

RUNNING HEAD: Prosocial Incentives

Prosocial Incentives Increase Employee Satisfaction and Team Performance

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Abstract

Organizations depend on effective incentivization of employees to boost employee morale and improve performance. One common strategy is to offer monetary rewards (e.g., bonuses) that employees typically spend on themselves. Recent research suggests, however, that spending money on others has a greater positive emotional impact than spending on oneself; given that such prosocial behavior has been hypothesized to improve group functioning, we explore the impact of providing people with *prosocial incentives* – a novel type of bonus spent on others rather than on themselves. In Study 1, we show that prosocial incentives – in the form of donations to charity – lead to happier and more satisfied employees. In Study 2, we show that prosocial incentives – in the form of expenditures on teammates – lead to better performance in both sales teams and sports teams. These results suggest that simple adjustments to employee incentives can produce measurable benefits for both employees and organizations.

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 incentives, 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 and test in three field settings an alternative means of incentivizing employees – what we term “prosocial incentives” – in which organizations provide employees with opportunities to engage in prosocial actions towards charities and co-workers.

More traditional incentives, such as large bonuses, are often surprisingly ineffective in increasingly employee morale and productivity—and can even backfire (Ariely, Gneezy, Loewenstein, & Mazar, 2009; Oyer, 1998). These incentive schemes typically rely on the notion that human beings are narrowly concerned with their own self-interest, but research suggests that the desire to help others is a need deeply rooted in human nature (Warneken & Tomasello, 2006; Weinstein & Ryan, 2010), and that spending money on others produces greater happiness than spending money on oneself (Andreoni, 1990; Dunn, Aknin, & Norton, 2008). Based on evolutionary theorists’ hypothesis that prosocial behavior may have served as the glue that helped hold early human groups together, increasing the trust and cooperation necessary for groups to function well (Darwin, 1871/1982; Henrich & Henrich, 2006; Henrich et al., 2010), we predicted that providing employees with money to help others would have a greater organizational impact than providing employees with money to spend on themselves. Preliminary support for this hypothesis comes from research demonstrating that greater

organizational commitment is correlated with contributions to employee support programs (Grant, Dutton, & Rosso, 2008).

We examine whether randomly assigning employees to engage in prosocial behavior – via prosocial incentives – has a causal impact on employee well-being, job satisfaction, and actual job performance. In Study 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 Study 2, we move beyond assessment of psychological constructs, investigating the impact of prosocial incentives on team performance in two different contexts: sales and sports.

Study 1

Method

Participants. A total of 133 employees (59% female) at an Australian bank with a wide range of incomes, ages, and years at the company completed the study (Table 1).¹

Procedure. All employees received an email asking them to participate in a study 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 participants' 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 (Watson, Clark, & Tellegen, 1988); this single-item measure is correlated with the full scale (Dunn, Ashton-James, Hanson, & Aknin, 2010). 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*; Cammann, Fichman, Jenkins, & Klesh, 1983); single-item measures of job satisfaction correlate with longer assessments (Ironson, Smith, Brannick, Gibson, & Paul, 1989; Kunin, 1955; Wanous, Reichers, & Hudy, 1997).

Results and Discussion

Preliminary ANOVAs confirmed that there were no differences between conditions in Time 1 happiness, $F(2, 130) = .12, p > .85, \eta_p^2 = .02$, or job satisfaction, $F(2, 130) = .54, p > .77, \eta_p^2 = .004$.

Happiness. We entered experimental condition into an ANCOVA predicting Time 2 happiness, controlling for Time 1 happiness, and 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. 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).

Study 2

Study 1 revealed two kinds of psychological benefits that can accrue when companies provide employees with the opportunity to spend in prosocial incentives: employees who donated \$100 to charity reported increased happiness and job satisfaction. Do the benefits of prosocial incentives extend beyond employee well-being to improving actual performance – and the organizations' bottom line?

In Study 2, we investigated the effect of prosocial incentives on team performance, while widening our investigation in three ways. First, we sought to extend the time course of our experiment to examine the longer-term effects of prosocial incentives. Second, we wanted to explore the impact of a different form of prosocial incentives; to do so, we redirected generous spending from external charitable causes to co-workers and teammates within the organization. Third, Study 1 compared the effects of prosocial incentives to a control condition; in Study 2 we directly compared the impact of prosocial and personal incentives, 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. In both cases, teamwork is essential and it is the performance of the team as a whole – rather than its individual members – that matters from the perspective of the organization; therefore, our performance metrics were based on team-level rather than individual-level achievement.

Sales Teams Methods

Participants. Following an invitation from their Human Resources department, 88 salespersons (50% 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 study in exchange for a chance to win an iPod. Participants were assured that participation was voluntary and their responses would remain confidential.

Procedure. Prior to participation, employees provided demographic information through an online survey. Each team was then randomly assigned to the prosocial or personal incentives 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 incentives 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 incentives teams, participants who received money were instructed to spend it on a specified teammate (randomly selected from the remaining team members).

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. Following the standard indicator used by pharmaceutical companies, therefore, we used the monthly sales (in Euros) in the geographical region under the responsibility of each sales team as our measure of performance.

Sports Teams Methods

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

Procedure. Members of participating teams completed a demographics survey. Each team was randomly assigned to the personal or prosocial incentives condition, and approximately one-third of team members were given \$20 CDN to spend over the next week. Participants in the personal incentives condition were instructed to spend the money on a bill, expense, or gift for themselves, while participants in the prosocial incentives condition were instructed to spend the money on a randomly selected teammate.

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 recreation league.

Results and Discussion

Analytic strategy. Because we investigated the effect of prosocial incentives on team-level performance in two different contexts (sales and sports) with a limited number of teams, we standardized performance scores from sales and sport teams and analyzed the data jointly to test whether prosocial incentives teams outperformed personal incentives teams.

Spending condition and team performance. To confirm that there were no significant differences in performance initially, we entered condition, team type, and their interaction into an ANOVA predicting Time 1 performance; this analysis revealed no significant effects, $F_s < 1$. As in Study 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 incentives teams performed significantly better than personal incentives teams, $F(1, 20) = 4.34, p = .05, \eta_p^2 = .18$ (Table 3). The interaction between team type and condition was marginally significant, $F(1, 20) = 3.84, p = .06, \eta_p^2 = .16$, indicating that prosocial incentives were especially effective for sales teams. That is, in the prosocial incentives 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 marginal increase, $t(5) = 1.87, p = .12, d = .76$. Meanwhile, in the personal incentives condition, there was no performance improvement for 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 incentives. On sales teams, for every 10€ given to a team member to spend on herself, the firm gets just 3€ back – a net loss – whereas for every 10€ given to a team member to spend on the team, the firm gets back a remarkable 52€.

Similarly for sports teams, every \$10 spent on oneself led to a 2% *decrease* in winning percentage, whereas \$10 spent prosocially led to an 11% *increase* in winning percentage.

General Discussion

We examined the evolutionary hypothesis that prosocial behavior improves group functioning (Darwin, 1871/1982; Henrich et al., 2010) in a modern context, exploring the causal impact of increasing prosocial behavior via the provision of prosocial incentives to employees at an Australian bank, members of dodgeball 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 benefit, with increased happiness and job satisfaction, and even improved team performance. Specifically, in Study 1, employees who had the opportunity to make a substantial donation to charity (\$100) on behalf of their company reported enhanced happiness and job satisfaction. In Study 2, we extended these findings to team performance, 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 incentives can benefit both individuals and teams, on both psychological and “bottom line” indicators, in both the short and long-term.

Interestingly, \$50 AUS (roughly \$25 USD) was not sufficient to increase employee satisfaction in Study 1, whereas \$20 USD was sufficient to increase team performance in Study 2. We suggest that this difference is likely due to the different form that prosocial incentives took in the two studies. Recent research suggests that face-to-face giving has a larger impact on people’s happiness than giving at a distance: the closer the link between giver and receiver, the bigger the benefits (Aknin, Dunn, Sandstrom, & Norton, 2010). As a result, it is not surprising

that the same amount of money (~\$20 USD) goes further in Study 2 than in Study 1, given the social nature of the team expenditure compared to the relatively impersonal donation to charity.

We close by noting that recent surveys indicate that employee job satisfaction is at a twenty-year low in the United States (Conference Board, 2010) – perhaps because over the same time frame, Americans have come to spend more and more of their time at work 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 (Schor, 1991). We suggest that rather than force employees to make a losing tradeoff between social life and work life, employers can co-opt this tradeoff and focus instead on using prosocial incentives to create a more altruistic, satisfying, and efficient workplace.

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Footnote

1. An additional 46 employees completed only the Time 1 survey. They 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 ($ts < 1.13$, $ps > .26$).

Table 1. Employee characteristics (Study 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 (Study 1)

	Time 1		Time 2	
	Happiness	Job Satisfaction	Happiness	Job Satisfaction
Control Condition	3.48 (.83)	5.15 (1.50)	3.56 (.80)	5.25 (1.35)
\$50 Condition	3.56 (.87)	5.37 (1.61)	3.51 (.95)	5.12 (1.35)
\$100 Condition	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 incentive (Study 2)

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