

HIIT@WORK

Can High Intensity Interval Training be fun enough to motivate desk-top workers for continued participation? A practice-based study of HIIT@WORK

De Clerck I.L., Vandaele F., Boudeaud'hui J., Custers L., Maenhout A. Van de Woestyne J., Van Hulle D.
Artevelde University College Ghent, Research and Development Centre "Innovation in Health & Care", Belgium



INTRODUCTION

- High Intensity Interval Training (HIIT) is an innovative training method which has been shown to be **at least as efficient to enhance one's health and physical performance** as the standard recommended moderate intensity continuous training.
- A lack of time is an often cited barrier to exercise more. HIIT is **low in time demand** and therefore it has a lot of potential as a health-enhancing intervention.
- Previously, by use of design research methodology, the 4 minute **HIIT@WORK exercise program** was created targeting desk-top workers in an office setting.
- Although the possible advantages, training at a high intensity might scare people off, have a negative affective response, be less attractive or result in a **lower motivation or a low attrition rate**.

OBJECTIVES

The aim of this study was to 1. examine the participation rate of the HIIT@WORK program; 2. study the perceived motivators for continued participation.

METHODS

- Within two companies, in total **27 participants** were included for participation. They were predominantly female (83%), with a mean age of 40,6 ($\pm 7,6$) year. It was a mixed group with both active and non-active desk-top workers.
- During 4 weeks, HIIT-sessions were organized 4 days a week during the afternoon break. The desk-top workers could **choose their participation rate** freely, but it was recommended to follow as many as possible to have larger health benefits.
- A **motivational framework** was created to increase motivation. This included f.e. choices of exercise (autonomy), goal setting strategies, group challenges and incentives.
- During intervention, participant rate was registered. Post-intervention participants were asked to fill in the **Physical Activity Enjoyment Scale (PACES)** and participated in a **semi-structured interview** questioning their motivation for continued participation. Ethics approval was received from the Ethics Committee UZ Gent.



HIIT@WORK TRAINING SESSIONS

- HIIT-sessions included a short warming-up, a **4 minute functional exercise work-out** based on the Tabata-protocol (8x20" @>80%Hrmax) and a cool down.
- Aiming for **maximal feasibility and acceptability**, we used no ergometers, no sports materials and no sports halls. Training sessions were administered in a normal meeting/dining room and changing of clothes was not necessary.



RESULTS

- The mean **participation rate** was 2.6 training sessions per week per person. This remained relatively stable during the 4 consecutive weeks of the program.

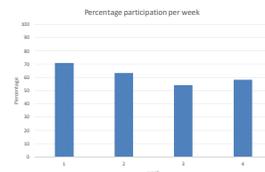


Fig 1: Percentage of participation from week 1 through week 4

- Participants reported to be positively influenced by following **motivators**:
 - Heart rate measurements (self-regulation)
 - Choices of exercise (autonomy)
 - Differentiation and exercising on one's own level of capacity (competence)
 - Individual and group challenges (goal setting)
 - Colleagues (belonging)
 - External rewarding (incentives).
- Participants scored the movement program at 104.5 ± 17.7 (on a total of 126) on the **Physical Activity Enjoyment Scale**.
- 77% preferred to continue doing HIIT@WORK even after the intervention was finished.

CONCLUSIONS

- Although HIIT@WORK is based on a potentially less enjoyable high intensity work-out, still desk-top workers frequently participated.
- HIIT training, including a motivational framework, can be made fun and motivational both for active and non-active desk-top workers. Important motivation came from aspects of autonomy, belonging, competence, self-regulation, goal-setting and incentives.
- More research is needed on the long term effects of HIIT training in an office setting. Currently, our research group is evaluating a 10wk HIIT@WORK program, including a more extensive goalsetting, pre and post fitness testing, START2HIIT introduction sessions, train-the-trainer programs and a HIIT@HOME module.

SEARCH FOR PARTNERS

We are open for any **national and international cooperation** regarding the topics "health promotion at work" of "workplace based physical activity programs".

Currently, we are exploring funding within the **Erasmus Plus Sport Collaborative Partnership** funding, or other similar funding sources.

We target the opportunity to develop, transfer and implement **innovative practices** to the setting of **work-place based physical activity and sport**.

Please contact us in case of interest or if you have any questions.

CONTACT INFORMATION

Dr. Ine De Clerck
Research and Development Centre
„Innovation in Health and Care“

Artevelde University College Ghent, Belgium

Ine.DeClerck@arteveldehs.be

www.HIITatWORK.be

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