lalin Anik, Lara B. Aknin, Michael I. Norton, Elizabeth W. Dunn, and Jordi Quoidbach

Working papers are in draft form. This working paper is distributed for purposes of comment and discussion only. It may not be reproduced without permission of the copyright holder. Copies of working papers are available from the author.

Prosocial Bonuses Increase Employee Satisfaction and Team Performance

Lalin Anik, Duke University

Lara B. Aknin, University of British Columbia

Michael I. Norton, Harvard Business School

Elizabeth W. Dunn, University of British Columbia

Jordi Quoidbach, University of Liège

WORD COUNT: 4,722

CORRESPONDING AUTHOR:

Lalin Anik

Fuqua School of Business, Duke University, 100 Fuqua Drive, Box 90120, Durham, North Carolina, USA 27708

Phone: (617) 980-9607 Email: lalin.anik@duke.edu

Abstract

In two field studies, we explore the impact of providing employees and teammates with *prosocial bonuses*, a novel type of bonus spent on others rather than on oneself. In Experiment 1, we show that prosocial bonuses in the form of donations to charity lead to happier and more satisfied employees at an Australian bank. In Experiment 2, we show that prosocial bonuses in the form of expenditures on teammates lead to better performance in both pharmaceutical sales teams in Belgium and sports teams in Canada. These results suggest that a minor adjustment to employee bonuses – shifting the focus from the self to others – can produce measurable benefits for employees and organizations.

Keywords: bonuses, prosocial behavior, job performance, job satisfaction, motivation, teams, happiness

Introduction

A recent survey revealed that just 46% of Americans are satisfied with their jobs, the lowest level recorded by the Conference Board [1] in the past two decades. Yet over the same time frame, Americans have come to spend more and more of their time at work [2]. Taken together, this trend suggests that employees are becoming more and more unhappy more and more of the time at work, hardly a formula for a healthy and productive workplace. In this increasingly negative environment, how can employers incentivize their employees to increase their happiness, job satisfaction, and ultimately their job performance?

Certainly, designing effective incentive schemes is a central challenge for a wide range of organizations, from multi-national corporations to academic departments. In pursuit of identifying the most effective strategies, organizations have devised an impressive variety of such bonuses, from fixed salaries to pay-per-performance, from commissions to end-of-year bonuses. We suggest that the wide variety in such schemes masks a shared assumption: That the best way to motivate employees is to reward them with money that they then spend on themselves. We propose an alternative means of incentivizing employees – what we term “prosocial bonuses” – in which organizations provide employees with bonuses used to engage in prosocial actions towards charities and co-workers.

Below, we first review research exploring existing methods of increasing workplace performance, including individual-based and team-based bonus schemes, which tend to reveal both benefits and unexpected costs. We then briefly review the literature on the benefits of improving social life in the work place, such as increasing employee citizenship behaviors. Next, we argue that prosocial bonuses mitigate some of the issues that arise with individual- and team-based compensation schemes, while retaining the benefits of improving employee’s social lives

in the workplace. Finally, we examine the impact of these prosocial bonuses on employee satisfaction and team performance, by reporting results from two “proof of concept” field experiments conducted in three countries.

Individual- and Team-Based Incentive Schemes

When asked why they work, individuals most commonly reply “money” [3]. But what is the effect of money on employee’s job satisfaction and performance? On one hand, monetary bonuses have been found to have positive effects – increased productivity, effort, performance, and job satisfaction [4-9]. Individual bonuses increase job satisfaction in part because employees see their time and effort being rewarded [10-13]. From pay-per-performance to piece rate compensation schemes to profit sharing to bonuses, individual-based incentive schemes can lead to improved employee outcomes [8, 14-18].

On the other hand, individual incentives – such as large bonuses – are often surprisingly ineffective in increasing employee morale and productivity [19-20]. Rewarding individual employees can produce negative outcomes by eroding workplace cohesion [21], as employees become reluctant to share information with others even at the expense of reduced output [22]. Relative comparisons at the individual level create competition which results in decreased trust, sharing and teamwork [23-25]; in Drago and Turnbull [26], for example, tournament-based compensation led to decreased helping behavior and increased the potential for sabotaging other workers.

In an effort to prevent such negative competitive dynamics that can result from individual-based bonuses, organizations often turn to incentivizing employees for their collective performance, encouraging cooperation and teamwork rather than competition [27-29]. Indeed, a growing body of research suggests that interpersonal relationships enable employees to

experience their work as important and meaningful [30-36]. Furthermore, evidence suggests that interpersonal relationships often enhance employees' motivations, opportunities, and resources at work [37-40]. Positive interpersonal relationships with coworkers provide social support and a buffer from stressful events [41-43], which in turn predict team commitment [44], job engagement [45-46], and job satisfaction [47-49].

In some cases, team-based compensation schemes have been shown to raise this sense of cooperation and cohesiveness between team members [22,50], inducing them to exert additional effort toward helping one another [51-54]. Importantly, such increased cooperation due to interdependent rewards has been shown to improve team performance [55], suggesting that team-based bonuses may be an effective means of improving employee social life. As with individual-based bonuses, however, team-based bonuses offer important advantages but also potential drawbacks – such as free riding [56], motivational loss due to the perception of inequity [57], and suboptimization of team goals [58]. Thus while team-based bonuses have the potential to improve relationships between co-workers, they can also lead to “antisocial” behaviors – and decreased employee outcomes.

Prosocial Bonuses

We suggest that prosocial bonuses offer an alternative approach that has the potential to provide some of the same benefits as team-based compensation – increased social support, cohesion, and performance – while carrying fewer drawbacks. Research suggests that the desire to help others is a need deeply rooted in human nature [59-60], and that giving to others has a causal impact on increasing happiness and life satisfaction [61-62]. At the organizational level, previous correlational research suggests that prosocial behavior in the workplace – often termed citizenship behaviors – is linked to employee morale and performance [63]: the extent to which

employees perceive themselves and their organizations as prosocial predicts organizational commitment [64-66]. We suggest that prosocial bonuses can have a *causal* impact on employee satisfaction and performance, such that providing employees with money to help others would have a greater organizational impact than providing employees with money to spend on themselves.

We note that we are not the first researchers to examine the interplay of incentives and prosocial behavior; indeed, several investigations point to the potential risk in mixing money with altruism [67]: paying children to collect money for charity decreases their efforts [68], publicly rewarding adults for earning money for charity also decreases effort [69], and paying friends to help with a move reduces the amount of help received [70]. Unlike these kinds of “prosocial incentives,” however, the prosocial bonuses we provide in the experiments below are not contingent upon or linked to any behavior – employees are simply given money by the firm to spend prosocially. In this sense, our investigation uses a version of a “reciprocity by proxy” strategy outlined by Goldstein, Griskevicius, and Cialdini [71]. In this investigation, guests who were informed that a hotel had already given a donation to an environmental cause were more likely to reuse their towels than those who were told the hotel would make a donation *only if* they reused their towels; their results showed that providing the prosocial incentive up front was more effective than linking the incentive directly to the behavior. Following this logic, we predicted that offering employees prosocial bonuses that were not linked to any current behavior or expectation of future behavior would be effective in increasing employee satisfaction.

Overview of the Present Research

We examine whether randomly assigning employees to engage in prosocial behavior – via prosocial bonuses – can have a causal impact on employee well-being, job satisfaction, and

job performance. In both field studies, some employees and teammates are given non-contingent “prosocial bonuses” – money that they receive as a windfall that they are encouraged to spend in a prosocial manner. In Experiment 1, we give some employees of a company the opportunity to donate money to charity, examining the impact of this intervention on both employee well-being and job satisfaction. In Experiment 2, we move beyond assessment of psychological constructs to behavioral measures; by comparing prosocial versus personal bonuses, we investigate their impact on team performance in the two different contexts of sales teams and sports teams.

Materials and Methods

Ethics Statement

Data collection for Experiment 1 was approved by the Harvard University Behavioral Research Ethics Board. Data collection for Experiment 2 was approved by the University of British Columbia’s Behavioral Research Ethics Board (B06-0557). Written informed consent was obtained for all studies.

Experiment 1

In Experiment 1, we examine the impact of prosocial bonuses on the most widely studied attitude in the field of organizational behavior, job satisfaction – broadly defined, employees’ subjective evaluation of their work experience [72-73]. The large number of investigations examining the factors that influence job satisfaction have tended to focus on two fundamental determinants: aspects of employees and their lives such as individual differences in self-esteem or education as well as individual experiences outside of work [74-78], and aspects of the job itself, such as communicating clear task goals and giving feedback when those goals are achieved [79-84]. We assigned some employees of a large bank to receive a prosocial bonus in

the form of money from the company to donate to charity, and examined the impact of spending this bonus on job satisfaction, compared to employees not given this bonus.

Participants. A total of 133 employees (59 percent female) at an Australian bank with a wide range of income, age, and years at the company completed the experiment (Table 1). An additional 46 employees completed only the Time 1 survey; these individuals were distributed evenly across conditions ($N_{\text{control}} = 14$, $N_{\$50} = 17$, and $N_{\$100} = 15$) and did not differ from our main sample in Time 1 happiness or job satisfaction ($ts < 1.13$, $ps > .26$). Employees completing only the Time 1 survey were not included in the analyses below, leaving a final sample of 133 employees ($N_{\text{control}} = 48$, $N_{\$50} = 41$, and $N_{\$100} = 44$).

Design and procedure. All employees received an email asking them to participate in an experiment on workplace attitudes. Employees were assured that their participation was voluntary and that their responses would not be shared with their employer. If employees followed a link indicating their willingness to participate, they were directed to the Time 1 survey. Two weeks later, based on random assignment, employees who had completed the Time 1 survey were sent an email that either directed them to complete the Time 2 survey (control condition), or informed them that the company had given them a charity voucher of 50 or 100 Australian dollars to donate to a charity of their choice (equivalent to \$25 and \$50 USD, respectively, based on exchange rates at the time). Participants in the two charity voucher conditions followed a link that took them to a charity website (KarmaCurrency.com.au) where they could donate to a wide range of charities of their choice. After completing the donation, participants were automatically redirected to the Time 2 survey.

Measures. On the Time 1 survey, participants reported their gender, age, and salary. Because this was a field experiment conducted during a work day, we asked participants to

complete single-item measures of happiness and job satisfaction at Time 1 and Time 2.

Participants rated how happy they felt on the 5-point scale (1: *very slightly or not at all* to 5: *extremely*) used in the Positive and Negative Affect Schedule [85]. This single-item measure has been previously shown to be highly correlated with the full scale ($r = .48, p < .001$) [86], and similar single-item measures of happiness have been widely used in the well-being literature [87-88]. To assess job satisfaction, participants completed a measure drawn from the Michigan Organizational Assessment Questionnaire, rating their agreement with the statement “All in all I’m satisfied with my job” on a 7-point scale [1: *strongly disagree* to 7: *strongly agree*; 89] single-item measures of job satisfaction have been shown to correlate with longer assessments, and yield adequate validity [90-92].

Experiment 2

Experiment 1 revealed two kinds of psychological benefits that can accrue when companies provide employees with the opportunity to spend prosocial bonuses: employees who donated \$100 to charity on behalf of their company reported increased happiness and job satisfaction. Do the benefits of prosocial bonuses extend beyond employee well-being to improving actual performance – and the organizations’ bottom line? As with job satisfaction, previous research has focused on two categories of predictors of job performance, some examining the links between employees’ individual differences (e.g., their general aptitude or conscientiousness) and their performance, and other research examining how aspects of the job itself can improve or undermine performance [77, 93-96]. We suggest that prosocial bonuses offer an additional approach to impacting job performance; we expected that compared to personal bonuses, prosocial bonuses would have a larger impact on job performance.

In addition to documenting the impact of prosocial bonuses on team performance, we also widened our investigation in three ways. First, we sought to extend the time course of our experiment to examine the longer-term effects of prosocial bonuses. In Experiment 1, we measured job satisfaction immediately after the prosocial bonus, which we acknowledge is likely when the impact of giving was at its greatest. We assess more delayed or extended benefits of prosocial bonuses in Experiment 2. Second, we explored the impact of a different form of prosocial bonuses; to do so, we redirected generous spending from external charitable causes to co-workers and teammates within the organization. Third, Experiment 1 compared the effects of prosocial bonuses to a control condition; in Experiment 2 we directly compared the impact of prosocial and personal bonuses, by giving members of some teams money to spend on their teammates and members of other teams money to spend on themselves. To maximize our sample size and the generalizability of our findings, we ran the same field experiment with two very different types of teams: sales teams and sports teams. We first report the results of both experiments together, and then report analyses for the two team types separately.

Sales Teams Methods

Participants. Following an invitation from their Human Resources department, 88 salespersons (50 percent male; $M_{age} = 36.0$, $SD = 6.9$) working in 14 teams ($M_{members} = 8.6$, $SD = 2.0$) at a Belgian pharmaceutical company completed this experiment in exchange for a chance to win an iPod. Participants were assured that participation was voluntary and their responses would remain confidential.

Design and Procedure. Prior to participation, employees provided demographic information through an online survey. Each team was then randomly assigned to the prosocial or personal bonuses condition. Because teams varied in size, we randomly selected approximately

one-third of team members and gave them 15 Euros (~\$22 USD) to spend by the end of the week. On personal bonus teams, participants who received money were asked to spend it on a bill, expense, or gift for themselves (as in Dunn et al., 2008), whereas on prosocial bonus teams, participants who received money were instructed to spend it on a specified teammate (randomly selected from the remaining team members). All participants receiving funds to spend were asked to complete the spending by the end of the week.

Team performance. Performance was assessed immediately before (Time 1) and one month after our spending intervention (Time 2). Pharmaceutical salespeople promote their product to physicians, pharmacies, and hospitals, rather than selling directly to customers. As such, the standard indicator of pharmaceutical sales team success is the total monthly sales collected by each pharmaceutical sales team (in Euros) in the geographical region under their purview. Therefore, we used monthly team sales as our measure of team performance.

Sports Teams Methods

Participants. Sixty-two students (83 percent male; $M_{\text{age}} = 20.49$, $SD = 2.6$) on 11 recreational dodge ball teams ($M_{\text{members}} = 4.71$, $SD = 1.4$) completed the experiment at the University of British Columbia for a chance to win \$100.

Procedure. Members of participating teams completed a basic demographics survey in which they noted their age, gender, annual income and student status. Each team was randomly assigned to the personal or prosocial bonuses condition. Within each team, approximately one-third of team members were randomly selected to receive \$20 CDN to spend over the subsequent week. Participants in the personal bonus condition were instructed to spend the money on a bill, expense, or gift for themselves, while participants in the prosocial bonus condition were instructed to spend the money on a randomly selected teammate. Both personal and prosocial

spending instructions were presented in written form and then explained by a research assistant to ensure participants understood the instructions. Recipients were asked whether they received a gift to confirm that the money was spent as declared by the spender.

Team performance. Performance was assessed with the percentage of games won out of total games played on the date of the initial survey (Time 1) and approximately two weeks later (Time 2). As with sales teams, only team level performance could be measured, as individual players' statistics were not collected by the recreational dodge ball league.

Results

Experiment 1

Happiness. A preliminary ANOVA confirmed that there was no difference between conditions in Time 1 happiness, $F(2, 130) = .12, p > .85, \eta_p^2 = .02$; we therefore entered experimental condition into an ANCOVA predicting Time 2 happiness, controlling for Time 1 happiness. We observed a significant main effect of condition, $F(2, 129) = 5.85, p < .005, \eta_p^2 = .08$. Follow-up analyses showed that participants who received a \$100 charity voucher became significantly happier, $t(43) = 5.12, p < .001$, whereas happiness levels were unchanged from Time 1 to Time 2 for those in the control and \$50 conditions, $ts < 1$ (Table 2).

Job Satisfaction. As with happiness, a preliminary ANOVA confirmed that there were no between-group differences in Time 1 job satisfaction, $F(2, 130) = .54, p > .77, \eta_p^2 = .004$. Entering condition into an ANCOVA predicting Time 2 job satisfaction, controlling for Time 1 job satisfaction, revealed a significant main effect of condition, $F(2, 129) = 3.14, p < .05, \eta_p^2 = .05$. As with happiness, participants who received a \$100 charity voucher showed an increase in

job satisfaction, $t(43) = 2.46, p < .02$, which was unchanged for those in the control and \$50 conditions, $ts < 1.19$ (Table 2).

Experiment 2

Analytic strategy. As with all field experiments with teams, analyzing data at the level of the team necessary decreases the number of observations – our 150 total participants become just 25 observations given the size of the teams we studied. As a result, we standardized performance scores from sales and sport teams and analyzed the data jointly to test whether prosocial bonus teams outperformed personal bonus teams, while also reporting the results for each context (sales and sports) separately.

Spending examples. Participants who received a personal or prosocial bonus were asked to report how they spent the allotted funds. On personal bonus teams, spenders reported buying items for themselves such as sportswear, small jewelry, CDs, food, and alcohol. On prosocial bonus teams, spenders reported buying items for others such as books, wine, a plant, a stuffed animal, a piñata and paying a teammate's sports league fee.

Spending condition and team performance. To confirm that there were no significant differences in initial performance, we entered condition (personal bonus vs. prosocial bonus), team type (pharmaceutical sales vs. dodge ball), and their interaction into an ANOVA predicting Time 1 performance; this analysis revealed no significant effects, $Fs < 1$. As in Experiment 1, therefore, we entered the same variables into an ANCOVA predicting Time 2 performance, controlling for Time 1 performance. As predicted, we found a significant main effect, whereby prosocial bonus teams performed significantly better than personal bonus teams, $F(1, 20) = 4.34, p = .05, \eta_p^2 = .18$ (Table 3).

The interaction between team type and condition was marginally significant, $F(1, 20) = 3.84$, $p = .06$, $\eta_p^2 = .16$. Although this interaction and the simple effects should be interpreted with caution given the very small sample sizes, closer examination suggests that prosocial bonuses were especially effective for sales teams. That is, in the prosocial bonuses condition, sales teams showed a large and significant increase in performance from Time 1 to Time 2, $t(6) = 2.70$, $p < .04$, $d = 1.02$, while sports teams showed a large, but statistically marginally significant increase, $t(5) = 1.87$, $p = .12$, $d = .76$. Meanwhile, in the personal bonuses condition, there was no evidence for a performance improvement for either sales teams, $t(6) = 0.10$, $p = .92$, $d = .04$, or sports teams, $t(4) = 0.39$, $p = .72$, $d = .17$ (Table 3).

Another way to conceptualize the effectiveness of these interventions is to calculate the return on investment for prosocial and personal bonuses. On sales teams, for every 10€ given to a team member to spend on herself, the firm gets just 3€ back – a net loss; because sales do not increase with personal bonuses, personal bonuses are wasted money. In sharp contrast, for every 10€ given to a team member to spend prosocially, the firm reaps 52€. Similarly for sports teams, every \$10 people spent on themselves led to a two percent decrease in winning percentage, whereas every \$10 spent prosocially led to an 11% increase in winning percentage.

Discussion

We offer initial evidence of the causal impact of increasing prosocial behavior via the provision of prosocial bonuses to employees at an Australian bank, members of dodge ball teams in Canada, and pharmaceutical salespeople in Belgium. Taken together, our studies show that when organizations give employees the opportunity to spend money on others – whether their co-workers or those in need – both the employees and the company can benefit, with increased happiness and job satisfaction and even improved team performance. Specifically, in Experiment

1, employees who had the opportunity to make a substantial donation to charity (\$100 AUD) on behalf of their company reported enhanced happiness and job satisfaction in the short term, compared to those in the control condition. In Experiment 2, we extended these findings to team performance in the longer term, showing that teams performed better when participants were assigned to spend money on their fellow team members than when given a more standard bonus: money to spend on themselves. Across the studies, we show that prosocial bonuses can benefit both individuals and teams, on both psychological and “bottom line” indicators, in both the short and long-term. Unlike some research suggesting a weak link between factors that improve job satisfaction and those that improve job performance [97-99] our results suggest that prosocial bonuses have a meaningful impact on both metrics.

How might prosocial bonuses lead to increased happiness, job satisfaction and team performance? Because our studies were conducted in the field, we were unable to conduct extensive surveys assessing likely mediators of the impact of prosocial bonuses. While the beneficial impact of prosocial spending on happiness is well-established [62,86], a key goal for future research is to explore underlying mechanisms of the prosocial bonus-performance link, with several clear possibilities worthy of investigation. First, prosocial bonuses may lead to the strengthening of existing relationships and even the formation of new relationships; such positive interpersonal relationships predict job engagement [45, 46] and job satisfaction [47-49]. Second, and relatedly, prosocial bonuses might lead to increased cooperation and cohesiveness between team members, which can improve team performance in part by encouraging helping behaviors [51-55]. Finally, prosocial spending may increase general feelings of reciprocity among members of organizations, leading both to greater cooperation and punishment of “shirkers” or “free riders” – those employees who are not contributing to the goals of the organization [100-

105]. Future experiments which include both prosocial and personal bonuses while assessing these – and other – constructs will add to our understanding of the benefits of prosocial bonuses.

We note that Experiment 1 included a prosocial bonus condition and a control condition but not a personal bonus condition, whereas Experiment 2 included prosocial and personal bonus conditions but not a control condition; in addition, Experiment 1 included two levels of bonuses, whereas in Experiment 2 the bonus amount was kept constant. These decisions were driven by logistics. Our study sites were not interested in including a personal bonus in Experiment 1 but did allow us to include two levels of prosocial bonus; they were interested in including both personal and prosocial bonuses of a fixed amount but not a control condition in Experiment 2. Of clear interest for future research is more systematic and comprehensive variation of all of these factors, crossing many bonus levels with both personal and prosocial bonuses. In addition, as we noted in Experiment 2, our observations at the team level are low in number (150 participants become just 25 teams); scaled-up experiments that utilized more teams would also build on the “proof of concept” experiments we present here.

It would be particularly interesting to examine employees’ sensitivity to bonus levels as a function of whether those bonuses are personal or prosocial. Receiving \$10 or \$20 for oneself is likely to lead only to the purchase of one or two additional coffees, and therefore seems unlikely to impact employee satisfaction or job performance. Buying a \$20 gift for a coworker instead of a \$10 gift, on the other hand, may encourage people to be even more creative and thoughtful in their gift choice, making the experience more impactful for both the giver and the receiver – and possibly leading to a bigger return on investment for the organization. More broadly, a \$10 personal bonus from one’s organization may seem like a trifling or insufficient reward, leading to a decrease in motivation [71] – “I worked all year and they only gave me \$10?” – our results

suggest that the same small sum of money spent prosocially has a markedly different, and positive, effect.

Related to the above, \$50 AUS (roughly \$25 USD) was not sufficient to increase employee satisfaction in Experiment 1, whereas \$20 USD was sufficient to increase team performance in Experiment 2. We suggest that this difference is likely due to the different form that prosocial bonuses took in the two studies. Recent research suggests that face-to-face giving has a larger impact on happiness than giving at a distance: not only are people more likely to donate money to toward single individuals than to larger organizations [106-107], but the closer the link between giver and receiver, the bigger the happiness benefits: people who give money others are happier when they give face-to-face rather than remotely, and spending money on close friends leads to more happiness than spending on more distant acquaintances [108-109]. As a result, it is not surprising that the same amount of money (~\$20 USD) goes further in Experiment 2 than in Experiment 1, given the social nature of the team expenditure compared to the relatively impersonal donation to charity. Perhaps even more importantly, whereas in Experiment 1 employees were givers only, in Experiment 2 teammates were both givers *and* receivers: for every salesperson who gave a gift, there was a salesperson who received that gift, likely another contributor to the greater impact of prosocial bonuses in Experiment 2. Importantly, the observed boost in employee satisfaction and happiness only for the \$100 AUS and not for the \$50 AUS in Study 1 helps rule out the possibility that our results are simply due to demand effects. Demand effects should have influenced both of the prosocial donation conditions (e.g., \$50 AUS and \$100 AUS) equally. Thus, if employees felt that they should be happy after giving, then the boost in happiness would have been observed across all prosocial spenders, not just for employees who gave \$100.

Our experiments provide evidence for the potential utility of prosocial bonuses, though future research is needed. Given that existing incentive schemes have important drawbacks, it is worthwhile to consider creative new approaches to incentivizing employees. That said, we assume that prosocial bonuses may have drawbacks of their own, which future research should document. In particular, it seems likely that prosocial bonuses could backfire if they were introduced by companies as a *replacement* for more standard bonuses. Because many companies already allocate funds for charitable giving and employee entertainment, however, it may be possible for companies to reap the benefits of prosocial bonuses by providing some of these existing funds directly to employees, who can then use this money to make donations to charity or to benefit co-workers—potentially increasing job satisfaction and performance in the process. Relatedly, prosocial bonuses were unconditional in our experiments; future research could examine whether bonuses conditional on performance or based on competition would prove as effective in increasing job satisfaction and performance.

We opened by noting that recent surveys indicate that employee job satisfaction is at a twenty-year low in the United States even as Americans have come to spend more and more of their time at work. This additional time at work, of course, often comes at the expense of devoting time to pursuits known to be linked to well-being, from forming social connections to engaging in prosocial acts such as volunteering [2, 110-111]. We suggest that rather than force employees to make a losing tradeoff between social life and work life, employers can focus instead on using prosocial bonuses to create a more altruistic, satisfying, and productive workplace.

References

1. Conference Board (2010) I can't get no...job satisfaction, that is: America's unhappy workers. (Report No. 1459-09-RR).
2. Schor J (1991) The overworked American: The unexpected decline of leisure. New York: Basic Books.
3. Jurgensen CE (1978) Job preferences (what makes a job good or bad?). *J of App Psyc* 63: 267-276.
4. John G, Weitz B (1989) Salesforce compensation: An empirical investigation of factors related to use of salary versus incentive compensation. *J of Market Res* 26: 1-14.
5. Lazear EP (2000) Performance pay and productivity. *Am Econ R* 90: 1346–1361.
6. Mueller CW, Price JL (1990) Economic, psychological, and sociological determinants of voluntary turnover. *J of Behav Econ* 19: 321-335.
7. Paarsch H, Shearer B (2000) Piece rates, fixed wages, and incentive effects, Statistical evidence from payroll records. *Int Econ R* 41: 59 - 92.
8. Parent D (1999) Methods of pay and earnings, a longitudinal analysis. *Ind and Labor Rel R* 53: 71–86.
9. Sager JK, Futrell CM, Varadarajan R (1989) Exploring salesperson turnover: A causal model. *J of Bus Res* 18: 303-326.
10. Eisenberger R, Rhoades L, Cameron J (1999) Does pay for performance increase or decrease perceived self determination and intrinsic motivation? *J of Pers and Soc Psyc* 77: 1026 –1040.
11. Greene CN (1973) Causal connections among managers' merit pay, job satisfaction, and performance. *J of App Psyc* 58: 95–100.

12. Miceli MP, Jung I, Near JP, Greenberger DB (1991) Predictors and outcomes of reactions to pay-for-performance plans. *J of App Psyc* 76: 508–521.
13. Smith PL, Smits SJ, Hoy F (1992) Human resource policies in small firms, Linkages to employee satisfaction. *App H.R.M. Res* 3: 1–19.
14. Ewing BT (1996) Wages and performance-base pay: Evidence from the NLSY. *Econ Lett* 51: 241–246.
15. Green C, Heywood JS (2008) Does performance pay increase job satisfaction? *Economica* 75: 710-728.
16. MacLeod WB, Parent D (1998) Job characteristics and the form of compensation. In: Polacheck S, editor. *Res in Lab Econ*. California: JAI Press. pp. 177-242.
17. Oettinger GS (2001) Do piece rates influence effort choices? Evidence from stadium Vendors. *Econ Lett* 73: 117–123.
18. Stajkovic AD, Luthans F (2001) Differential effects of incentive motivators on work performance. *Acad of Manag J* 44: 580-590.
19. Ariely D, Gneezy U, Loewenstein G, Mazar N (2009) Large stakes and big mistakes. *R of Econ Stud* 76: 451-469.
20. Oyer P (1998) Fiscal year ends and nonlinear incentive contracts: The effect on business seasonality. *Quart J of Econ* 113: 149-185.
21. Drago R, Turnbull GK (1988) Individual and group piece rates under team technologies. *J of the Japan and Int Econ* 2: 1–10.
22. Lazear EP (1989) Pay Equality and Industrial Politics. *J of Pol Econ* 97: 561-580.
23. Bloom M (1999) The performance effects of pay dispersion on individuals and organizations. *Acad of Manag J* 42: 25-40.

24. Gardner T (1999) When pay for performance works too well: The negative impact of pay dispersion. *Acad of Manag Exec* 13: 101–103.
25. Grant AM, Christianson MK, Price RH (2007) Happiness, health, or relationships? Managerial practices and employee well-being tradeoffs. *Acad of Manag Pers* 21: 51-63.
26. Drago R, Turnbull GK (1987) An analysis of non-insurance work incentives. *Econ Lett* 23: 301-304.
27. Cohen SG, Bailey DE (1997) What makes teams work: Group effectiveness research from the shop floor to the executive suite. *J of Manag*, 23: 239-290.
28. Grant AM (2007) Relational job design and the motivation to make a prosocial difference. *Acad of Manag R* 32: 393–417.
29. Hamman J, Rick S, Weber RA (2007) Solving coordination failure with “all-or-none” group-level incentives. *Exp Econ* 10: 285-303.
30. Barry B, Crant JM (2000) Dyadic communication relationships in organizations: An attribution/expectancy approach. *Organ Sci* 11: 648 – 664.
31. Bradbury H, Bergmann Lichtenstein BM (2000) Relationality in organizational research: Exploring the space between. *Organ Sci* 11: 551–564.
32. Gersick CJG, Bartunek JM, Dutton JE (2000) Learning from academia: The importance of relationships in professional life. *Acad of Manag J* 43: 1026 –1044.
33. Kahn WA (1990) Psychological conditions of personal engagement and disengagement at work. *Acad of Manag J* 33: 692–724.
34. Kahn W (1998) Relational systems at work. *Res in Organ Behav* 20: 39 –76.

35. Kozlowski SWJ, Bell BS (2003) Work groups and teams in organizations. In: Borman WC, Ilgen DR, Klimoski RJ, editors. Handbook of psychology: Industrial and organizational psychology. London: John Wiley & Sons Inc. pp. 333-375.
36. Wrzesniewski A, Dutton JE., Debebe G (2003) Interpersonal sensemaking and the meaning of work. *Res in Organ Behav* 25: 93–135.
37. Adler PS, Kwon S (2002) Social capital: Prospects for a new concept. *Acad of Manag R* 27: 17–40.
38. Ibarra H (1993) Personal networks of women and minorities in management: A conceptual framework. *Acad of Manag R* 18: 56 – 87.
39. Leana CR, Rousseau DM (2000) Relational wealth: The advantages of stability in a changing economy. New York: Oxford University Press.
40. Rangan S (2000) The problem of search and deliberation in economic action, when social networks really matter. *Acad of Manag R* 25: 813– 828.
41. Cunningham MR, Barbee AP (2000) Social support. In: Hendrick C, Hendrick SS, editors. *Close relationships: A sourcebook California*: Sage Publications Inc. pp. 273-285.
42. Langston CA (1994) Capitalizing on and coping with daily-life events, Expressive responses to positive events. *J of Pers and Soc Psyc* 67: 1112–1125.
43. Terry DJ, Nielsen M, Perchard, L (1993) Effects of work stress on psychological wellbeing and job satisfaction: The stress-buffering role of coworker support. *Aus J of Psyc* 45: 168–175.
44. Bishop JW, Scott, K (2000) An examination of organizational and team commitment in a self-directed team environment. *J of App Psyc* 85: 439–450.

45. Avery DR, McKay PF, Wilson DC (2007) Engaging the aging workforce: The relationship between perceived age similarity, satisfaction with coworkers, and employee engagement. *J of App Psyc* 92: 1542–1556.
46. Heaphy ED, Dutton JE (2008) Positive social interactions and the human body at work: Linking organizations and physiology. *Acad of Manag R* 33: 137–162.
47. Chiaburu D, Harrison D (2008) Do peers make the place? Conceptual synthesis and meta-analysis of coworker effects on perceptions, attitudes, OCBs, and performance. *J of App Psyc* 93: 1082–1103.
48. Morrison R (2004) Information relationships in the workplace, Association with job satisfaction, organizational commitment and turnover intentions. *NZ J of Psyc* 33: 114–128.
49. Simon LS, Judge TA, Erez A (2008) Capitalizing on positive events at work, The impact on positive events on mood and job satisfaction. In: Ilies R, Fandre J, chairs. *Effects of work experiences on behavior and well-being Explanatory mechanisms*. Symposium conducted at the annual meeting of the Society for Industrial & Organizational Psychology. San Francisco, CA.
50. Karau SJ, Williams KD (1997) The effects of group cohesiveness on social loafing and social compensation. *Group Dyn* 1: 156–168.
51. Boning B, Ichniowski C, Shaw K (2007) Opportunity Counts: Teams and the effectiveness of production incentives. *J of Lab Econ* 25: 613-50.
52. Itoh H (1991) Incentives to help in multi-agent situations. *Econometrica* 59: 611-636.
53. Itoh H (1992) Cooperation in hierarchical organizations, an incentive perspective. *J of Law, Econ, and Organ* 8: 321-345.

54. Itoh H (1993) Job design and incentives in hierarchies with team production. Kyoto University, Kyoto, Japan: Mimeo.
55. Wageman R, Baker G (1997) Incentives and cooperation, the joint effects of task and reward interdependence on group performance. *J of Organ Behav* 18: 139- 158.
56. Holmstrom B (1979) Moral hazard and observability. *Bell J of Econ* 10: 74-91.
57. DeMatteo JS, Eby LTL, Sandstrom, E (1998) Team-Based Rewards, Current Empirical Evidence and Directions for Future Research. *Res in Organ Behav* 20: 141–183.
58. Mohrman SA, Lawler EE, Mohrman, AM (1992) Applying employee involvement in schools. *Educ Eval and Policy Anal*, 14: 347-360.
59. Warneken F, Tomasello M (2006) Altruistic helping in human infants and young chimpanzees. *Science* 311: 1301-1303.
60. Weinstein N, Ryan RM (2010) When helping helps: An examination of motivational constructs underlying prosocial behavior and their influence on well-being for the helper and recipient. *J of Pers and Soc Psyc* 98: 222-224.
61. Andreoni J (1990) Impure altruism and donations to public goods: A theory of warm-glow giving. *The Econ J* 100: 464-477.
62. Dunn EW, Aknin LB, Norton MI (2008) Spending money on others promotes happiness. *Sci*, 319: 1687-1688.
63. Bateman TS, & Organ DW (1983) Job satisfaction and the good soldier: The relationship between affect and employee “citizenship”. *Acad of Manag J* 26: 587–595.
64. Grant AM (2008) Designing jobs to do good: Dimensions and psychological consequences of prosocial job characteristics. *J of Positive Psyc* 3: 19–39.

65. Harrison DA, Newman DA, Roth PL (2006) How important are job attitudes? Meta-analytic comparisons of integrative behavioral outcomes and time sequences. *Acad of Manag J* 49: 305-325.
66. Meyer JP, Stanley DJ, Herscovitch L, Topolnysky L (2002) Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *J of Vocat Behav* 61: 20-52.
67. Gneezy U, Meier S, Rey-Biel P (2011) When and how incentives (don't) work to modify behavior? *J of Econ Persp* 25: 1-21.
68. Gneezy U, Rustichini A (2000) Pay enough or don't pay at all. *Quart J of Econ* 115: 791–810.
69. Ariely D, Bracha A, Meier S (2009) Doing good or doing well? Image motivation and monetary incentives in behaving prosocially. *Americ Econ R* 99: 544-555.
70. Heyman J, Ariely D (2004) Effort for payment: A tale of two markets. *Psyc Sci* 15: 787–793.
71. Goldstein NJ, Griskevicius V, Cialdini, RB (2011) Reciprocity by proxy: A novel influence strategy for stimulating cooperation. *Admin Sci Quart* 56: 441-473.
72. Judge TA, Klinger R (2008) Job satisfaction: Subjective well-being at work. In: Eid M, Larsen R, editors. *The Science of Subjective Well-Being*. New York: Guilford Publications. pp.393-413.
73. Locke EA (1976) The nature and causes of job satisfaction. In: Dunnette MD, editor. *Handbook of Industrial and Organizational Psychology*. Chicago: Rand-McNally. pp. 1319-1328.
74. Bruck CS, Allen TD, Spector PE (2002) The relationship between work–family conflict and job satisfaction: A finer-grained analysis. *J of Vocat Behav* 60: 336–353.

75. Chen G, Casper WJ, Cortina JM (2001) The roles of self-efficacy and task complexity in the relationships among cognitive ability, conscientiousness, and task performance: A meta-analytic examination. *Human Perf* 14: 209-230.
76. Chen G, Gully SM, Eden D (2001) Validation of a new general self-efficacy scale. *Organ Res Methods* 4: 62– 83.
77. Judge TA, Bono JE (2001) Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance, a meta analysis. *J of App Psyc* 86: 80–92.
78. Weaver CN (1980) Job satisfaction in the United States in the 1970s. *J of App Psyc* 65: 364-367.
79. Bedeian AG, Armenakis, AA (1981) A path-analysitic experiment of the consequences of role conflict and ambiguity. *Academy of Management Journal* 24: 95-112.
80. Fried Y, Ferris GR (1987) The validity of the job characteristics model: A review and meta-analysis. *Personnel Psyc* 40: 287–322.
81. Gross N, Mason WS, McEachern, AW (1958) *Explorations in role analysis*. New York: John Wiley & Sons Inc.
82. Hackman RJ, Lawler EE III (1971) Employee reactions to job characteristics. *J of App Psyc* 55: 259-286.
83. Haynes K (1979) Job satisfaction of mid-management social workers. *Admin in Soc Work* 3: 207-217.
84. Rizzo JR, House RJ, Lirtzman SI (1970) Role conflict and ambiguity in complex organizations. *Admin Sci Quart* 15: 150–163.

85. Watson D, Clark LA, Tellegen A (1988) Development and validation of brief measures of positive and negative affect: The PANAS scales. *J of Pers and Soc Psyc* 54: 1063-1070.
86. Dunn EW, Ashton-James CE, Hanson MD, Aknin LB (2010) On the costs of self-interested economic behavior: How does stinginess get under the skin? *J of Health Psyc* 15: 627-633.
87. Kahneman D, Krueger AB, Schkade D, Schwarz N, Stone AA (2006) Would you be happier if you were richer? A focusing illusion. *Sci*: 312: 1908–1910.
88. Oishi S, Kesebir S, Diener E (2011) Income inequality and happiness. *Psyc Sci* 22: 1095-1100.
89. Cammann C, Fichman M, Jenkins Jr GD, Klesh JR (1983) Assessing the attitudes and perceptions of organizational members. In: Lawler EE III, Mirvis PH, Cammann C, Seashore S, editors. *Assessing organizational change: A guide to methods, measures, and practices*. New York: John Wiley & Sons Inc. pp. 71-138.
90. Ironson GH, Smith PC, Brannick MT, Gibson WM, Paul KB (1989) Construction of a job in general scale: A comparison of global, composite, and specific measures. *J of App Psyc* 74: 193-200.
91. Kunin T (1955) The construction of a new type of attitude measure. *Personnel Psyc* 8: 65-78.
92. Wanous JP, Reichers AE, Hudy MJ (1997) Overall job satisfaction: How good are single-item measures? *Journal of Applied Psychology* 82: 247-252.
93. Judge TA, Bono JE (2000) Five-factor model of personality and transformational leadership. *J of App Psyc* 85: 751–765.
94. Schmidt FL, Hunter J (2004) General mental ability in the world of work: Occupational attainment and job performance. *J of Pers and Soc Psyc* 86: 162–173.

95. Vinchur A, Schippmann J, Switzer F, Roth P (1998) A meta-analytical review of predictors of job performance for sales people. *J of App Psyc* 82: 30-43.
96. Wright TA, Cropanzano R (2000) Psychological well-being and job satisfaction as predictors of job performance. *J of Occupational Health Psyc* 5: 84–94.
97. Brayfield AH, Crockett WH (1955) Employee attitudes and employee performance. *Psyc Bulletin* 52: 396-424.
98. Iaffaldano MT, Muchinsky PM (1985) Job satisfaction and job performance: A meta-analysis. *Psyc Bulletin* 97: 251-273.
99. Judge TA, Thoresen CJ, Bono JE, Patton GK (2001). The job satisfaction job performance relationship: A qualitative and quantitative review. *Psyc Bulletin* 127: 376-407.
100. Akerlof GA, Kranton RE (2005) Identity and the economics of organizations. *J of Econ Perspectives* 19: 9-32.
101. Boyd R, Gintis H, Bowles S, Richerson PJ (2003) Evolution of altruistic punishment. *Proceedings of the Ntl Acad of Sci* 100: 3531–3535.
102. Carpenter J (2007) Punishing free-riders: How group size affects mutual monitoring and the provision of public goods. *Games and Econ Behav* 60: 31–51.
103. Carpenter J, Bowles S, Gintis H, Hwang S (2009) Strong reciprocity and team production. *J of Econ Behav and Organ* 71: 221-232.
104. Fehr E, Gächter S (2000) Cooperation and punishment. *Amer Econ R* 90: 980–994.
105. Fuster A, Meier S (2010) Another hidden cost of incentives: The detrimental effect on norm enforcement. *Manag Sci* 56: 57-70.
106. Kogut T, Ritov I (2007) One of us: Outstanding willingness to help save a single identified compatriot. *Organ Behav and Human Decision Proc*, 104: 150-157.

107. Small DA, Loewenstein G (2003) Helping *a* victim or helping *the* victim: Altruism and identifiability. *J of Risk and Uncertainty* 26: 5-16.
108. Aknin LB, Dunn EW, Sandstrom GM, Norton MI (2012) Putting the “social” in prosocial spending: Social contact as a catalyst for turning good deeds into good feelings. In press.
109. Aknin LB, Sandstrom GM, Dunn EW, Norton MI (2011) It's the recipient that counts: Spending money on strong social ties leads to greater happiness than spending on weak social ties. *PLoS ONE*, 6: e17018.
110. Putnam R (2000) *Bowling alone: The collapse and revival of American Community*. New York: Simon and Schuster.
111. Thoits PA, Hewitt LN (2001) Volunteer work and well-being. *J of Health and Soc Behav* 42: 115-131.

Tables

Table 1. Employee demographics (Experiment 1)

Age (years)	%	Income (\$AUS)	%	Years at Company	%
21-29	23.3	\$20,001-\$50,000	10	<1	14
30-39	38.3	\$50,001-\$100,000	42	1-2	18
40-49	26.3	\$100,001- \$150,000	34	3-5	21
50-59	12	\$150,001 - \$200,000	11	6-10	12
		\$200,001 - \$500,000	3	11-15	12
				>15	23

Table 2. Change in happiness and job satisfaction between Time 1 and Time 2 as a function of condition (Experiment 1)

	Time 1		Time 2	
	Happiness	Job Satisfaction	Happiness	Job Satisfaction
Control Condition (<i>N</i> =48)	3.48 (.83)	5.15 (1.50)	3.56 (.80)	5.25 (1.35)
\$50 Condition (<i>N</i> =41)	3.56 (.87)	5.37 (1.61)	3.51 (.95)	5.12 (1.35)
\$100 Condition (<i>N</i> =44)	3.52 (.70)	5.23 (1.29)	3.98 (.51)	5.55 (1.07)

Table 3. Change in sports and sales team performance between Time 1 and Time 2 as a function of condition (Experiment 2)

	Time 1		Time 2	
	Sports Teams	Sales Teams	Sports Teams	Sales Teams
	<i>Percentage of</i>	<i>Sales in Euros</i>	<i>Percentage of</i>	<i>Sales in</i>
	<i>Games Won</i>		<i>Games Won</i>	<i>Euros</i>
Personal Bonuses	50% (35%)	3928 (2366)	43% (44%)	3938 (2392)
Prosocial Bonuses	50% (55%)	3336 (2171)	81% (31%)	3525 (2279)