

# STRAW PROJECT - DISENTANGLING THE SOURCES AND CONTEXT OF DAILY STRESS AT WORK

DEPARTMENT: PUBLIC HEALTH AND PRIMARY CARE – RESEARCH GROUP: EPIDEMIOLOGY AND PREVENTION

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## Introduction and novelty of the project

Over the past decades, substantial attention has been paid to research focusing on chronic exposure to psychosocial stress in occupational settings and its adverse impact on chronic disease outcomes. The influence on mental and cardiovascular health in particular has been tested and confirmed by frameworks leading in stress research, such as the Job-Demand-Control-Support model and the Effort-Reward-Imbalance model.

Our project adds new approaches to stress research by including several novel aspects; 1) we focus on **day-to-day stress** and not on chronic stress, 2) we will detect stress in **real-world settings** i.e. at work and not in lab studies in which participants get exposed to artificially created stress situations, and 3) we measure work environment risk factors (i.e. stressors), and self-perceived stress outcomes (i.e. consequences of stress) **repeatedly** i.e. more than twice, as compared to traditional longitudinal/follow-up studies. Additionally, physiological responses to stress and smartphone sensor data will be measured **continuously**.

## Research question

How are relationships between 1) **work environment risk factors** (i.e. stressors), 2) **self-perceived stress outcomes** (i.e. consequences of stress) experienced in occupational settings, 3) **physiological stress parameters**, and 4) context as inferred from **smartphone sensor data** in office-based workers - employed in academic settings - best modelled?

## Inclusion criteria for participation (N= 100)

- Healthy adults
- Employment in an academic setting independent of educational level
- Both genders (25 men and 25 women per country i.e. Belgium and Slovenia)
- Users of Android smartphones
- ≥ 80% employment (increased exposure to work environment risk factors is required)
- Agreement to install the app on their smartphone and to wear the wristband
- Allowance to participate in data collection during working hours

## Ecological Momentary Assessment (EMA)

EMA can be understood as an **electronic diary** in which participants will report repeatedly over their working day on their work environment risk factors, self-perceived stress outcomes, health-related behaviors, and activities.

The EMA protocol is being developed based on the results of a **systematic literature review** and **focus groups** conducted in Belgium and Slovenia.

Example of question about self-perceived stress outcomes

Example of question about health-related behaviors

