Find a cost-effective incentive strategy based on a psychological state called self-efficacy

Optimizing financical incentive for exercise adherence

IOWN Future

Medical, Healthcare, and Human-Augmentation Technologies to Empower People

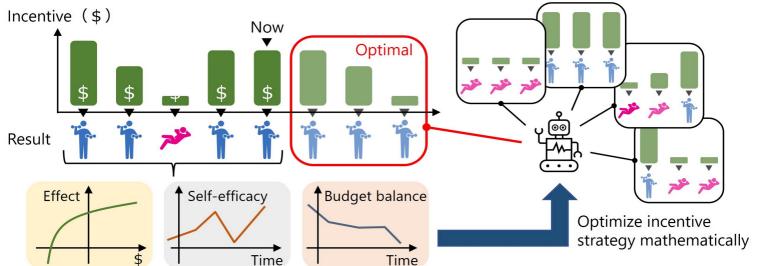


Background

Physical inactivity is a major risk factor for various diseases like hypertension, stroke, and diabetes. Financial incentive, including points, is a popular tool for motivating individuals to engage in health behaviors, but much remains to be explored to find cost-effective incentive strategies.

Summary

By focusing on a psychological determinant called self-efficacy, this technology derives a cost-effective incentive strategy to maintain a recommended level of physical activity. The derived strategy enables us to determine the best amount of the next incentive based on user's past behavior.



Features

- We experimentally shows that our technology achieves deriving a more cost-effective incentive strategy than conventional simpler ones
- The world's first technology to derive the most cost-effective strategy of financial incentive with a computational approach
- The mathematical behavior model that mimics the effect of financial incentive on health behavior is constructed for each person, resulting in the best strategy for each individual

Future_benefits

Through healthcare services with this technology, we can achieve habitual health behaviors by utilizing financial incentive (e. g., d POINT) effectively.

Exhibiting Company

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