

# Fit Friends: The Importance of a Supportive Social Network for Persistent Fitness Sharing

Kunwoo Park<sup>1</sup>, Ingmar Weber<sup>2</sup>, Meeyoung Cha<sup>3</sup>, and Chul Lee<sup>4</sup>

<sup>1</sup>Graduate School of Web Science Technology, School of Computing, KAIST, South Korea

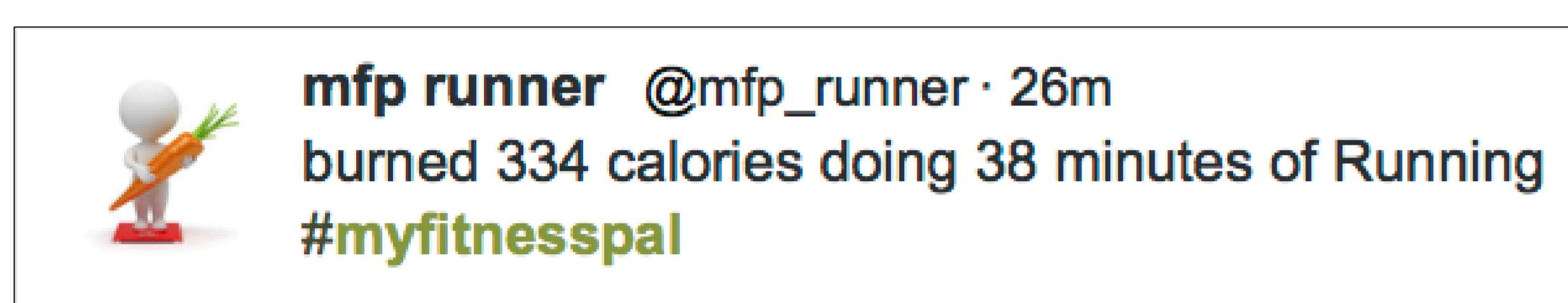
<sup>2</sup>QCRI(Qatar Computing Research Institute), Qatar

<sup>3</sup>Graduate School of Culture Technology, KAIST, South Korea

<sup>4</sup>MyFitnessPal, United States

## Social Sharing and User Engagement

- Fitness app users can share their status on external social media, which is called social sharing.



- Sharing private health statuses is known to be effective for retrieving positive effects to persistently engage in health activities [1]; On the other hand, it sometimes make sharers feel privacy concerns, preventing for future engagement [2]

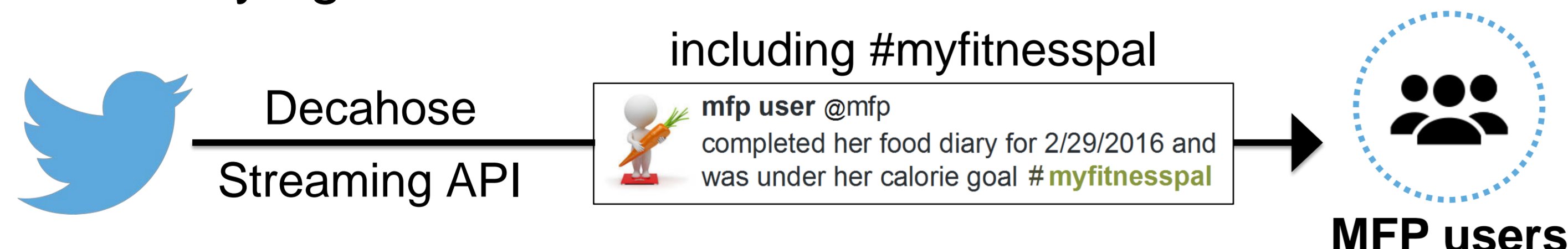
## What kinds of users are more likely to persistently share their health status?

### MyFitnessPal

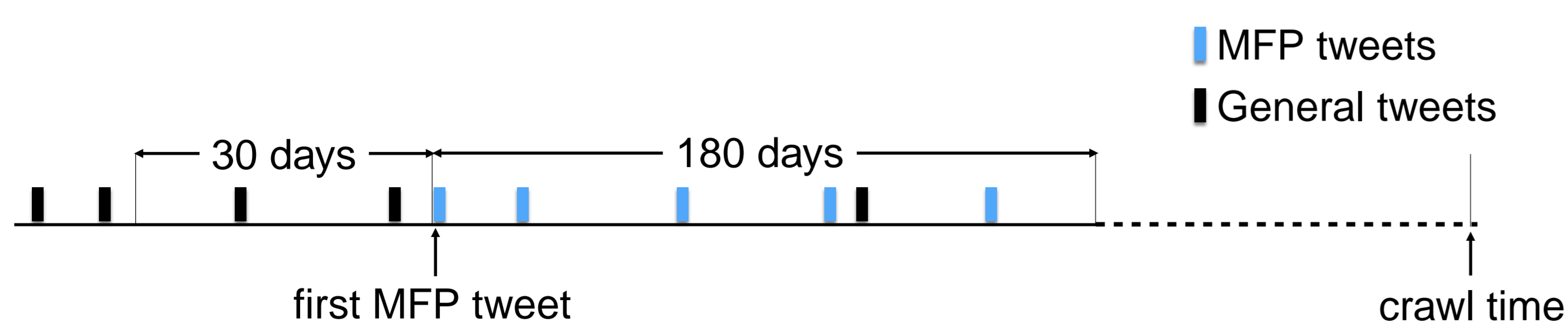
- #1 mobile app for managing health and fitness
- Users can automatically share health status on Twitter

### Data Collection

#### 1. Identifying users

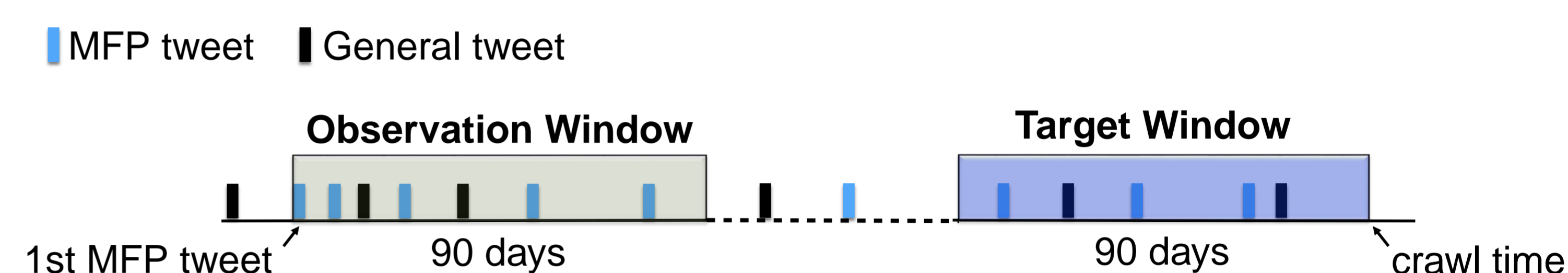


#### 2. Crawling historical tweets



4,794,071 tweets of 3,169 users

## Definition of Persistent Fitness Sharing



### Persistent users ( $N(i) > 0$ )

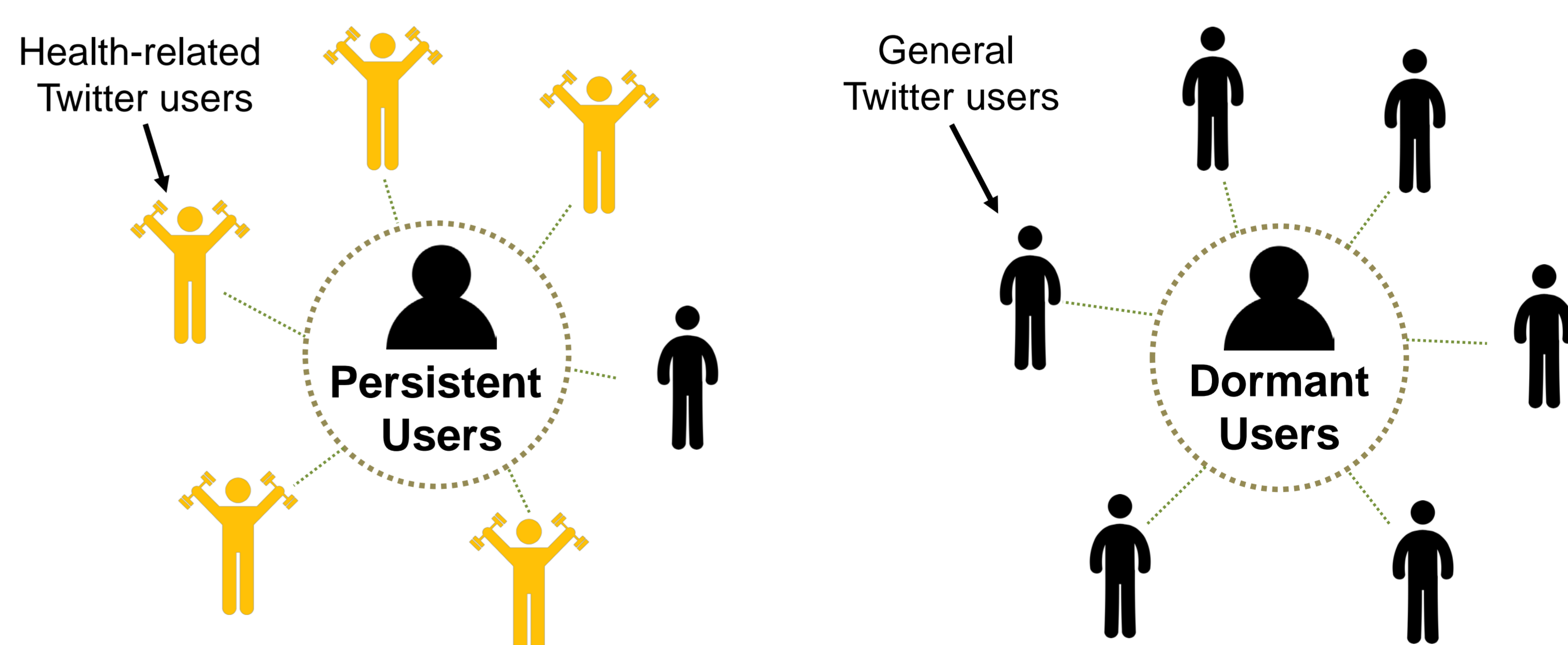
- N = 2,598
- Retained to the app over an extended period of time

### Dormant users ( $N(i) == 0$ )

- N = 581
- Three labeled cases;
  - abandoning the app
  - temporarily inactive
  - disabled auto-sharing

## Can We Predict Persistent Sharing?

- Logistic regression with 19 features of three category: Twitter Profile, Fitness Activity, Fitness Network
- Persistent users tend to have **Twitter friends** who use the same fitness app ( $p < .05$ ) or have interests in health ( $p < .05$ )



**Owning a supportive social network is important for persistent social sharing**

**If you have more interests in this study, please check our CSCW paper!**

Paper: <http://bit.ly/1nceHPQ>  
E-mail: kw.park@kaist.ac.kr



[1] Munson et al. 2010. Happier together: integrating a wellness application into a social network site. In Proc. of the Persuasive Technology. 27-39.

[2] Newman et al. 2011. It's not that i don't have problems, i'm just not putting them on facebook: challenges and opportunities in using online social networks for health. In Proc. of the CSCW. 341-350.