

# Giving Time Gives You Time

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## Abstract

Results of four experiments reveal a counterintuitive solution to the common problem of feeling that one does not have enough time: Give some of it away. Although the objective amount of time people have 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. We compared spending time on other people with wasting time, spending time on oneself, and even gaining a windfall of "free" time, and we found that spending time on others increases one's feeling of time affluence. The impact of giving time on feelings of time affluence is driven by a boosted sense of self-efficacy. Consequently, giving time makes people more willing to commit to future engagements despite their busy schedules.

## Keywords

time perception, well-being, volunteering, prosocial behavior, helping

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Despite medical advances that have lengthened the human life span 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, 2007), and twice as many Americans would prefer 2 weeks of vacation over 2 weeks of extra pay (Honoré, 2004). Most relevant to the present investigation, people's sense that time is scarce decreases their willingness 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 such as New York being least likely to spend time helping strangers.

We propose, however, that helping other people can actually increase feelings of time affluence and alleviate the perceived time famine—despite the fact that giving time necessarily consumes objective time. Why would giving time mitigate the experience of 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, & Bhargava, 2010). Taken together, this research suggests that because helping increases feelings of self-efficacy, time spent helping other people 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.

In four experiments, we tested the hypothesis that spending time on others increases individuals' perceived time, in terms of the amount of spare time they currently have (Kasser & Sheldon, 2009; Zauberman & Lynch, 2005) as well as the expansiveness of their future (Lang & Carstensen, 2002). We compared giving time with other activities that could affect time affluence—wasting time (Experiment 1a), spending time on oneself (Experiments 1b and 3), and getting time (Experiment 2)—and tested for the underlying role of self-efficacy (Experiment 3).

## Experiment 1a: Giving Time Versus Wasting Time

We first compared the impact of giving time with that of wasting time—another behavior that could signal time affluence ("If I have enough time to fritter away, I must have a lot of

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time”) but which our account suggests will not increase time affluence, because it is not accompanied by feelings of self-efficacy. We predicted that people who had given time would subsequently feel they had more time than those who had wasted it.

## Method

Fifty-five min into a 1-hr laboratory session at an East Coast university, participants ( $N = 218$ ; mean age = 20.7 years; 58% female, 42% male) were randomly assigned to one of two 5-min 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 the letter “e” in multiple pages of Latin text. After spending 5 min on their respective tasks, participants reported their perceptions of time by indicating their agreement with four time-related 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 could 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 because of the unpleasantness of counting the letter “e,” we compared the impact of giving time with a more pleasant task in Experiment 1b: spending time on oneself. Just as wasting time can signal that one has abundant time, so can spending time indulging oneself: “If I have enough time for ‘me’ time, I must have a lot of time.” Mirroring our predictions in Experiment 1a, we predicted that spending time on other people 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, and we examined whether the impact of giving time depended on the amount of time spent.

## Method

Participants recruited through an online pool ( $N = 150$ ; mean age = 39.9 years; 74% female, 26% male) were randomly assigned to one condition of a 2 (Recipient: self vs. other)  $\times$  2

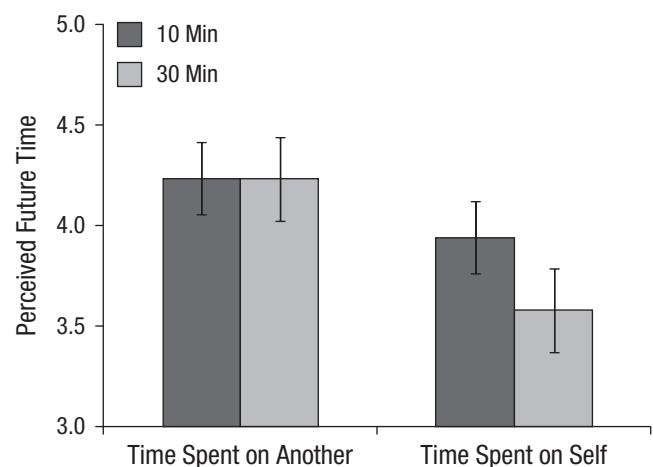
(Time: 10 min vs. 30 min) between-subjects design. On a Saturday morning, participants received instructions. Participants in the self condition were asked to “spend 10 minutes doing something for yourself that you weren’t already planning to do today.” Participants in the other condition were asked to “spend 30 minutes doing something for 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)  $\times$  2 (time) analysis of variance 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 time and no interaction between the two variables ( $ps > .10$ ). These results suggest that regardless of whether participants spent 10 or 30 min, spending time on others seemed to expand the future ( $M = 4.24$ ,  $SD = 1.27$ ) relative to spending time on oneself ( $M = 3.77$ ,  $SD = 1.24$ ; Fig. 1). Consistent with research on the benefits of spending money on other people (Dunn, Aknin, & Norton, 2008), the amount of the resource spent mattered less than whether it was spent on oneself or others.

## 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 help another person, and a control group was allowed to leave the session early. Although receiving a windfall of free time objectively increases the time available to do other things, we predicted that giving time



**Fig. 1.** Results of Experiment 1b: mean rating of future time perception as a function of whether time was spent on oneself or on another, and of the amount of time spent. Error bars indicate  $\pm 1$  SE.

would lead to even greater perceptions of time affluence than getting time would. Second, we introduced a new measure of time affluence: measuring the amount of time that individuals felt they currently had (rather than the amount of time they felt they had in the future). 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 less time constrained and more capable: committing to future engagements and following through on those time commitments.

## Method

Forty-five min into a 1-hr laboratory session at an East Coast university, participants ( $N = 136$ ; mean age = 20.8 years; 58% female, 42% male) learned that their final task would be to spend 15 min helping an at-risk student from a local public high school by editing his or her research essay. Half were given an essay and a red pen for editing; the rest were told that all 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 on a scale ranging from 1, *strongly disagree*, to 7, *strongly agree*. They also rated how much available spare time they had on a scale ranging from  $-5$ , *very little available time*, to 5, *lots of available time* (Zauberman & Lynch, 2005). Finally, participants chose whether to sign up for 0, 15, 30, or 45 min of paid online studies during the coming week. We then tracked participants' follow-through on their intentions.

## 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 who received a windfall of time ( $M = -2.18$ ,  $SD = 2.41$ ),  $F(1, 129) = 4.76$ ,  $p = .03$ ,  $\eta_p^2 = .04$ .

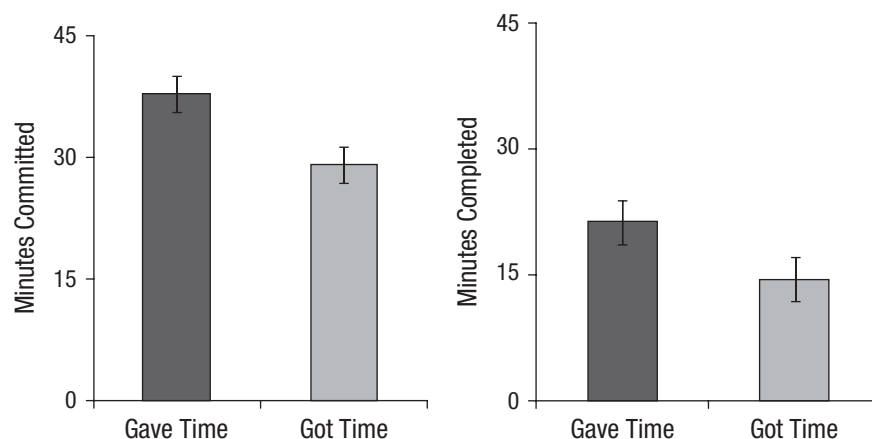
Participants' behavior followed the predicted pattern: Those who gave time subsequently committed to spend more time on future surveys ( $M = 37.95$  min,  $SD = 16.05$ ) than those who received time ( $M = 29.14$  min,  $SD = 20.57$ ),  $F(1, 134) = 7.69$ ,  $p = .006$ ,  $\eta_p^2 = .05$  (Fig. 2).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

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

## Experiment 3: The Role of Self-Efficacy

The previous experiments suggest that compared with spending time on oneself, getting time, or wasting time, spending time on other people relaxes perceived time constraints. Experiment 3 examined the proposed mechanism—self-efficacy—as well as three other potential mechanisms: interpersonal connection, meaning, and enjoyment.

We propose that because helping other people increases feelings of self-efficacy—such that more can be accomplished within a given amount of time—and because full time is



**Fig. 2.** Results of Experiment 2: mean time committed to completing future surveys (left panel) and actual time spent completing those surveys (right panel) as a function of whether individuals gave time to help another or were given free time. Error bars indicate  $\pm 1$  SE.

perceived as longer, giving time should increase perceptions of how much time one has more generally. We additionally explored the possibility that because helping other people 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 that 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 ( $N = 105$ ; mean age = 34.1 years; 56% female, 44% male) recruited through Amazon’s Mechanical Turk completed Experiment 3 in exchange for \$1. On the basis of similar reminiscence-based methodologies (Van Boven & Gilovich, 2003), we randomly assigned participants to vividly describe a recent expenditure of time doing something that 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 controlled for this; however, the significance of the results did not change when hours spent was 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 by asking participants to report the amount of spare time they had (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 other people ( $\alpha = .84$ ). 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 findings of previous studies, our results showed that participants who remembered giving time ( $M = 4.47$ ,  $SD = 1.77$ ) felt 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, participants who gave time ( $M = 4.29$ ,  $SD = 0.78$ ) felt more effective than those who spent time on themselves ( $M = 3.57$ ,  $SD = 1.01$ ),  $F(1, 102) = 19.93$ ,  $p < .001$ ,  $\eta_p^2 = .16$ .

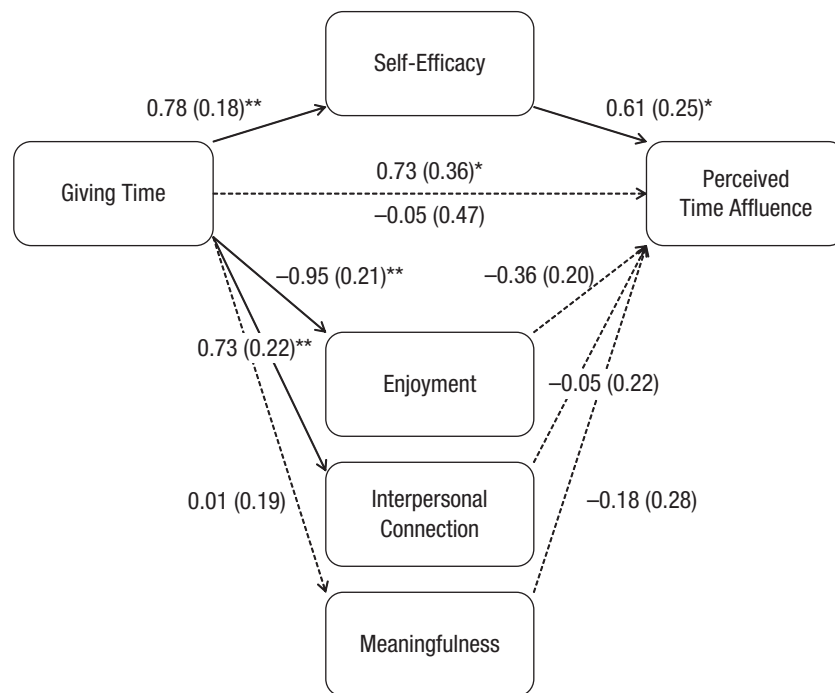
We next used a mediation model to investigate whether self-efficacy explained the influence of giving time on perceived time affluence (Fig. 3). We found that it did. The effect of giving time on time affluence was significantly reduced (from  $b = 0.73$ ,  $SE = 0.36$ ,  $p < .05$ , to  $b = -0.05$ ,  $SE = 0.47$ ,  $p > .10$ ) when self-efficacy was included in the model, whereas self-efficacy remained a significant predictor ( $b = 0.61$ ,  $SE = 0.25$ ,  $p < .05$ ). The 95% bias-corrected confidence interval for the indirect effect excluded 0 ([.114, .981]), indicating a significant indirect effect. These results suggest that spending time on other people increases perceived time affluence by increasing one’s sense of efficacy.

Enjoyment was higher for participants who remembered spending time on themselves ( $M = 4.45$ ,  $SD = 0.81$ ) than for those who remembered giving time ( $M = 3.46$ ,  $SD = 1.29$ ),  $F(1, 102) = 20.53$ ,  $p < .001$ ,  $\eta_p^2 = .17$ , and social connection was higher for those who remembered giving time ( $M = 3.82$ ,  $SD = 0.95$ ) than for those who remembered spending time on themselves ( $M = 3.15$ ,  $SD = 1.22$ ),  $F(1, 102) = 11.47$ ,  $p = .001$ ,  $\eta_p^2 = .10$ . However, these differences cannot account for the impact of giving time on time affluence, as neither enjoyment ( $b = -0.36$ ,  $SE = 0.20$ ,  $p > .05$ ) nor social connection ( $b = -0.05$ ,  $SE = 0.22$ ,  $p > .10$ ) predicted time affluence in our model. In addition, time given to another person ( $M = 4.04$ ,  $SD = 1.02$ ) was reported as no more meaningful than time spent on oneself ( $M = 4.09$ ,  $SD = 0.97$ ),  $F(1, 102) = 0.00$ ,  $p = .98$ ,  $\eta_p^2 = .00$ , and meaningfulness did not predict time affluence ( $b = -0.18$ ,  $SE = 0.28$ ,  $p > .10$ ), suggesting that meaningfulness also does not account for the effect. Most important, as Figure 3 shows, only self-efficacy mediated the effect of giving time on perceived time affluence.

## General Discussion

In the present experiments, we compared giving time to friends or strangers with wasting time, spending time on oneself, and even receiving “free” time. We found that giving time 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, our results suggest that if people instead spent time on others, they might feel less time constrained and better 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



**Fig. 3.** Results of Experiment 3: the influence of spending time on another person (vs. oneself) on perceived time affluence, as mediated by self-efficacy. Unstandardized regression coefficients are shown, 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 0 are indicated by asterisks (\* $p < .05$ , \*\* $p < .001$ ), and their associated paths are shown by solid lines; dashed lines indicate nonsignificant paths.

the well-being of both the self and others. For example, one 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, 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 ( $N = 71$ ; mean age = 37.9 years; 63% female, 37% male) 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 ( $M = 2.80$ ,  $SD = 0.94$ ) than those who recalled giving some time ( $M = 3.73$ ,  $SD = 0.83$ ),  $t(43) = 3.51$ ,  $p = .001$ . In fact, those who gave too much time felt as time poor as participants whom we asked to recount an occasion in which they had wasted time ( $M = 2.69$ ,  $SD = 1.16$ ),  $t(47) = 0.37$ ,  $p = .72$ . Consistent with these results, research examining the impact of obligatory long-term caregiving reveals depleting effects on caregivers (Coyne & Smith, 1991; Schulz & Tompkins, 1987). Future research is needed to further explore the two factors that vary between our shorter-term paradigms and longer-term giving: the sheer amount of time given and the volitional versus obligatory 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 & Zauberan, 2009; Rudd, Vohs, & Aaker, in press; Van Boven, Kane, McGraw, & Dale, 2010; Vohs & Schmeichel, 2003). Our results demonstrate that the way time is spent can also affect time perception, and we identify a specific choice that individuals can make to lessen their experienced time pressure: Be effective by helping others. Decompressing in front of the television or getting a massage might be fun and relaxing, but activities like these are 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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