

RUNNING HEAD: Giving Time Gives You Time

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Cassie Mogilner

The Wharton School, University of Pennsylvania

Zoe Chance

Yale School of Management

Michael I. Norton

Harvard Business School

In Press, Psychological Science

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Abstract

Four experiments reveal a counterintuitive solution to the common problem of feeling that one does not have enough time: giving some of it away. Although people's objective amount of time cannot be increased (there are only 24 hours in a day), this research demonstrates that people's subjective sense of time affluence can be increased: compared with wasting time, spending time on oneself, and even gaining a windfall of "free" time, spending time on others increases feelings of time affluence. The impact of giving time on feelings of time affluence is driven by a boosted sense of self-efficacy – such that giving time makes people more willing to commit to future engagements despite their busy schedules.

Despite medical advances that have lengthened the human lifespan and technological innovations that have automated many chores, Americans report feeling more time-constrained than ever (Carroll, 2008; Robinson & Godbey, 1999). Many, in fact, perceive themselves as victims of a “time famine” – having too much to do and not enough time to do it (DeVoe & Pfeffer, 2011; Perlow, 1999). With waking hours largely consumed by work, precious minutes remain for the daily list of to-dos, including exercise, cleaning, and socializing with friends and family (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004). Not surprisingly, some 85% of parents wish for more time with their children (Bianchi, Robinson, & Milkie, 2006), and twice as many Americans would prefer two weeks of vacation over two weeks of extra pay (Honoré, 2004). Most relevant to the present investigation, people’s sense that time is scarce decreases their tendency to give time to others. Darley and Batson (1973) showed that seminary students late to discuss the parable of the Good Samaritan hurried past a suffering confederate. Similarly, Levine (1998) found pace-of-life to negatively predict prosocial behavior in cities around the world, with the chronically time-constrained inhabitants of places like New York being least likely to spend time helping strangers.

We propose, however, that helping others can actually increase feelings of time affluence and alleviate people’s perceived time famine – despite the fact that giving time necessarily consumes more of one’s objective time. Why would giving time mitigate one’s experienced temporal scarcity? Previous research shows that spending time on others makes people feel highly effective and capable (Grant & Gino, 2010; Gray, 2010; Omoto & Snyder, 1995), and that the same duration of time is perceived as longer when more has been accomplished – when it is “fuller” (Block, 1974; Ornstein, 1969; Zauberman, Levav, Diehl, & Bhargave, 2010). Taken together, this research suggests that because helping increases feelings of self-efficacy, time

spent helping others should seem more accomplished and full. In short, we propose that spending time on others makes people feel like they have done a lot with their time – and the more they feel they have done with their time, the more time they will feel they have.

Four experiments test our hypothesis that spending time on others increases individuals' perceived time, both in terms of the amount of spare time they currently have (Kasser & Sheldon, 2002; Zauberman & Lynch, 2005) as well as the expansiveness of their future (Lang & Carstensen, 2002). We compare the impact of giving time to activities that could also affect time affluence – wasting time (Experiment 1A), spending time on oneself (Experiments 1B and 3), and getting time (Experiment 2) – and test for the underlying role of self-efficacy (Experiment 3).

Experiment 1A: Giving Time versus Wasting Time

We first compared the impact of giving time to that of wasting time – another behavior that signals time affluence (“If I have enough time to fritter away, I must have a lot of time”) but which our account suggests will not increase time affluence because it is not accompanied by feelings of self-efficacy. We predicted that giving time to others would lead to greater feelings of having time than wasting time – even when the same objective amount of time was spent on both activities.

Method

Fifty-five minutes into a one-hour laboratory session at an East Coast university, participants ($N = 218$; $M_{age} = 20.7$; 58% female) were randomly assigned to one of two five-minute tasks in which they either gave their time or wasted it. Participants in the giving time condition wrote an encouraging note (which was subsequently mailed) to a gravely ill child. Participants in the wasting time condition were instead asked to complete a “filler task” that

required counting “e’s” in multiple pages of Latin text. After spending five minutes on their respective tasks, participants reported their perceptions of time by indicating their agreement to four items from Lang and Carstensen’s (2002) Future Time Perspective scale (e.g., “My future seems infinite to me,” 1 = *very true*; 7 = *very untrue*).

Results and Discussion

Participants who gave time by writing to a sick child subsequently felt like they had more time ($M = 4.91$, $SD = 1.02$) than those who wasted time ($M = 4.64$, $SD = 1.01$; $F(1, 217) = 3.93$, $p < .05$, $\eta_p^2 = .02$). Although both giving time and wasting time signal that one has an abundance of time, only giving time led participants to perceive their time as more abundant.

Experiment 1B: Spending Time on Others versus the Self

To address the possibility that wasting time in Experiment 1A diminished perceived time affluence due to the unpleasantness of counting “e’s”, Experiment 1B compared the impact of giving time with a more pleasant task: spending time on oneself. Just as wasting time can signal that one has abundant time, so too can spending time indulging oneself: “If I have enough time for ‘me’ time, I must have a lot of time.” Mirroring Experiment 1A, we predicted that spending time on others would lead to greater feelings of time affluence than spending time on oneself. Additionally, we moved from the laboratory to the field by encouraging participants to spend time on the people in their lives, while examining whether the impact of giving time depended on the amount of time spent.

Method

Participants recruited through an online pool ($N = 150$; $M_{age} = 39.9$; 74% female) were randomly assigned to one condition of a 2 (Time Recipient: Self vs. Other) x 2 (Time Amount: 10 minutes vs. 30 minutes) between-subjects design. On a Saturday morning, participants were

emailed instructions to “spend 10 [30] minutes doing something for yourself [someone else] that you weren’t already planning to do today.” At the end of the day, participants reported their perceptions of time using the items from Experiment 1A.

Results and Discussion

A 2 (Recipient) x 2 (Amount) ANOVA on participants’ time perceptions revealed the predicted main effect of recipient ($F(1, 149) = 5.30, p = .02, \eta_p^2 = .04$), but no main effect for duration, and no interaction ($ps > .10$). These results suggest that, regardless of whether participants spent 10 or 30 minutes, spending time on another seemingly expanded the future ($M = 4.24, SD = 1.27$) relative to spending time on oneself ($M = 3.77, SD = 1.24$). Consistent with research on the benefits of spending money on others (Dunn, Aknin, & Norton, 2008), the *amount* of the resource spent mattered less than whether it was spent on oneself or others.

 Insert Figure 1 about here

Experiment 2: Giving Time versus Getting Time, and Future Commitments

Experiment 2 had three primary aims. First, we tested the impact of giving time on feelings of time affluence against an even stricter standard: actually receiving an unexpected “windfall” of free time. In a laboratory session, some participants were assigned to give time to others, while a control group was allowed to leave the session early. Although receiving a windfall of free time objectively increases one’s time available to do other things, we predicted that giving time would lead to greater perceptions of time affluence than getting time. Second, we introduced a new measure of time affluence, measuring the amount of time individuals felt they *currently* had (rather than the amount of time they felt they had in their future). Finally, our account posits that giving time makes people feel efficacious – like they can get more done.

Therefore, we also included behavioral measures reflective of feeling both less time-constrained and more capable: committing oneself to future engagements, and following through on those time commitments.

Method

Forty-five minutes into a one-hour laboratory session at an East Coast university, participants ($N = 136$; $M_{age} = 20.8$; 58% female) were informed that their final task would involve spending 15 minutes helping an at-risk student from a local public high school by editing his or her college application essay. Half were given an essay and a red pen for editing; the rest were told that all of the essays had been edited and they could leave early. Before exiting, all participants rated the extent to which they agreed that time was their scarcest resource (1 = *strongly disagree*; 7 = *strongly agree*) and how much available spare time they had (-5 = *very little available time*; +5 = *lots of available time*; Zauberman & Lynch, 2005). Finally, participants chose whether to sign up for 0, 15, 30, or 45 minutes of paid online studies during the coming week; we tracked participants' follow-through on these appointments.

Results and Discussion

Both self-report measures showed that participants who gave time felt as though they had more time than those who received an equivalent amount of "free" time. Specifically, participants who spent their time helping an at-risk student reported feeling that their time was less scarce ($M = 4.68$, $SD = 1.56$) than those who received time ($M = 5.21$, $SD = 1.49$; $F(1, 134) = 4.14$, $p = .04$, $\eta_p^2 = .03$). Similarly, participants who gave time reported having more spare time ($M = -1.23$, $SD = 2.58$) than those given a windfall ($M = -2.18$, $SD = 2.41$; $F(1, 129) = 4.76$, $p = .03$, $\eta_p^2 = .04$).

Participants' behavior followed the same pattern: those who gave time subsequently committed to spend more time on future surveys ($M = 37.95$ mins, $SD = 16.05$) than those who received time ($M = 29.14$ mins, $SD = 20.57$; $F(1, 134) = 7.69$, $p = .006$, $\eta_p^2 = .05$). In addition, they also spent marginally more time completing surveys during the following week ($M = 21.36$ mins, $SD = 22.49$) than those who received time ($M = 14.57$ mins, $SD = 21.05$; $F(1, 134) = 3.31$, $p = .07$, $\eta_p^2 = .02$).

 Insert Figure 2 about here

Although receiving free time objectively increased participants' spare time, those who received a windfall of 15 minutes felt more time-constrained and completed an average of 7 minutes *less* work on an additional task than those who had spent 15 minutes helping others. Whereas previous research suggests that inducing prosocial behavior can increase future prosocial behavior (Freedman & Fraser, 1966), these results suggest that spending time prosocially increases how much one does in the future more generally, prosocial or not.

Experiment 3: The Role of Self-Efficacy

The previous experiments suggest that compared to spending time on oneself, getting time, or wasting time, spending time on others relaxes perceived time constraints. Experiment 3 examines our proposed mechanism – self-efficacy – as well as three other potential mechanisms: feeling interpersonally connected, meaningfulness, and enjoyment.

We propose that because helping others increases feelings of self-efficacy – such that more can be accomplished within a given amount of time – and because “full” time is perceived as longer, giving time should increase perceptions of how much time one has more generally. We additionally explored the possibility that, because helping others also increases feelings of

connectedness (Grant & Gino, 2010), the sense of community gained from giving time may create a general feeling of expansiveness that spills over to perceptions of time. It is also possible that giving time to others is experienced as more meaningful than spending time on oneself (Baumeister, 1991); because deeply meaningful tasks are often characterized by a “flow” state which can alter people’s subjective sense of time (Csikszentmihalyi, 1990), we assessed whether differences in meaningfulness underlie the effect of giving time on time perception. Finally, in light of the adage, “time flies when you’re having fun,” we tested the additional possibility that differences in enjoyment experienced while spending time on oneself and others may influence perceptions of the time one has (Campbell & Bryant, 2007; Sackett, Meyvis, Nelson, Converse, & Sackett, 2010).

Method

Participants ($N = 105$; $M_{age} = 34.1$; 56% female) recruited through Mechanical Turk completed the study in exchange for \$1. Based on similar reminiscence-based methodologies (Van Boven & Gilovich, 2003), participants were randomly assigned to vividly describe a recent expenditure of time doing something which was not part of their normal responsibilities – either for someone else or for themselves. Because the amount of time spent varied across recalled activities, the analyses control for time spent; however, the significance of the results does not change when hours spent is not included as a covariate.

Time perception was measured with Kasser and Sheldon’s (2009) Time Affluence Index (e.g., “I have had plenty of spare time,” 1 = *strongly disagree*; 5 = *strongly agree*) and reported spare time available (1 = *very little available time*; 10 = *lots of available time*), $\alpha = .90$.

Next, self-efficacy was assessed with a 3-item scale adapted from Bandura (1990): participants rated the extent to which the time spent made them feel capable, competent, and

useful ($\alpha = .84$). Social connectedness was assessed by asking participants to rate the extent to which the time spent made them feel loving, loved, and connected to others ($\alpha = .84$). Meaning was assessed by asking participants to rate the extent to which the time spent was meaningful and fulfilling ($\alpha = .81$). Finally, enjoyment was assessed by asking participants to rate the extent to which the time spent was fun and enjoyable ($\alpha = .93$). All items were measured on 7-point scales (1 = *not at all*; 7 = *very much*).

Results and Discussion

Consistent with the previous studies, participants who remembered giving time ($M = 4.47$, $SD = 1.77$) felt like they had more time than participants who remembered spending time on themselves ($M = 3.79$, $SD = 1.88$; $F(1, 102) = 4.09$, $p < .05$, $\eta_p^2 = .04$).

Also as predicted, those who gave time ($M = 4.29$, $SD = .78$) felt more effective than those who spent time on themselves ($M = 3.57$, $SD = 1.01$; $F(1, 102) = 19.93$, $p < .001$, $\eta_p^2 = .16$). Furthermore, these feelings of efficacy mediated the effect of spending time on perceptions of having time. The effect of giving time on time affluence was significantly reduced (from $b = .73$, $SE = .36$, $p < .05$ to $b = -.05$, $SE = .47$, $p > .10$) when self-efficacy was included, whereas self-efficacy remained a significant predictor ($b = .61$, $SE = .25$, $p < .05$). The 95% bias-corrected confidence interval for the indirect effect excluded zero [.114, .981], indicating a significant indirect effect. These results suggest that spending time on others increases perceived time affluence by increasing one's sense of efficacy.

Spending time on oneself was more enjoyable ($M_{\text{give}} = 3.46$, $SD = 1.29$ vs. $M_{\text{self}} = 4.45$, $SD = .81$; $F(1, 102) = 20.53$, $p < .001$, $\eta_p^2 = .17$) and giving time made participants feel more connected ($M_{\text{give}} = 3.82$, $SD = .95$ vs. $M_{\text{self}} = 3.15$, $SD = 1.22$; $F(1, 102) = 11.47$, $p = .001$, $\eta_p^2 = .10$). However, these differences cannot account for the impact of giving time on time affluence,

as neither enjoyment ($b = -.36, SE = .20, p > .05$) nor social connection ($b = -.05, SE = .22, p > .10$) predicted time affluence. In addition, time given was reported as no more meaningful than time spent on oneself ($M_{\text{give}} = 4.04, SD = 1.02$ vs. $M_{\text{self}} = 4.09, SD = .97; F(1, 102) = .00, p = .98, \eta_p^2 = .00$), nor did meaningfulness predict time affluence ($b = -.18, SE = .28, p > .10$), suggesting that meaningfulness also does not account for the effect. Most importantly, as Figure 3 shows, only self-efficacy mediated the effect of giving time on perceived time affluence.

 Insert Figure 3 about here

General Discussion

Compared with wasting time, spending time on oneself, and even receiving “free” time, giving time to friends or strangers increases perceptions of having time – in both the present and the future – by increasing feelings of self-efficacy. This is welcome news in light of research showing the detrimental consequences of time pressure on happiness, stress levels, and prosocial behavior (deGraaf, 2003; Kasser & Sheldon, 2009). Although feeling starved for time generally leads individuals to prioritize spare hours for themselves over giving this precious resource away, our results suggest that if people instead spent time on others, they would feel less time-constrained and more able to complete their myriad tasks and responsibilities.

Moreover, giving time to others not only increases the giver’s sense of subjective time but can also increase the recipient’s objective amount of time, such that giving time contributes to the well-being of both the self and others. For instance, a participant in Experiment 3 recalled saving a friend some time by helping him pull up an old floor. Despite these potentially multiplicative benefits of giving time, however, there is likely an upper limit at which giving time has negative consequences – for example, when giving time starts to impair people’s ability

to be effective in their own lives. Indeed, when we asked a sample of part-time employees ($N = 71$; $M_{age} = 37.9$; 63% female) to recount either a recent occasion in which they spent some time on another or a recent occasion in which they spent too much time on another such that they were unable to accomplish their own necessary tasks, those who recalled giving “too much” time felt less time affluent ($M = 2.80$, $SD = .94$) than those who recalled giving “some” time ($M = 3.73$, $SD = .83$; $t(43) = 3.51$, $p = .001$). In fact, those who gave too much time felt as time poor as participants who we asked to recount an occasion in which they had wasted time ($M = 2.69$, $SD = 1.16$; $t(47) = .37$, $p = .72$). Consistent with these results, research examining the impact of obligatory long-term caregiving reveals depleting effects on caregivers (Coyne & Smith, 1991; Schulz & Tompkins, 1988). Future research is needed to further explore the two factors that vary crucially between our shorter-term paradigms and longer-term giving: the sheer amount of time given, and the volitional versus obligational nature of giving.

Prior research shows that emotional factors such as arousal, awe, emotional intensity, and self-regulation shape the experience of time (e.g., Kim & Zauberger, 2009; Rudd, Vohs, & Aaker, 2011; Van Boven, Kane, McGraw, & Dale, 2010; Vohs & Schmeichel, 2003). Our results demonstrate that the way time is *spent* can also impact time perception, and identifies a specific choice individuals can make to lessen their experienced time pressure: be effective by doing something for others. To be sure, decompressing in front of the television and getting massages are certainly fun and relaxing, but activities like these are very unlikely to increase feelings of self-efficacy. Indeed, people’s choice to spend additional leisure time on themselves may partly explain why the increase in leisure time in modern life has not increased people’s feelings of time affluence (Robinson & Godbey, 1999); our results indicate that spending time prosocially is

more effective in relieving the pressure of time. When individuals feel time-constrained, they should become *more* generous with their time – despite their inclination to be less so.

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Figure 1. Mean ratings of future time perception ($\pm SE$) for individuals who spent either 10 minutes or 30 minutes of their time that day for someone else or for themselves (Experiment 1B).

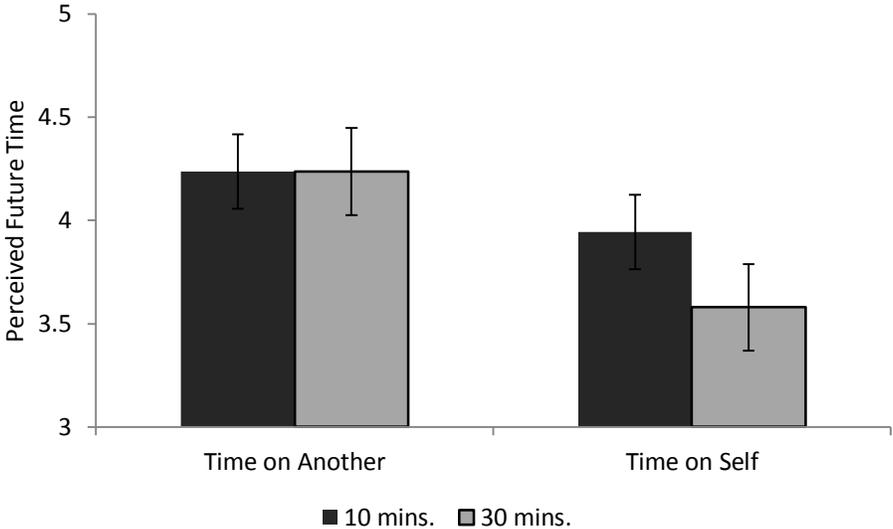


Figure 2. Mean number of minutes committed to complete – and actual time committed to – future surveys ($\pm SE$) for individuals who either gave or received 15 minutes of time (Experiment 2).

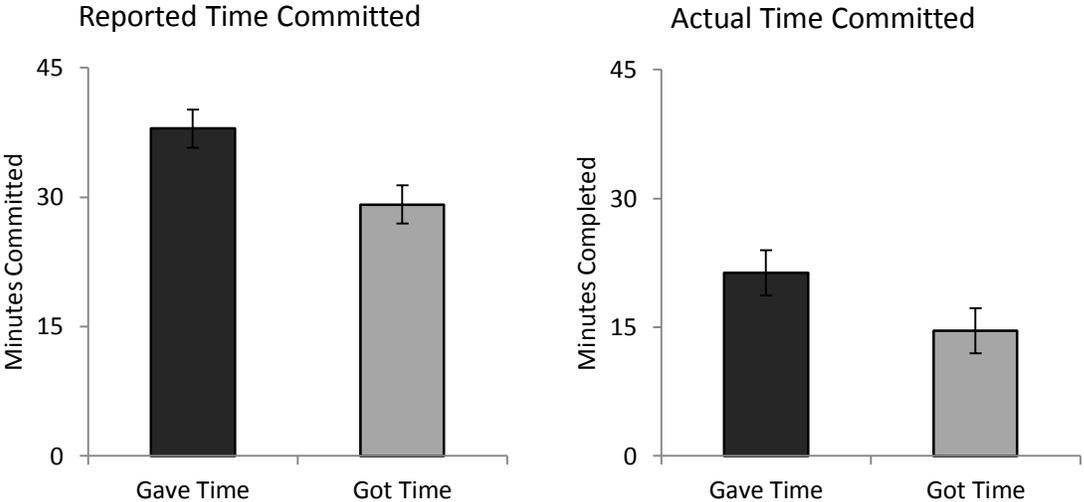
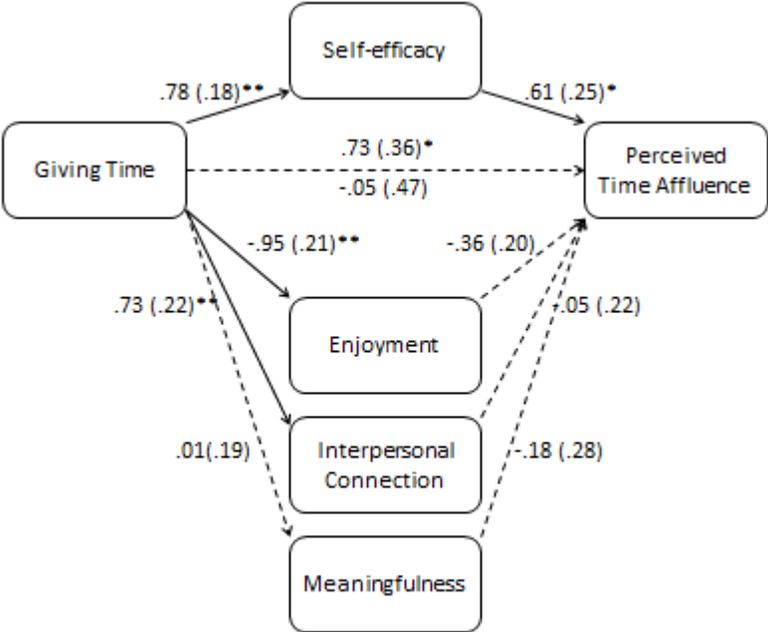


Figure 3. Self-efficacy mediates the effect of spending time on another (vs. oneself) on perceived time affluence (Experiment 3).



Note. Path coefficients represent unstandardized regression weights, and standard errors are presented in parentheses. The coefficient above the path from giving time to perceived time affluence represents the total effect with no mediators in the model; the coefficient below the path represents the direct effect when the mediators were included in the model. Coefficients significantly different from zero are indicated by asterisks (* $p < .05$, ** $p < .001$), and their associated paths are shown by solid lines; dashed lines indicate nonsignificant paths.