

# WORK ENVIRONMENT RISK FACTORS CAUSING DAY-TO-DAY STRESS IN OCCUPATIONAL SETTINGS – A SYSTEMATIC REVIEW

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

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## Introduction and Objective

The impact of chronic workplace stress on health-related outcomes like mental and cardiovascular diseases has been widely investigated. This systematic review focuses on the sources of psychosocial day-to-day workplace stress, which are measured repeatedly/continuously in real-world settings.

The **objective** is to summarise evidence on (potential) day-to-day i.e. fluctuating work environment risk factors experienced in occupational settings, showing correlations with self-perceived stress levels and/or physiological stress responses, but may or may not cause chronic stress.

## Methods

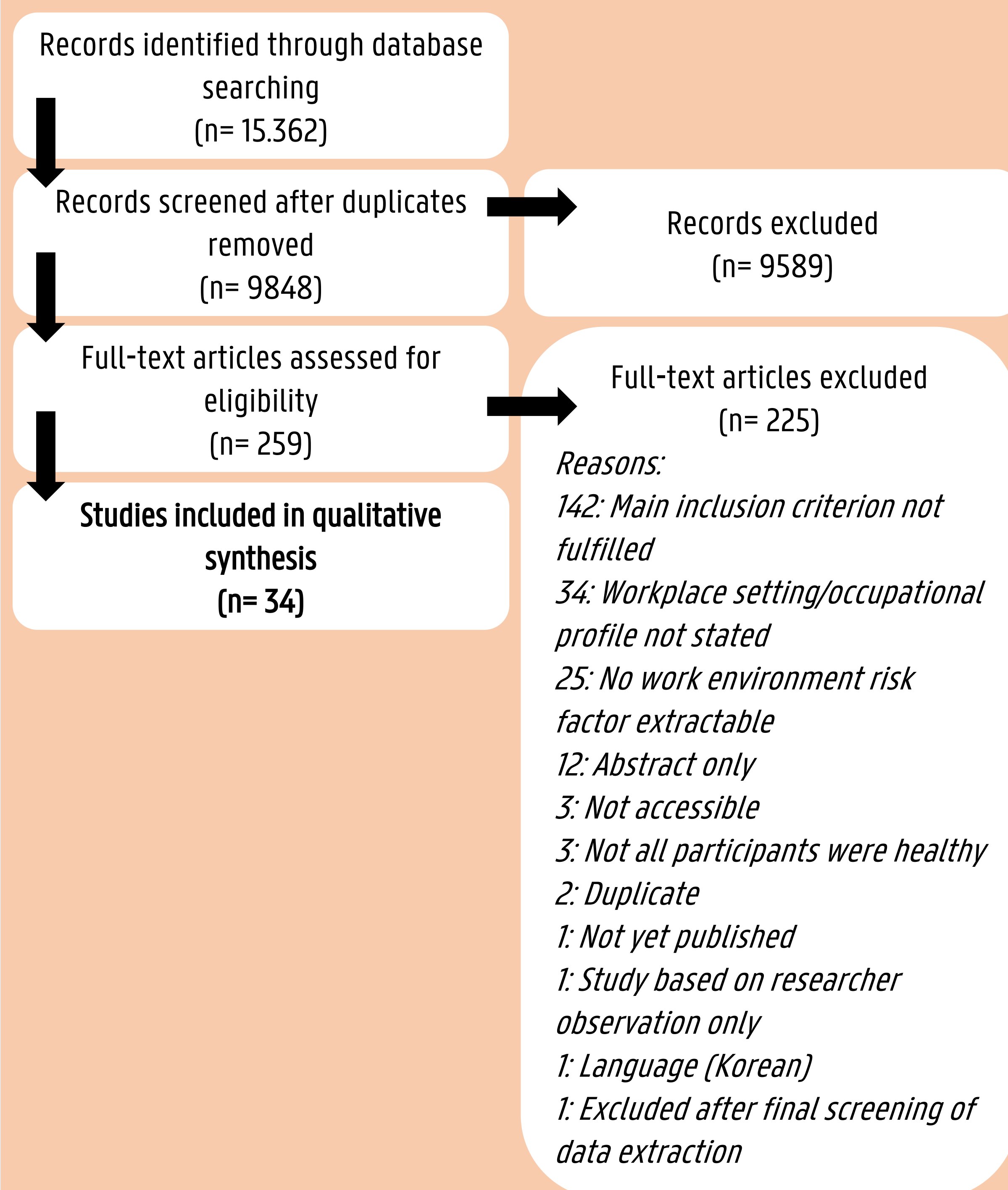
### Database search

The following databases were searched: CINAHL, Embase, ERIC, PsycARTICLES, PubMed, Scopus, and Web of Science with "English only" as a limitation criterion.

### Inclusion criteria

- Repeated/continuous measurement of work environment risk factors, and either self-perceived (stress) outcomes, or physiological stress detection, or both (main inclusion criterion)
- Studies focusing on day-to-day stress (without excluding chronic stress)
- Studies being applied in real-world working environments
- Healthy full-time and part-time workers
- Observational quantitative and mixed-methods studies (only quantitative part of the latter was of relevance)

## Study selection process



## Conclusions

- Work environment risk factors in the domains of work intensity and social environment are most prominent based on these results
- These results are relevant for **research**, since they will be implemented in our STRAW-Project, which aims to disentangle the sources and context of day-to-day workplace stress
- These results are relevant for **practice**, since they will be used for advising on workplace procedures and policies for reducing workplace stress

## Results

The work environment risk factors were categorized by job quality indices of the 6<sup>th</sup> European Working Conditions Survey by Eurofound – the broadest framework assessing job quality.

Throughout the 34 included publications, 32 work environment risk factor groups were extractable, leading either to self-perceived (stress) outcomes or physiological stress reactions, or both. Some work environment risk factors could not be categorized based on the framework. Therefore, "Commuting from and to the workplace", "Occupation-specific", and "Various" were added (in blue).

Job quality indices and work environment risk factor groups	No. of citations
Work intensity	15 / 34
Workload / job demands / mental demands / task strain	11
Time pressure	3
Effort	2
Workflow interruptions	1
Pressure	1
Working faster and working longer	1
Time spend on specific work activities	1
Role conflict	1
Working time quality	6 / 34
Overtime work / time spend on working	4
Family interference with work / work-nonwork interference / work-to-family conflict	3
Social environment	14 / 34
Social support / co-worker support / supervisor support / organizational support	6
Social interaction / social contact	5
Interpersonal conflict / social conflict / social stressors / incivility	4
Customer-related social stressors	1
Verbal interaction	1
Team cooperation	1
Transformational leadership	1
Type of communication with supervisor	1
Skills and discretion	7 / 34
Work control / situational control / autonomy	5
Illegitimate tasks	1
Task significance	1
Prospects	3 / 34
Reward	2
Workplace uncertainty	1
Commuting from and to the workplace	2 / 34
Morning commuting stressors / stressful delays during commuting	2
Time spend on commuting	1
Recovery experiences during commuting	1
Occupation-specific	6 / 34
Number of patients under care / clinical workload	5
Ambulance alarms	1
Number of emergency calls	1
Various	10 / 34
Description of hassles / stressful events / stressful situations / work-related stressors / possible cause of current heart rate	9
Description of work activities / nursing work tasks	5
Number of stressful events	1