

## Incentives and the Signal of Behaving Pro-Socially: Evidence from Field and Lab Experiments

In general there are two classes of motivations for human behavior: a motivation to maximize direct utility from consumption (watching movies, getting money, etc.), and a motivation to maximize indirect utility – an activity that generates utility, but is not pleasurable per se. Within the motivation of indirect utility, one of the most interesting examples is signaling of one's own traits, a motivation that can be directed either toward the self (self signaling) or toward others (prestige). In the current work we examine the interplay between these three motivations (direct utility, self signaling, and prestige) by creating experimental conditions that systematically manipulate them and examine the resulting quantity of motivation. More specifically, we conducted both field and laboratory experiments in which prestige and self signaling were generated by public and private conditions, respectively, and monetary compensation represented direct utility.

In study 1 we launched the 'Bike for Charity' campaign at the MIT gym, in which participants donate to an assigned charity one dollar per each mile they bike on stationary bikes within ten minutes. Each participant was randomly assigned to bike in the public – the crowded second floor – or in the private – a room on the unpopular third floor. The charity, for which the participant could bike, was randomly assigned; Due to the set of available charities, some people were assigned charities they support ("good"), and some were assigned charities they do not support ("bad"). Both the procedure and the charity, which the participants bike for, were common knowledge (public signs). Finally, some participants could, in addition to the donation, earn money per each mile they bike; whenever this was the case, it was publicly advertised. We capture effort, or energy, invested in donation using the amount of calories burned during the time spent on the bikes. In study 2, the 'Click for Charity' experiment, subjects could, similarly to study 1, donate to 'good' and 'bad' charities in public and private settings. This time participants could donate by clicking on two keys on the keyboard for up to 5 minutes. Again, by clicking on the keys, some participants, in addition to the donation, could earn money for themselves. In the public setting, at the end of the study the participants had to stand up and tell the other participants which charity they had, whether they could earn money for themselves and how much was their donation.

The results from both studies clearly demonstrate that participants care about the "signaling utility" and that they care more about the public version of this utility (prestige) than the private one (self signaling): participants put significantly more effort when biking for a 'good'

cause, relative to a 'bad' cause; and this differential effect was significantly greater in the public relative to the private domain. Similarly, participants key-pressed more when it was for a 'good' cause, relative to a 'bad' cause; and this differential effect was significantly larger in the public relative to the private domain.

In terms of the relationship between direct utility (making money in our case) and signaling motivation, introducing private monetary incentives beyond the signaling motivation, did not significantly affect the effort in the public domain (prestige), but significantly increased the effort in the private domain. Looking at the effort for the good cause only, the data suggest a negative interaction of monetary incentives and prestige, while a positive interaction of monetary incentives and self-signaling. This result, although very preliminary, suggests that crowding out of signaling motivation by monetary incentives, if exist, is a prestige effect.

In sum, the results show that signaling utility, in the form of prestige and self signaling, is an important motivator of human behavior; prestige seems a stronger motivator than self signaling, and the crowding-out phenomenon, if exists, seems to be a prestige effect.