# Promo@Work: Evidence-based Health Promotion in Workplaces

Markku Kekkonen, Piiastiina Tikka, Janne Jaako, and Harri Oinas-Kukkonen

University of Oulu, Faculty of Information Technology and Electrical Engineering, Oulu Advanced Research on Service and Information Systems, Oulu, Finland {markku.kekkonen;piiastiina.tikka;janne.jaako;harri.oinas-kukkonen}@oulu.fi

## 1 The Project

Promo@Work is a collaboration research project, which is funded by the Strategic Research Council at the Academy of Finland. The collaborating parties are the Finnish Institute of Occupational Health, university of Oulu, university of Tampere and university of Cologne.

The aims of the project are 1) to produce evidence-based knowledge and information about the effects of healthy living regarding recovery from work-related strain and stress; and 2) to research the effectivity and utilization of persuasive technology regarding the promotion of health and well-being in workplaces.

In the project, a mobile application for helping entrepreneurs to recover from work was developed with the help of Persuasive Systems Design (PSD) [1] model. An intervention was realized in the form of a randomized controlled trial. Microentrepreneurs were recruited as participants for the eight-week intervention.

### 2 Background

**Underlying Theories.** The PSD model [1] was used as the framework for designing the persuasive technology features within the application, whereas the Self-determination theory (SDT) [2] was used as the theoretical background. The Transtheoretical Model (TTM) [3] was adopted for 'Stages of Change'-driven goal setting within the application.

**Health Problem Domains.** The following health problem domains were included within the application: 1) Exercising, 2) Stress management, 3) Efficient working hours (time management), 4) Recovery from work, 5) Sleep, 6) Nutrition (dietary) 7) Sedentary behavior (excessive sitting). Alcohol consumption was integrated within the health problem domains and therefore was not a standalone domain within the application.

# **3** The System

**Primary Task Support.** The application utilized two different PSD principles from the Primary task support category: Self-monitoring tools e.g. pedometer for providing the users ways to track their performance or status; and Rehearsals e.g. nutrition rhythm tool for rehearsing target behavior.

**Dialogue Support.** From the Dialogue support category, four different PSD principles were utilized in the app. Praise was used for giving the users feedback on their positive behaviors; whereas Reminders e.g. push notifications were used for reminding the users of their target behavior. The users were suggested to carry out certain behaviors during the usage process. The visual side of the system was designed to be attractive; therefore, the users should like the look and feel of the system.

**System Credibility Support.** The application could have said to utilize one PSD principle from the System credibility support category. As the system provided evidence-based health promotion, it could be viewed as trustworthy.

**Social Support.** From Social support category, one PSD principle was present in the application: Social comparison e.g. stress statistics tool for providing the users means for comparing their situation with the situation of others.

#### 4 Project Status

The system was built mainly during 2017, and released for the intervention group participants in March of 2018, marking the beginning of the eight-week randomized controlled trial period. The control group participants gained access to the app during September of 2018. As of 2019, the results will be analyzed and published.

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