Reciprocity or Self-Interest? Leveraging Digital Social Connections for Healthy Behavior

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Abstract

We examine the role of reciprocity enabled by digital social platforms for offline healthy behavior. Although reciprocity is a fundamental aspect of human psychology, its application in promoting healthy behavior has been limited. We conduct a randomized field experiment with over 1,700 pairs of users on a mobile social network platform. Individuals in the reciprocity treatment group receive a gift from their friends and are asked to return this favor by participating in a running challenge. Their performance is compared to the self-interest incentives widely used in practice. Building on social exchange theory, we argue that reciprocity-based incentives will outperform self-interest incentives with modest reward for motivating behavior change. We find that, on average, reciprocity is stronger than self-interest in inducing exercise behavior by a substantial amount. Furthermore, our results reveal that the magnitude of the reciprocity effect is contingent on the social closeness between senders and receivers. Interestingly, social closeness has an inverted U-shaped influence on the reciprocity effect. The effect is strongest when closeness is moderate, and wanes when closeness is either too strong or too weak. Compared to commonly used self-interest based financial incentives, our findings offer a potentially more powerful avenue for mechanism design in promoting healthy behavior.

Keywords: Reciprocity, self-interest, healthy behavior, social connections, social closeness, social exchange theory