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Simultaneous evaluation of pro-self and prosocial bonus schemes: Implications for newer management policies towards social betterment

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Abstract

Prosocial bonuses are incentive schemes where people get bonus money to spend on social causes or colleagues that can potentially improve functioning and satisfaction. It is not yet clear how people would evaluate and choose when simultaneously pro-self and prosocial options are posed. We presented three alternatives simultaneously for a bonus that could be spent on oneself or colleagues or poor people. Two studies measured predicted satisfaction for these alternative ways of spending the bonus and a third study examined whether people would indeed opt to spend a real monetary bonus prosocially when a pro-self option is available. Results provided converging evidences in support of prosocial bonuses if it is spent on poor people but not on colleagues.

Keywords: prosocial bonus, satisfaction, incentive, social betterment

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Simultaneous Evaluation of Pro-Self and Prosocial Bonus Schemes: Implications for Newer Management Policies towards Social Betterment

1. Introduction

Imagine you are a manager of a corporation with two important issues bothering you day and night. On one hand, you find large scale poverty and malnutrition across countries appalling. On the other hand, with rising attrition and lowering of work satisfaction, you also have the daunting task of increasing employee satisfaction which will possibly translate into higher throughput and more profits. You might wonder.. ‘is it indeed possible to contribute towards social causes but also make employees happy’?

One would want employees to be aptly rewarded for project completions and enhance their overall satisfaction at work by providing employee bonuses. There are multiple options when it comes to monetary bonus schemes. The traditional practice is a ‘pro-self bonus’ where the employee is simply given additional money apart from the salary. However some new research (Dunn, Aknin & Norton, 2008) that are often highlighted in the popular media¹ says that when people spend money on others, not themselves; they are happier.

A ‘prosocial bonus’ is an additional monetary bonus which people need to spend on others (Anik, Aknin, Norton, Dunn & Quoidbach, 2013). Interestingly, when one is given money to spend on other people – a prosocial bonus, it makes them happier which can also increase workplace satisfaction and performance (Anik et al., 2013). What would be the best employee incentive policy that you would choose? Would you choose a prosocial or a pro-self bonus? It is important to first examine preferences among management professionals in order to design newer policies that promote growth, both for the company and the society. More importantly, when both pro-self and prosocial bonus options are simultaneously available, what would be people’s attitudes and choices?

Gifting money to employees as a bonus might be the norm but money need not always be the best incentive for motivating employees even though it has some positive consequences (for

¹ For example, <http://tierneylab.blogs.nytimes.com/2008/03/20/yes-money-can-buy-happiness/>

a review, see Mukherjee, Manjaly & Kumar, in press). There however seems to be an intrinsic paradox between happiness and prosocial behavior (“hedonistic paradox”; Konow & Earley, 2008). Although the ‘*homo economicus*’ intends to find happiness in oneself and in one’s own wealth; one would actually find more happiness by spending money on others (Dunn et al., 2008). The proposed alternative to a pro-self bonus is to give a ‘prosocial bonus’ that they can spend on others (Anik et al., 2013). Even thinking back about a time when one had spent money on someone else makes the person feel happier at present, compared to those who think about times when money was spent on the self (Aknin, Dunn & Norton, 2012). When a group of retired senior citizens volunteered for giving free massage to infants, it resulted in reduced stress-related hormone and reduced anxiety among the elderly (Field, Hernandez-Reif, Quintino, Schanberg, and Kuhn, 1998) which showed that there are long-term health benefits associated with prosocial involvement.

There is some indication that the link between charitable giving and happiness is universal. Initial results from North America (Dunn et al., 2008) showed that prosocial spending is associated with greater happiness and it was conceptually replicable across 136 countries including developing ones like India and underdeveloped resource-scarce countries like Uganda (Aknin et al., 2013). At a fundamental physiological level, work in neuroscience have shown that when participants in USA donated money to a charity, the brain areas associated with processing rewards (mesolimbic reward system) is engaged in the same way as when participants gained money for themselves (Moll et al., 2006). Continuing in similar lines, Harbaugh, Mayr, and Burghart (2007) have shown that the brain areas (like medial orbitofrontal cortex and striatum) that are activated for generic rewards like receiving money or chocolates were also activated when people in North America were asked to donate money for charity. Moreover, when the giving was voluntary, the reward centers in the brain showed greater activity compared to involuntary donations (as through tax deductions), which was taken to mean that voluntary donations for charity are intrinsically rewarding and is associated with positive emotions. Overall, prosocial spending seems to be increasing happiness which in-turn increases further prosocial spending (Aknin et al., 2012).

Eradicating poverty and malnutrition is one of the fundamental goals of any government. The crucial social policy question is: Can this positive loop between prosocial giving and

satisfaction be harnessed by businesses so that we can achieve a double benefit? If we can increase employee satisfaction while at the same time also contribute towards a social cause (or a common pool resource), then that would have a large benefit for the society and for managements in organizations. Some data from western countries (Anik et al., 2013) suggests that prosocial bonuses can indeed increase employee satisfaction and workplace performance. In one experiment on employees of an Australian bank, Anik et al. (2013) found that when employees were given a bonus amount of \$50 which they could donate to a charity of their choice, it increased happiness and job satisfaction compared to those who were either not given any bonus or given a small amount (\$25). In another experiment, these authors approached sales teams in a Belgium pharmaceutical company and asked one group to spend a bonus of \$22 either on themselves or on their team mates. The overall team performance was improved when money was spent on colleagues compared to money spent on the self possibly because of larger social bonding and cohesion. These interesting findings lay the ground for prosocial bonuses in employee incentive policies.

The alternative prosocial policy schemes that promote spending on others might enhance both businesses and the society but, it remains to be understood whether managers from more resource scarce countries (like developing or under-developed countries) would actually opt for such schemes when given the options to choose. Note that in previous research, there was no choice given to people. There could be important differences in the way simultaneous options are evaluated compared to evaluating options in isolation. Moreover, prosocial spending can have a large variety as positive feelings arising out of giving money for others crucially depends on who is the benefactor (Aknin, Sandstrom, Dunn & Norton, 2011).

All kinds of prosocial spending need not give happiness. We can recollect times from our own life when volunteering or donating did not make us happier and indeed academic research also confirms the same (Berman & Small, 2012). So, it is important to delineate conditions under which prosocial spending would result in more positive emotions. Some researchers have suggested that prosocial spending likely produces happiness or satisfaction when it satisfies the basic human needs of relatedness, competence and autonomy (Dunn, Aknin & Norton, 2014). Relatedness implies that one deserves more happiness when the spending is on those who are socially closer and connected. Competence means that the spending makes a genuine difference

to another person's life. Autonomy is a condition that is satisfied when the donation is made voluntarily, that likely makes one more satisfied than a forced donation (Harbaugh et al., 2007).

Spending on one's colleagues satisfies the relatedness condition more crucially than spending on unknown poor people. Colleagues are spatially closer because they share common workplace environments but they need not be psychologically connected. However, donating to poor people should highlight competence as spending 100 rupees (approximately \$2) on a starving child on the road has much larger utility than spending it on one's colleague working in a multi-national company. We were interested to find which condition – connectedness or competence would be more valued.

Importantly, while previous studies (Anik et al., 2013) compared different bonus schemes independently between participants; in our study, we asked them to evaluate these three options simultaneously to be able to clearly weigh each policy against the other.

2. Overview of the studies

When given different incentive schemes, would one choose to accept a prosocial scheme or a pro-self one? Would the preferences remain the same for different stakes of money and for different recipients? Do managers and employees think differently? When given actual cash in hand, what would be their preferred option?

These important questions need to be addressed where employee incentive schemes are simultaneously compared so that some ground is laid for possible adoption of newer policies which is socially beneficial. Further, as there are hardly any studies from non-western countries on these issues, we think that the present study can provide preliminary evidence on actual preferences people have before we debate the viability of policies like prosocial bonuses.

We measured predicted satisfaction and actual choices arising from spending the bonus money on oneself (pro-self bonus) compared to spending the money on colleagues and poor people (prosocial bonuses). Study 1 compared satisfaction among graduating students when one is given a low sum (100 rupees; approximately \$2) or a high sum (10,000 rupees; approximately \$200) that can be spent on the self, on their colleagues or on poor children. Study 2 was performed on people who have significant working experience. They were either asked to think

as managers or as employees of a large multi-national firm and both groups had to choose between the different bonus policies (spend bonus on themselves, their colleagues or on poor people). Study 3 examined when people are given bonus money in hand that they can opt to spend on themselves, colleagues or poor people, what does one do?

3. Study 1

Participants

Eighty-seven graduating students (age range: 20-30 years) from a large business school in Asia participated in the study. They were completing the two year post graduate programme in management and looking forward to management positions within a year. This group of participants was apt to find whether a monetary bonus meant to spend on others is acceptable. Further, even though a common understanding is that according to naïve intuition, spending money on self makes one more satisfied; we intended to test whether trained would-be managers hold a similar idea or they could predict that prosocial spending would also make one satisfied. Participants were individually sent a web link that took them to a survey which was purported to measure social preferences in people. All responses were anonymous to reduce any socially desirable responding.

Method

They were told that the researchers would be randomly selecting some people (among those who complete the survey) to receive a monetary bonus which could be spent in three ways: (a) on themselves, (b) on their colleagues with whom they work and (c) on poor hungry children living on the streets. Their task was to rate how satisfied they would feel if they spent the money in all those three ways on a scale of 1 (= not at all) to 100 (very satisfied). One group of participants (*no. of participants* = 51) was told that the monetary bonus will be 100 rupees (about \$2) while another group of participants (*no. of participants* = 36) were told the bonus to be given is 10,000 rupees (about \$200 according to current transaction rates). This was done to find whether large and small bonuses have similar or opposing effects. Later, they answered some demographic questions like age, gender and family income.

Results

Interestingly, we found that participants predicted comparable satisfaction derived from prosocial spending on poor children and spending on oneself, but satisfaction ratings for spending on colleagues were significantly lower. Even more counter-intuitively, the similarity in satisfaction from spending money on self and poor children was similar for both low (100 rupees) and high (10,000 rupees) amounts of money (figure 1).

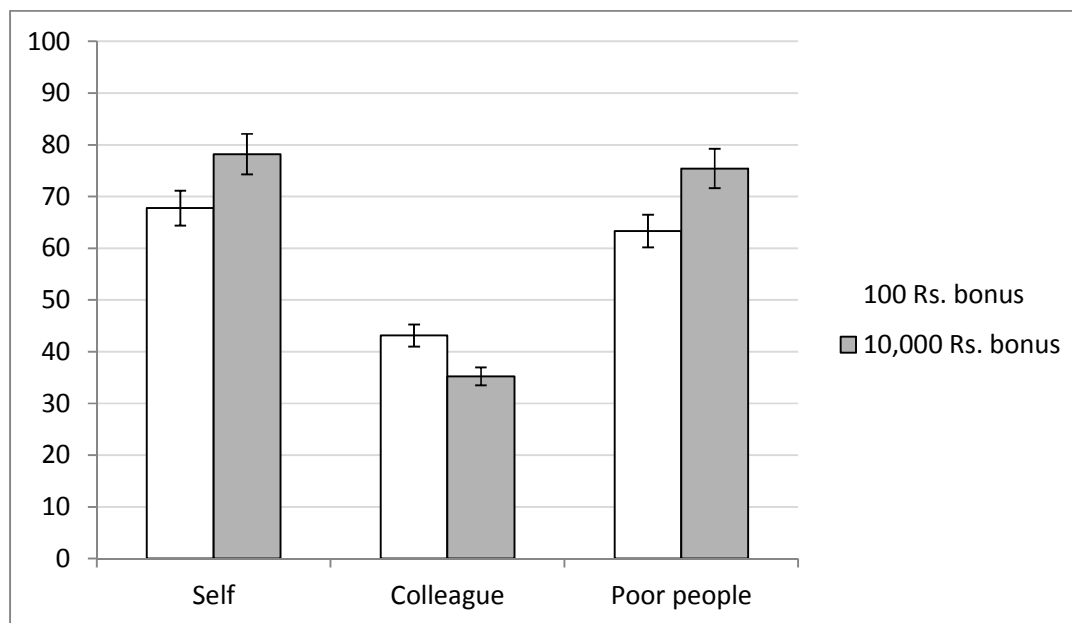


Figure 1

A repeated measures Analysis Of Variance (ANOVA) with recipient (self, colleague, poor people) as a within subject factor and amount of money (10 and 10,000) as a between-subject factor taking income as a co-variate, showed a significant effect of recipient, $F(2, 168) = 8.38$, $p < .01$, $\eta^2 = .09$. Post-hoc pair wise comparisons showed that predicted satisfaction from spending on the self and spending on poor children was not statistically different, (mean difference = 3.61, $p = .36$). Satisfaction from spending on colleague was significantly lower from spending on the self (mean difference = -33.64, $p < .01$) and spending on poor people (mean difference = -30.03, $p < .01$). There was no main effect of bonus amount ($p > .2$) or income ($p > .4$). We however found a significant interaction between recipient and amount of money, $F(2, 168) = 4.12$, $p = .01$, $\eta^2 = .04$. Satisfaction ratings were higher for both self and poor children for a

higher amount of money compared to a lower amount. For spending on colleagues, satisfaction was lower for a larger amount which clearly showed that people did not want to spend larger amounts on colleagues. Counter to some previous reports (Dunn et al., 2014), participants did not hold intuitions that spending on the self is only rewarding. In fact, they rated satisfactions from spending money on themselves and on poor children similarly. These results are promising from the perspective of introducing prosocial bonus schemes as people predict satisfaction from spending on poor as high as spending on themselves.

4. Study 2

We were interested in finding preferences of people who had held management positions and had experience of employee incentive schemes to be able to validate our previous findings.

Participants

Fifty-one adults (age range = 28 to 42 years) with significant working experience (mean work experience = 10 years, minimum = 8 years, maximum = 20 years) in a variety of sectors (like information technology, finance, government, media etc.) participated voluntarily in this study. They were enrolled in the post graduate program for executives programme at a large business school in Asia.

Method

Role was manipulated between participants. About half of the participants were asked to think as a manager (*no. of participants* = 25) while the other half was asked to think as an employee (*no. of participants* = 26). Both the groups of participants were told to evaluate three possible employee incentive schemes (presented randomly across participants) where employees are given 5000 rupees which they can spend on (a) himself/herself, (b) his/her colleague and (c) a poor child on the streets. First, they were asked to decide which option they would themselves choose. Then we asked them to indicate on a 100-point scale (1 = not at all, 100 = very satisfied) how satisfied they thought the employees would be for each of the three incentive policies. Following the satisfaction ratings, all participants were asked to rate on a 5-point scale (1 = significantly decrease, 2 = slightly decrease, 3 = No change, 4 = slightly increase, 5 = significantly increase), how much the on-job performance of employees could increase or

decrease due to the three different incentive schemes (see Akin et al., 2013). Finally, some demographic questions (including monthly income) were asked.

Results

Choosing a policy:

Among those who were asked to think as managers ($n = 25$), 68% (17 out of 25) opted for a policy that enables them to spend the money on themselves, 4% (1 out of 25) opted for spending the money on colleagues and 28% (7 out of 25) chose a policy for spending the money on poor people; yielding a significant difference in choice for the different policies, $\chi^2(2) = 15.68$, $p < .01$.

For those who were allotted the role of an employee ($n = 26$), 57.69% (15 out of 26) opted to spend the money on themselves, 3.84% (1 out of 26) opted to spend on colleagues and 38.46% (10 out of 26) opted to spend on poor people; which again yielded a significant difference in choosing the different policies, $\chi^2(2) = 11.61$, $p < .01$.

These results show that when asked to actually choose between the different policies a significant proportion of participants actually do choose a prosocial bonus that is towards helping poor people (although a larger proportion wanted a pro-self bonus policy).

Predicted satisfaction ratings:

A repeated measures ANOVA was performed on satisfaction predictions with recipient (self, colleague, poor people) as a within subject factor and role (manager and employee) as a between-subject variable with income as a co-variate. It was found that there was a significant main effect of recipient, $F(2, 96) = 6.86$, $p < .01$, $\eta^2 = .12$. Post-hoc tests showed that compared to spending the money on colleagues, satisfaction predicted from spending the money on oneself (mean difference = -35.06, $p < .01$) or on poor people (mean difference = -20.72, $p < .01$) are significantly higher (figure 2). Neither was there any main effect of role or income, nor any interaction between either recipient and role or recipient and income.

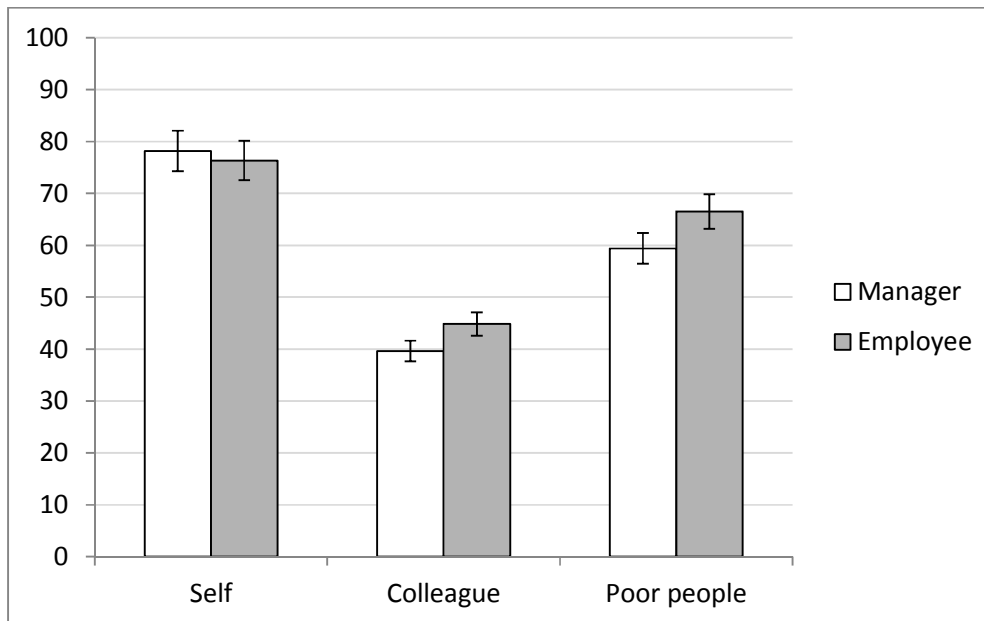


Figure 2

Predicted change in job performance:

A repeated measures ANOVA on predictions of job performance with role (manager/employee) as a between-subject condition and recipient (self, colleague, poor people) as a within subject factor along with income as a co-variate showed a significant effect of recipient, $F(2, 96) = 10.91, p < .01, \eta^2 = .18$. Post-hoc tests showed that spending money on the self was predicted to result in increased job performance compared to spending money on colleagues (mean difference = 1.05, $p < .01$) or poor children (mean difference = .41, $p = .01$). Interestingly, for our discussions, spending money on poor children was predicted to increase job performance more compared to spending money on colleagues (mean difference = .64, $p < .01$) but previous findings in western countries (Aknin et al., 2013) have found that when a bonus is spent on colleagues, it increases work performance of the team. There were no observed main effects of income or of role allotment ($ps > .1$). No interaction was observed between role and recipient showing that the predictions were similar by both the groups allotted to different roles of employees and managers.

5. Study 3

The previous studies showed that people predict a relatively high level of satisfaction from spending on poor people (almost close to how they would feel when spending on themselves). However, these were predictions of how satisfied people thought they would feel if they were to have the choice of spending the money, but they were not given real money. This study was intended to examine people's behavior and feelings when they are actually given a monetary bonus that they can decide how to spend in one of three ways – on themselves or colleagues or on poor people. We predicted that giving people a choice to be pro-social would be more influential as autonomous or volitional prosocial acts are more effective (Harbaugh et al., 2007; Weinstein & Ryan, 2010).

Participants

Seventy-eight naïve adults (age range = 19 to 36 years) participated voluntarily in this study. The experiment was run on two groups of adults studying in two different institutions in India to increase external validity. All of them were students studying with their fellow colleagues for a year.

Method

Participants were presented with an envelope that had a cash of 100 INR and a questionnaire which stated that there is a bonus sum of money which they can decide how they would like to spend. There were three ways to spend it – (a) on themselves, (b) on one of their colleague who would be randomly chosen by us and (c) on a poor child in the city through a local NGO. After indicating their choice, they had to fold the form and put it back in the envelope. If they wanted to spend the money on colleagues or poor people, they were instructed to put the money back in the envelope and if they wanted to spend the money on themselves, we asked them to take the money with them but still return the envelope with the questionnaire. Then they stated how satisfied they felt about their choice (1 = not at all satisfied, 100 = very satisfied) and how they were feeling (1=very unhappy, 7 = very happy). To avoid any effects from peer influence, after filling up the questionnaire, the respondents took the questionnaire with the envelope into a separate room where they dropped the envelope in a bag (with or without the money) without anyone else being present in the room.

Results

Choosing how to spend the money:

Out of 78 participants, 13 (16.67%) opted to spend the money on themselves, 3 (3.85%) wanted to spend on colleagues and 62 (79.48%) preferred the money be spent on the poor, resulting in a significant difference between ways of spending the bonus, $\chi^2(2) = 76.69, p < .001$. All those who chose the bonus be spent on colleagues or on poor people had left the money inside the envelope. Hence, only 16.67% chose a pro-self option while the remaining chose a pro-social option. Between spending on colleagues or poor people, a much larger portion of people wanted the money be spent on poor people. From a rational purely economic perspective, one would believe that when given bonus money, most people should take it and spend on themselves but clearly it was not the case.

Satisfaction and feelings after the choice:

A one-way ANOVA on satisfaction found a significant difference between the three groups of people who opted to spend on themselves, colleagues or poor people, $F(2, 75) = 4.10, p = .02, \eta^2 = .09$. Planned post-hoc tests showed that spending on the self (pro-self bonus) resulted in significantly lower satisfaction compared to spending on poor people (mean difference = -13.91, 95%CI [-25.96, -1.86]), $p = .01$. There was no significant difference ($p > .77$) between spending on oneself or on colleagues.

For rating on feelings, the pattern was similar with pro-self spenders (mean = 5.15, SD = 1.51) reporting lesser happiness compared to those who opted to spend on colleagues (mean = 5.66, SD = 1.52) or on poor people (mean = 5.87, SD = .96) but the results did not reach conventional significance, $F(2, 75) = 2.32, p = .17, \eta^2 = .05$.

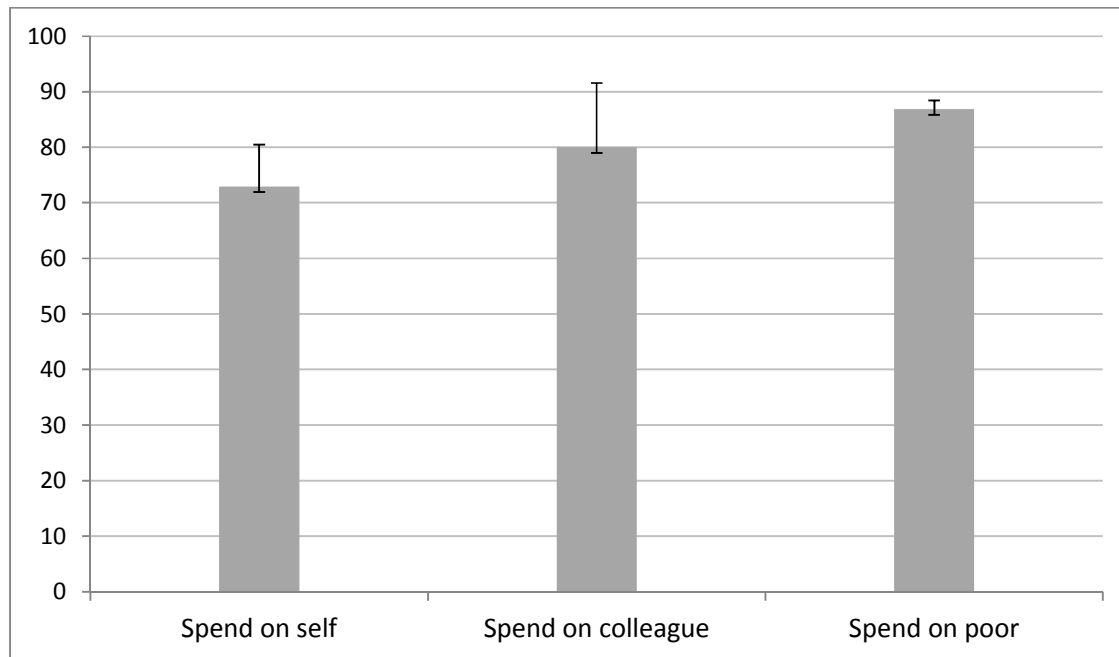


Figure 3

These results fit with our earlier studies by showing that even when real money is given, a significant majority of people opt to spend on poor people and also derive more satisfaction from doing so. Infact, people were more satisfied when they opted the money be spent on the poor compared to taking the bonus to spend on themselves.

5. General Discussion

One of the important questions addressed in this paper was how do people evaluate different bonus schemes, especially when both pro-self and prosocial options are available. Previous work on prosocial bonuses had presented pro-self and prosocial bonuses to different groups of people (Anik et al., 2013). But, to examine how viable it is as a proposed policy, one needs to examine how people evaluate prosocial bonuses relative to pro-self ones. Three related questions were studied. Firstly, a common question in all the studies was how the three alternatives of spending a bonus on the self, colleagues or poor people are weighed by people. Secondly, what are people's predictions about satisfaction (study 1 and 2) from spending prosocially and on oneself? Thirdly, when both options are available (study 3), how do people behave?

Study 1 with aspiring managers showed that people expect comparable satisfaction from spending money on poor people and spending on oneself, but spending on colleagues was predicted to reduce satisfaction. Study 2 was done with management professionals where we found that both when they think as managers or as employees, a prosocial bonus for spending on poor people was expected to make employees as satisfied as a bonus intended to be spent on themselves. Again, satisfaction from spending on colleagues was predicted to have relatively lesser satisfaction. A salient point is that this relationship was true irrespective of monetary amounts. Moreover, the pattern was similar across job experience and roles adopted to think about such employee policies. Even income did not interact with this pattern of results thus showing that these preferences are quite stable. Overall, these results suggest that even though most people would intuitively believe that when given an option, almost everybody would be satisfied with a bonus to spend on oneself (Dunn et al., 2014), we find that it need not be so. Study 3 showed that if people are given an opportunity to voluntarily indulge in prosocial spending, then a large majority would indeed opt for a bonus that is spent on poor and also derive personal satisfaction from doing so. This could in part be because providing a choice to spend prosocially or selfishly increase autonomous self motivation (Harbaugh et al., 2007; Weinstein & Ryan, 2010) to help and that in turn guides behavior in a prosocial orientation. As mostly the gains for a poor child is far higher for a small amount of money compared to colleagues who are well off, most people perhaps opted to spend on the poor which in a way showed that among the two conditions of competence and connectedness which is guide prosocial actions, clearly competence was given more importance.

One of the larger aims of this research intended to verify the practical viability of prosocial bonuses. Our results along with some previous findings (Anik et al., 2013) provide some support for a new incentive policy that gives monetary bonuses which the employees need to spend on others – specifically on poor people. This is a welcoming result as it shows introduction of prosocial bonuses to be a viable policy.

These studies however are not without limitations which need to be addressed by future research. We need to test whether there are both short-term and long-term benefits. Further, bonuses could either be conditional and contingent on performance or unconditional. Whether prosocial bonuses have positive influences both for conditional and unconditional criteria is not

yet clear. Finally, our data is from one of the premier institutions from Asia where most participants were economically stable. Even though we controlled for the effect of income in our studies, it is possible that for employees from lower income ranges or smaller companies may not prefer prosocial bonuses. Prosocial bonuses hence need to be conceptualized as an additional bonus apart from the salary (Anik et al., 2013) that might enhance employee's satisfaction and also contribute towards pressing social issues.

Multiple social problems can in part be addressed by the corporate establishments. For example, in developing countries like India, malnutrition is high with more than 40% of children being severely to moderately underweight according to the UNICEF². Across the world, nations suffer crisis in sustaining food for all. Hence, if it would indeed be possible to address the needs of improving lives of poor people while at the same time, we could also enhance employee satisfaction; then that would be a very effective policy. Prosocial bonus policies could have three benefits. Firstly, it would satisfy the requirement in form of social obligations and social marketing that require companies to spend on social issues. Secondly, if such bonuses make employees satisfied, then these policies can potentially translate to higher employee performance and lower attrition. Thirdly, more importantly, it would partially mitigate the large social problems of hunger, education and healthcare so that we can move towards social betterment. Finally, having influence over others serve important needs like feelings of belongingness, control and meaningful existence (Bourgeois, Sommer & Bruno, 2009). Policies targeted toward increasing social influences for the needy could potentially have large consequences across countries.

² See http://www.unicef.org/india/children_2356.htm for details.

References

- Aknin, L. B., Dunn, E. W., & Norton, M. I. (2012). Happiness runs in a circular motion: Evidence for a positive feedback loop between prosocial spending and happiness. *Journal of Happiness Studies*, 13(2), 347-355.
- Aknin, L. B., Sandstrom, G. M., Dunn, E. W., & Norton, M. I. (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(2), e17018.
- Aknin et al. (2013). Prosocial spending and well-being: Cross-cultural evidence for a psychological universal. *Journal of Personality and Social Psychology*, 104(4), 635-652.
- Anik, L., Aknin, L. B., Norton, M. I., Dunn, E. W., Quoidbach, J. (2013) Prosocial Bonuses Increase Employee Satisfaction and Team Performance. *PLoS ONE* 8(9): e75509.
- Berman, J. Z., & Small, D. A. (2012). Self-interest without selfishness: The hedonic benefit of imposed self-interest. *Psychological Science*, 23(10), 1193-1199.
- Bourgeois, M. J., Sommer, K. L., & Bruno, S. (2009). What do we get out of influencing others? *Social Influence*, 4(2), 96-121.
- Dunn, E. W., Aknin, L. B., & Norton, M. I. (2008). Spending money on others promotes happiness. *Science*, 319(5870), 1687-1688.
- Dunn, E. W., Aknin, L. B., & Norton, M. I. (2014). Prosocial Spending and Happiness: Using Money to Benefit Others Pays Off. *Current Directions in Psychological Science*, 23(1), 41-47.
- Field, T. M., Hernandez-Reif, M., Quintino, O., Schanberg, S., & Kuhn, C. (1998). Elder retired volunteers benefit from giving massage therapy to infants. *Journal of Applied Gerontology*, 17(2), 229-239.
- Harbaugh, W. T., Mayr, U., and Burghart, D. R. (2007). Neural responses to taxation and voluntary giving reveal motives for charitable donations. *Science* 316(5831), 1622–1625.

- Konow, J., & Earley, J. (2008). The Hedonistic Paradox: Is *homo economicus* happier?. *Journal of Public Economics*, 92(1), 1-33.
- Moll, J., Krueger, F., Zahn, R., Pardini, M., de Oliveira-Souza, R., & Grafman, J. (2006). Human fronto–mesolimbic networks guide decisions about charitable donation. *Proceedings of the National Academy of Sciences*, 103(42), 15623-15628.
- Mukherjee, S., Manjaly, J. A., & Kumar, N. (in press). Role of money in creative cognition. In J. A Manjaly & B. Indurkha (Eds.) *Cognition, Experience & Creativity*. New Delhi: Orient Blackswan.
- Weinstein, N., & Ryan, R. M. (2010). When helping helps: autonomous motivation for prosocial behavior and its influence on well-being for the helper and recipient. *Journal of personality and social psychology*, 98(2), 222-244.