Paying Less to Do More: Harnessing the Motivational Power of Streaks in an Incentive Scheme

Katie S. Mehr\(^1\), Jackie Silverman\(^2\), Marissa Sharif\(^1\), Alixandra Barasch\(^3\), & Katherine L. Milkman\(^1\)

\(^1\)The Wharton School, University of Pennsylvania, \(^2\)Lerner College of Business and Economics, University of Delaware, \(^3\)NYU Stern School of Business

Research Question

Do people exert more effort for less money when they are paid in a streak-rewarding way (i.e., reward for 3 consecutive behaviors)?

Abstract

Economic theory predicts that people should work more in exchange for a larger payment compared to a smaller, dominated reward. However, in four incentive-compatible, pre-registered experiments, we show that smaller payments encouraging people to maintain a streak (i.e., complete three or more consecutive, undesirable tasks) lead people to complete more undesirable tasks than a larger, flat incentive. Our findings suggest that rewarding payments are more motivating than flat payments and thus people do more when paid less by being driven by increasing incentive schemes.

Study 1: Establish effect, test mechanism

- **Sample**: N = 1,216 from Mturk (preregistered)
- **Design**: Streak-rewarding vs flat payments; testing proposed mechanism of gamification (ask participants whether HIT feels like it can be won and if HIT feels like a game)
- **Mediation**: Marginally significant indirect effect of gamification on number of CAPTCHA tasks completed

Study 2: Effect is not solely driven by increasing incentive scheme

- **Sample**: N = 711 from Mturk (preregistered)
- **Design**: 3 between subject payment conditions: Streak-rewarding vs flat vs increasing. Increasing = 0.5, 0.75, and 1 cent for the 1st, 2nd, and 3rd CAPTCHA task, regardless of whether tasks were completed consecutively

Study 3: Full penalty not required to motivate people

- **Sample**: N = 702 from Mturk (preregistered)
- **Design**: 3 between subject payment conditions: Streak-rewarding vs flat vs streak without skip penalty. Streak without skip penalty = payment remains at same amount after selecting a video and increases after 2 consecutive CAPTCHA tasks following video

Conclusion

- Streak-rewarding payments are more motivating than flat, dominant payments and thus people do more when paid less
- Replicated across different payment amounts and tasks
- Highlighting the possibility of streaks could motivate people to engage in more should behaviors (i.e., saving for retirement, exercising)

Questions and feedback welcome! Please email Katie Mehr at kmehr@wharton.upenn.edu.