Abstract citation ID: ckad160.732 Joint associations of leisure time physical activity and sitting time with sickness absence

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## **Background:**

Physical inactivity and prolonged sitting are risk factors for non-communicable diseases and threaten public health. The aim of this study was to examine the joint associations of leisure time physical activity and sitting time with sickness absence among Finnish adult population.

## Methods:

Randomly selected adults (N = 10 300, response rate 70,5 %) were asked to fill in questionnaire of the FinHealth 2017 population survey. The survey data were linked to the Finnish Social Insurance Institution's register data on sickness benefit periods (over 10 working days), including diagnoses (follow-up 2,9 years). Self-reported leisure time physical activity was classified into three groups: inactive, moderately active, and active and screen sitting time into two groups: ≤3hrs hours or less and over three hours a day, yielding a six-category variable for the joint analyses. The analytical sample were restricted to working age (18-63 years), which included 5183 participants. Associations were examined by using logistic regression analysis adjusting for key covariates with SPSS 29.

#### **Results:**

Those who were inactive and spend a lot of time sitting in front of a screen (< 3h) during leisure had a higher risk for sickness absence due to mental disorders (OR = 2,07 95% CI 1,03-4,18) than physically active low sedentary group. Also, the inactive and low sedentary group (OR = 1,69 95% CI 1,12-2,55) and the moderately active and high sedentary group (OR = 2.06, 95% CI 1.15-3.67) had a higher risk. No significant differences were found for associations due to all-cause and musculoskeletal disorders sickness absence.

## **Conclusions:**

Alongside increasing leisure-time physical activity, reducing sedentary behavior can have a positive impact on the risk of sickness absence for mental health reasons. A reduction in sedentary behavior and an increase physical activity should be encouraged.

# Key messages:

- Sedentary behavior in leisure was associated to a higher occurrence of mental health sickness absence.
- Attention should be paid to reducing sitting time and increasing physical activity.