# Methodology manual for the psychosocial workload factors survey

Occupational Safety and Health Administration

# Contents

# Introduction

This methodology manual describes the contents of the psychosocial workload factors survey and explains how the survey can be used. It is always important to get acquainted with the background, intended purpose and objectives of survey techniques before using them. Even questionnaires on the same subject can have very different objectives and target groups, which can have a significant impact on how the results should be interpreted and what conclusions can be drawn.

The psychosocial workload factors survey was originally designed to help Regional State Administrative Agencies' occupational safety and health inspectors to evaluate employers' compliance with psychosocial workload regulations. Psychosocial workload factors are factors relating to the content of work, the way in which work is organised and social dynamics at work that can have a harmful impact on workers' health. Although the survey was originally designed to help occupational safety and health inspectors, the survey can also be used independently at workplaces to identify psychosocial workload factors and analyse employees' psychosocial work environment. The questionnaire can be copied and used at workplaces as long as the Occupational Safety and Health Administration is cited as the source.

The survey was developed in response to a request by the Regional State Administrative Agency for Southern Finland by the Finnish Institute of Occupational Health in cooperation with the Regional State Administrative Agency network in 2018 and 2019. Occupational safety and health inspectors from the Divisions of Occupational Safety and Health of five Regional State Administrative Agencies contributed to the project.

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# 1. Objective of the methodology

The psychosocial workload factors survey was originally designed to help Regional State Administrative Agencies' occupational safety and health inspectors to evaluate employers' compliance with psychosocial workload regulations. Occupational safety and health authorities are responsible for ensuring that employers fulfil their obligation to prevent harmful psychosocial workloads at workplaces. Most of the psychosocial workload regulations for the enforcement of which occupational safety and health authorities are responsible are laid down in the Finnish Occupational Safety and Health Act (738/2002). The provisions of the Occupational Safety and Health Act concerning working conditions also cover psychosocial workload factors even though the Act does not mention the concept explicitly. The psychosocial workload factors survey is designed to help the authorities to enforce compliance with the provisions.

The means by which occupational safety and health authorities enforce compliance with psychosocial workload regulations are described in the Occupational Safety and Health Administration's Psychosocial Workload Enforcement Guidelines 1/2018 [1]. The aim of occupational safety and health inspections is to determine whether psychosocial workload factors have been evaluated sufficiently thoroughly and systematically in the course of employers' risk assessments and analyses. If an employer has identified any potentially harmful psychosocial workload factors or if it transpires otherwise that there are harmful psychosocial workload factors present at a workplace, inspectors must evaluate the effectiveness of the actions taken by the employer to prevent or minimise the risk to workers' health.

The Finnish Act on Occupational Safety and Health Enforcement and Cooperation on Occupational Safety and Health at Workplaces (44/2006) lays down a procedure for the enforcement of occupational safety and health regulations. According to the Act, occupational safety and health authorities and inspectors have the right to talk with workers in order to learn any information that is necessary for them to perform their enforcement duties. Most occupational safety and health inspections include an inspection round at the workplace, which is designed to familiarise the inspectors with the working conditions. This includes talking to workers and making observations about their work environment. Potential issues associated with the psychosocial work environment are, as a rule, difficult to spot during such tours. Occupational safety and health inspectors therefore need a tool that they can use to find out whether workers are suffering from unhealthy levels of psychosocial strain and to identify harmful psychosocial workload factors.

The psychosocial workload factors survey can be likened to the inspection round in order to learn about the working conditions for enforcement purposes. Occupational safety and health inspectors can use the survey to evaluate whether employers have taken sufficient steps to identify psychosocial workload factors as required under the Occupational Safety and Health Act and introduced measures to improve the working conditions. Employers' compliance with the law cannot be deduced from the workers' answers directly, but the results of the survey can provide useful information for enforcement purposes.

The survey can also be used independently at workplaces to identify psychosocial workload factors and analyse employees' psychosocial work environment. The Finnish Occupational Safety and Health Act obligates employers to identify and analyse the workload factors present in their employees' work and to evaluate the impact of those factors on their employees' health. The survey can help employers to identify psychosocial workload factors in the workplace.

# 2. Focus of the survey technique

## 2.1. Links between the demands and resources of work and workers' health

Every job includes demands as well as resources. The demands of work can begin to impact negatively on workers' health if they are expected to continuously maintain an unreasonably high level of performance and/or if they are not given enough time to recover [2]. Psychosocial workload factors can increase the risk of burnout, which in turn can damage workers' mental and physical health and work ability in the long term [3].

Job resources can help workers to deal with the demands of their work. Job resources also determine how motivated and enthusiastic workers feel about their work and their level of commitment and engagement.

The picture below (Picture 1) illustrates potential interactions and links between the job demands and job resources.

As the aim of occupational safety and health enforcement is to identify problems and weaknesses in working conditions, the psychosocial workload factors survey only studies job demands with potentially negative effects. As job resources are not covered, the survey cannot be used as a substitute for employers' internal assessments of the resources of the work community and ways in which the negative effects of workload can be counteracted by improving working conditions.

## 2.2. Psychosocial workload factors

The questionnaire focuses on the psychosocial workload factors that studies have shown to pose the highest risk. The survey identifies three different categories of psychosocial workload factors: factors relating to 1) the way in which work is organised, factors relating to 2) the nature of the work, and factors relating to 3) social interactions within the work community (see Picture 2).

In the context of occupational safety and health enforcement, psychosocial workload factors do not include business decisions made by employers (such as restructuring), factors relating to employment contracts (such as wages or fixed-term employment) or factors relating to workers' private lives (such as demands of their family) even though these may also be sources of stress. The survey therefore does not address these factors.

## 2.3. Use of the survey in different sectors of the economy

The questions are worded so as to make it possible to use the survey in different kinds of workplaces and in different sectors of the economy. Certain workload factors are more common in certain jobs or sectors, such as irregular working hours and shift work, travel and the risk of workplace violence. Respondents can skip irrelevant questions by answering "Does not apply to my work". It is also worth noting that there are scenarios that are not addressed by the survey.
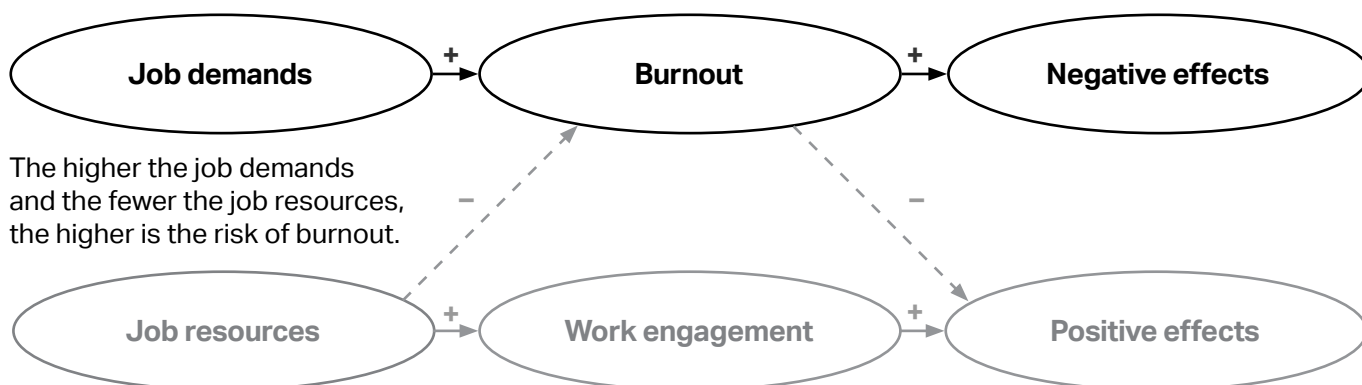


Picture 1. Links between job demands and job resources (Source: Työhyvinvoinnin myönteiset voimavarakehät − kolmen vuo-den seurantatutkimus [Positive occupational well-being resources − a three-year longitudinal study]. Hakanen J and Perho-niemi R. Finnish Institute of Occupational Health).

Workload factors
relating to
**the way in which
work is organised**

Workload factors
relating to
**to the content
of the work**

Workload factors
relating to
**the social
functionality
in the work
community**

## Workload factors relating to the way in which work is organised

1. Unclear job descriptions or responsibilities
2. Unrealistic or unreasonable goals
3. Excessive workload relative to working hours
4. Working outside regular working hours
5. Irregular working hours, shift work or night work
6. Disadvantages, faults or malfunctions related to equipment or the work environment
7. Factors interfering with concentration at work (e.g. noise)

## Workload factors relating to the content of the work

8. Lack of variation, monotony
9. Working with unclear instructions or expectations
10. Information overload or uncontrolled information flow
11. Performing several tasks simultaneously
12. Constant interruptions while working
13. High responsibility related to the work
14. Challenging or difficult work tasks
15. Challenging or difficult situations with customers
16. Threat of violence related to the job

## Workload factors relating to the social functionality in the work community

17. Problems related to mutual cooperation and interaction between colleagues
18. Lack of support from colleagues in performing the work
19. Problems related to cooperation and interaction with the supervisor
20. Lack of support from the supervisor in performing the work
21. Harassment or other recurring inappropriate treatment occurring in my work community
22. Discrimination based on age, state of health, origin, opinion or another reason related to the employee's person

Picture 2. Psychosocial workload factors featured in the survey.

# 3. Benefits

## 3.1. Use of the survey by occupational safety and health authorities

Occupational safety and health inspectors can use the survey to evaluate whether there are any potentially harmful psychosocial workloads present in a workplace and to try to pinpoint the factors causing them. The answers given to the survey can help occupational safety and health inspectors in, for example, the following ways:

1) The results can show to the inspectors that psychosocial workload needs to be looked into in more detail and allow them to focus on the aspects of psychosocial workload that are particularly relevant taking into account the conditions at the workplace.

2) The survey provides a systematic way to collect information about the work environment from workers themselves. The information provided by the survey can make it easier for the inspectors and the employer to approach the subject of workload factors during inspections.

3) Occupational safety and health inspectors can consult the answers given to the survey to evaluate whether the employer has
   - carried out a sufficiently thorough and systematic assessment of any psychosocial workload factors present in the workplace,
   - taken sufficient actions to address any workload factors identified and their potential risk to workers' health or whether they have a plan in place to do so, and
   - put efficient procedures in place for intervening in health-endangering strain sufficiently early.

4) The survey can be used to identify problems specific to each workplace that require particular attention from the perspective of enforcement. For example, the workers' answers can reveal potential issues relating to working hours, workplace violence, harassment and inappropriate treatment, or equal opportunities.

5) The results of the survey can also help inspectors to evaluate whether any deficiency identified in the course of an inspection warrants issuing an improvement notice or whether written advice will suffice. An improvement notice must be issued if a deficiency poses a more than negligible risk to workers' health.

Either all employees in a workplace or a smaller group of workers (such as one department) can be surveyed.

Occupational safety and health authorities can compare the results of a survey to results of other workplaces in the same sector of the economy. These comparisons help inspectors to make observations about the working conditions. Inspectors can also use the reference data as tangible justifications for any findings of psychosocial strain that require action from the employer.

The survey is no substitute for a physical inspection, and employers' compliance with psychosocial workload regulations cannot be deduced from their employees' answers alone. However, the answers can give inspectors an idea as to what potentially harmful workload factors may be present in the workplace. There may also be other workload factors at the workplace. The information provided by the survey can help inspectors to determine which areas to dig deeper into during inspections.

A small number of respondents can limit the usability of the survey. It is the inspectors' duty to present the results of the survey to the employer in such a format that individual respondents cannot be identified. Response rates of less than 50% increase the uncertainty of any extrapolations. However, even these kinds of results can be consulted in the course of inspections, as long as the inspectors remember that the answers are not representative of the entire work community. If the response rate is particularly low, the inspectors can talk with workers about their experiences of workload factors in person during the inspection round.

## 3.2. Use of the survey at workplaces

Employers have a legal duty to identify and analyse any hazards and risks associated with their employees' work, take steps to reduce risks and continuously monitor the effectiveness of the steps taken. Picture 3 illustrates employers' responsibilities in respect of identifying workload factors and preventing any associated harmful effects. Employers can use the psychosocial workload factors survey to identify psychosocial workload factors (step 1) and also to monitor progress (step 4). However, conclusions on the health implications of workload factors (step 2) or what action to take to address them (step 3) cannot be drawn on the basis of the survey alone. Employers can consult external specialists, such as their occupational health care provider, to help analyse the results.

**1 Identify the workload factors in the workplace**
- Checklists and questionnaires
- Interviews of staff representatives
- Job satisfaction and atmosphere surveys
- Individual performance reviews
- Records on hours worked, travel days etc.
- **Workplace investigation carried out by occupational healthcare service**

**4 Follow up the impact of the measures**
- Have harmful workloads diminished?
- Are additional measures required?
- How are the changes in working conditions taken into account?
- **Follow up the measures recommended by the occupational healthcare service**

Handled together with the OSH cooperation bodies of the workplace

**2 Assess health impacts and prioritise risks**
- Which workload factors put employees health at risk?
- Risk assessment must be based on adequate information on the health impacts of workload factors
- **Conclusions of the workplace investigation**

**3 Carry out measures to reduce risks**
- Employer's conclusions on which measures should be carried out in what time frame
- Workload factors that jeopardise employee health the most must be tackled first
- **Recommendations on measures given in the workplace investigation**

Picture 3. Employers' responsibilities in respect of identifying workload factors and preventing any associated harmful effects [4]

The workload factor questionnaire was originally designed to help occupational safety and health inspectors to perform their enforcement duties. The survey should not be used as the only way to evaluate psychosocial workload factors, and there is no evidence of its usefulness for other purposes.

The technique is only intended for collecting basic information about psychosocial workload factors present in workplaces. It is important to note that the survey does not cover all workload factors that may exist and that all potentially harmful workload factors must be identified. Workload factors relating to working hours, for example, may require a separate, more detailed assessment.

No conclusions on what steps should be taken to address potentially harmful workload factors can be drawn from the results of the survey alone. However, the results can give employers an idea as to what kinds of factors to look out for. The results should be discussed with the employees and analysed in order to determine how prevalent the identified workload factors are in different kinds of jobs. Employers can also ask workers to describe how any potentially harmful workload factors affect them personally in connection with the survey. This gives them information about the situation in respect of different jobs.

It is important to remember that the survey does not factor in job resources. The survey focuses exclusively on workload factors and does not take into account any resources that make it easier for workers to deal with the harmful consequences of psychosocial strain. Conclusions on the health implications of workload factors or what action to take to address them cannot therefore be drawn on the basis of the survey alone. The circumstances in each workplace must always be analysed holistically.

Employers can also use the survey to monitor how effective the steps taken to reduce harmful psychosocial workload have been by repeating the survey at regular intervals. Workers' answers to subsequent surveys give the employer an idea of whether the situation has improved or whether further action is needed.

# 4. Questionnaire

The survey identifies three different categories of psychosocial workload factors: factors relating to 1) the way in which work is organised, factors relating to 2) the content of the work, and factors relating to 3) social interactions within the work community. The reasons why each of these themes is featured in the survey and what workers are asked in respect of each category are described below.

The survey is designed to provide information about longer-term work-related strain that can pose a risk to workers' health. Respondents are asked to base their answers on their experiences during the previous six months. The survey consists of 22 questions relating to specific psychosocial workload factors and one generic question concerning the perceived effect of psychosocial workload on each respondent's health. The last question is designed to gauge whether individual respondents have noticed any negative effects resulting from their workload on the whole.

Only the last question (No 23) addresses the potentially harmful impact of workload on health. The other questions are designed to collect information about the prevalence of individual workload factors, which is not a direct measure of their potential health implications. Respondents may identify multiple workload factors that are only minor sources of strain individually but that together affect their health. Alternatively, there may be a single factor that is putting a considerable strain on a respondent, but the resources that they have available are keeping the strain from damaging their health. Question No 23 is designed to provide more information about whether or not the individual workload factors are causing enough strain to put workers' health at risk.

Some of the questions (such as the ones about inappropriate treatment at work and challenging interactions with customers) relate to psychosocial workload factors that are usually easy to identify. More and more professions and jobs now make high cognitive demands on workers, which is why cognitive workload has become an increasingly important element of psychosocial workload. The psychosocial workload factors survey consequently includes several questions that relate to cognitive workload factors. Examples include questions No 6 and No 7, which relate to equipment and distractions, and questions No 10, No 11 and No 12, which relate to information overload and interruptions.

## 4.1. Response scale

Respondents are asked to use a scale of 1 to 5 to indicate how much, if any, strain each of the workload factors asked about has caused them (1 = 'Has not caused strain at all' and 5 = 'Has caused strain very often'). The more often individual factors are identified as sources of strain, the higher is therefore the numerical value. This scale was chosen to help occupational safety and health authorities to identify workload factors that could, if not addressed, lead to health problems resulting from work-related strain in the long term.

In other words, the scale is only designed to measure the level of strain. The fact that an individual workload factor is not identified as a source of strain cannot be interpreted as meaning that everything is fine in that respect or that the factor in question is actually a resource for workers. The scale only provides information about whether a workload factor is or is not a source of strain. Identifying job resources at the same time would require a response scale where one extreme was that 'The situation is extremely bad' and the other that 'The situation is extremely good'.

There is a sixth option for respondents who, for one reason or another, cannot rate a factor or feel that the question does not apply to their work. 'Does not apply to my work' answers are not analysed numerically, and they therefore do not affect the average score.

## 4.2. Workload factors relating to the way in which work is organised

### 4.2.1 Duties, targets and workload

| How often have the following issues caused you harmful strain at work during the past six months? | Not at all | Rarely | Occasionally | Fairly often | Very often | Does not apply to my work |
|---|---|---|---|---|---|---|
| 1. Unclear job descriptions or responsibilities | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. Unrealistic or unreasonable goals | 1 | 2 | 3 | 4 | 5 | 6 |
| 3. Excessive workload relative to working hours | 1 | 2 | 3 | 4 | 5 | 6 |

Unclear job descriptions or responsibilities can be a significant psychosocial workload factor and, if the situation is not resolved, have a negative impact on workers' health. Studies show, among other things, that confusion over goals or conflicts between targets and an individual's personal expectations of their work can lead to psychosocial strain and burnout [5]. A healthy organisation has a clearly defined mission, which both helps the organisation to succeed and employees to thrive. The mission should be reflected in each employee's job description and targets, making it easier for them to understand the purpose of their work and their role in the organisation. This also calls for a clear division of roles and responsibilities and clear organisation of work. Clear targets help to prevent uncertainty and give employees a better idea of how they are meant to perform and what they are meant to achieve. Goals must be unambiguous, logical and meaningful.

In the case of matrix and project organisations, it is especially important to ensure that each individual's job description, responsibilities and targets are both clear and realistic. Even line managers may not have a clear idea of individual employees' actual workload in these kinds of circumstances. If more than one person is overseeing an individual's work, their duties, targets, role and workload must be reviewed at regular intervals both with the individual in question and within the working group. Talking openly about any problems and

challenges should be encouraged, and there should be a clear procedure in place for overcoming such issues. The biggest risk in these kinds of situations relates to individuals feeling that they have no say in their own circumstances, that their voice is not heard even when they face problems and that they are not supported.

Unrealistic or unreasonable goals can cause harmful strain in two principal ways. Firstly, unrealistic goals often lead to a sense of lack of control, which is known to increase the risk of cardiovascular diseases [6]. Secondly, unreasonable targets can cause individuals to take on more work than they can handle and make them rush (see next paragraph). Studies show that high expectations and lack of influence at work are the biggest causes of dangerous levels of work-related strain. In addition to mental exhaustion and burnout, this kind of strain also increases the risk of heart disease [7].

Excessive workloads, falling behind and always being busy are known causes of exhaustion and stress, mistakes and burnout [8, 5]. There is also some evidence of these factors being linked to heart disease, musculoskeletal disorders, mental health issues and depression [9]. Giving employees more control over their work (by means of flexitime, for example) can help to counteract the negative effects of heavy workloads. Trying to cram too much work into too little time also increases the risk of accidents [10].

## 4.2.2 Working hours

| How often have the following issues caused you harmful strain at work during the past six months? | Not at all | Rarely | Occasionally | Fairly often | Very often | Does not apply to my work |
|---|---|---|---|---|---|---|
| 4. Working outside regular working hours | 1 | 2 | 3 | 4 | 5 | 6 |
| 5. Irregular working hours, shift work or night work | 1 | 2 | 3 | 4 | 5 | 6 |

The risk of accidents and injuries increases with long working hours and shifts. Having to continuously work overtime or long hours otherwise increases the risk of coronary heart disease and reduces cognitive function [11, 12].

Not being able to take breaks or not having enough time off between shifts can harm workers' health [13].

There is a large body of scientific evidence that shows that working more than 40 hours per week on average, and especially more than 50 hours per week on average, lowers performance and increases the risk of, for example, coronary heart disease and depression [11, 14]. The European Working Time Directive (and the 2020 version of the Finnish Working Hours Act) recommends working no more than 40 hours per week, which is a good benchmark for all sectors of the economy. The recommendation is based on limiting work to approximately eight hours per day in order to leave enough time for other activities as well as rest (i.e. sleep). Individuals whose work involves a lot of travel can also end up working long days [15], which causes strain.

The European Working Time Directive recommends allowing at least 11 hours for rest each day and leaving at least 11 hours for other activities and sleep between two periods of work.

Studies show that, in the context of shift work, period-based (irregular) work and night work, short intervals (of less than 11 hours) between periods of work increase fatigue, the risk of sleep disorders, dissatisfaction with one's work–life balance and the likelihood of sickness absences [16].

## 4.2.3 Equipment, work environment and distractions

| How often have the following issues caused you harmful strain at work during the past six months? | Not at all | Rarely | Occasionally | Fairly often | Very often | Does not apply to my work |
|---|---|---|---|---|---|---|
| 6. Disadvantages, faults or malfunctions related to equipment or the work environment | 1 | 2 | 3 | 4 | 5 | 6 |
| 7. Factors interfering with concentration at work (e.g. noise) | 1 | 2 | 3 | 4 | 5 | 6 |

Disadvantages, faults or malfunctions related to equipment or the work environment include a wide range of factors that can make work more difficult or less enjoyable in a number of ways. Problems relating to equipment and the work environment that keep recurring and causing frequent interruptions are particularly stressful. Recurring issues with equipment often lead to more work and delays, which in turn can cause harmful psychosocial strain and increase the risk of cardiovascular diseases due to excessive workloads and tight schedules [5, 9]. Almost all work requires interaction with information technology these days. Equipment and procedures that are at odds with people's information processing abilities and limitations can be a source of work-related strain [17].

Having to work in a badly designed environment and with malfunctioning equipment can be both cognitively and emotionally taxing. Physical factors, chemical or biological agents, or the risk of accidents can also contribute to psychosocial strain if they cause workers to worry.

Distractions, such as background noise or other people talking or moving around the workspace, can be a significant psychosocial workload factor for employees who feel that they are frequently interrupted and prevented from doing their work. Interruptions are known to increase mental workload [18] and the risk of cognitive mistakes and "near-accidents" [19]. Even low levels of noise can affect workers mentally. Noise stimulates the nervous system and the brain and can even influence internal organs. Noise can also make it more difficult to concentrate and increase blood pressure [20].

Many jobs require attention to detail and high levels of concentration. Knowledge-intensive and cognitively challenging tasks are performed in many different kinds of work environments, from traditional factories to modern activity-based offices. Cognitive workload factors in a work environment can relate either to the nature of the work itself (e.g. poor lighting that makes it difficult to read instructions) or to distractions that make it more difficult to concentrate on the task at hand. In activity-based offices, for example, even faint sounds can cause lapses in concentration and interfere with working memory [21]. It is especially challenging not to be distracted by discernible speech and movement. In open-plan offices, particular attention must be given to layout, acoustics, the availability of secluded workspaces and sound insulation. Ignoring these issues can lead to employees suffering from psychosocial strain. The recent increase in mobile work and working in multiple locations has created new challenges in terms of distractions. In addition to their own offices, employees these days need to be able to work at customer sites, at home, in hotels, in public places and on public transport.

## 4.3. Workload factors relating to the content of the work

Workload factors relating to the content of work are factors associated with the nature of individuals' work tasks.

### 4.3.1 Monotony

| How often have the following issues caused you harmful strain at work during the past six months? | Not at all | Rarely | Occasionally | Fairly often | Very often | Does not apply to my work |
|---|---|---|---|---|---|---|
| 8. Lack of variation, monotony | 1 | 2 | 3 | 4 | 5 | 6 |

Lack of variation, or monotony, can be a source of psychosocial strain, as it often also means having little control and few opportunities to learn and progress. Having to perform menial tasks lowers work motivation and can cause workers to feel redundant. Lack of challenges and opportunities for learning reduces job satisfaction, increases stress levels and can lead to burnout [22, 23, 24]. Stimulating work also keeps workers' minds active. Lack of stimulation can affect the alertness of workers who are already fatigued by, for example, insufficient sleep or long working hours [25].

## 4.3.2 Unclear instructions and information overload

| How often have the following issues caused you harmful strain at work during the past six months? | Not at all | Rarely | Occasionally | Fairly often | Very often | Does not apply to my work |
|---|---|---|---|---|---|---|
| 9. Working with unclear instructions or expectations | 1 | 2 | 3 | 4 | 5 | 6 |
| 10. Information overload or uncontrolled information flow | 1 | 2 | 3 | 4 | 5 | 6 |

Not having clear instructions can cause harmful psychosocial strain just as having unclear goals and expectations [5]. Unclear instructions and expectations are one of the biggest sources of cognitive strain among, for example, health care professionals [26]. Even if workers are given clear targets, they can feel overwhelmed if the instructions or procedures that they are meant to follow are inconsistent or if it is unclear which set of instructions should be followed. The ability to plan ahead makes workers feel more in control. Unclear instructions and expectation make work less predictable. Unpredictability adds to perceived workload and is known to increase the risk of heart disease [27].

Information overload and uncontrolled information flows are new psychosocial workload factors introduced by modern society. Studies show that information overload is linked to, for example, higher perceived stress levels and health issues [28]. The amount of information that workers have to deal with in today's information society and labour market is many times higher than in past decades. The ability to recognise relevant information and use it correctly has become a vital skill in many professions. The amount of information is not in itself a workload factor, but problems can arise if too much information comes in at too high a rate. Another typical issue often associated with information overload is workers' frustration with not being able to find the information that they need.

### 4.3.3 Multitasking and interruptions

| How often have the following issues caused you harmful strain at work during the past six months? | Not at all | Rarely | Occasionally | Fairly often | Very often | Does not apply to my work |
|---|---|---|---|---|---|---|
| 11. Performing several tasks simultaneously | 1 | 2 | 3 | 4 | 5 | 6 |
| 12. Constant interruptions while working | 1 | 2 | 3 | 4 | 5 | 6 |

Having to perform several tasks at the same time can cause psychosocial strain in multiple ways. Firstly, multitasking is known to lower performance and increase perceived workload [29]. The human brain is ill-equipped for multitasking, which can easily make this kind of work feel fragmented. Workers find themselves having to split their tasks into smaller and smaller components, focus more and switch frequently between jobs. Having many simultaneous or overlapping tasks also makes work less predictable and more difficult to plan. Lack of control is known to increase the risk of, among other things, coronary heart disease and depression [30]. Office workers, for example, may need to take notes, monitor their e-mail, answer the telephone and converse with their colleagues simultaneously. Many think about this way of working as being effective and rewarding but, in reality, our ability to multitask effectively is relatively limited. Frequent interruptions and random distractions are known to create more work and make workers feel less in control [31].

Interruptions increase psychosocial workload, and studies in the health care sector, for example, show that they cause both irritation and mistakes and reduce job satisfaction [32]. In this context, 'interruption' refers to something that causes a worker to stop doing what they are doing in order to do something else in between. It takes time to shift one's focus to a new task, and resuming the original task afterwards requires the worker to reacquaint themselves with the details [33]. Frequent interruptions therefore mean that each task takes longer to perform. On the other hand, some workers tend to work harder to finish any tasks that have been interrupted, which is known to increase subjective stress levels [34].

Interruptions as tangible situations are manifestations of constant change (and uncertainty). Interruptions have a direct impact on cognitive function and the ability to plan ahead, which are vital in knowledge-intensive work [35]. Dealing with interruptions takes time and increases the risk of mistakes and, along with other job demands, drains workers' resources. The most draining are situations where the original task and the task that interrupts the original task require different kinds of knowledge, which forces the worker to split their focus during transitions from one task to the other [36]. However, some interruptions can be useful. For example, an interruption can involve a worker learning a new piece of information that makes it easier for them to complete their task or sharing their knowledge with a colleague in order to help them with theirs. Completing a task can create a sense of relief [37].

## 4.3.4 Challenging or high-responsibility work and the risk of workplace violence

| How often have the following issues caused you harmful strain at work during the past six months? | Not at all | Rarely | Occasionally | Fairly often | Very often | Does not apply to my work |
|---|---|---|---|---|---|---|
| 13. High responsibility related to the work (e.g. responsibility over the safety and health of others or financial accountability) | 1 | 2 | 3 | 4 | 5 | 6 |
| 14. Challenging or difficult work tasks | 1 | 2 | 3 | 4 | 5 | 6 |
| 15. Challenging or difficult situations with customers | 1 | 2 | 3 | 4 | 5 | 6 |
| 16. Threat of violence related to the job | 1 | 2 | 3 | 4 | 5 | 6 |

High-responsibility jobs are mentally draining and known stressors especially when combined with little control and scant support from the work community [38]. Having too much responsibility increases the risk of heart disease especially among less physically active workers [39]. High-powered jobs cause particular strain when the worker's powers and responsibilities are not commensurate with the burden. Especially managers and executives can have a lot of financial responsibility. Health care workers are responsible for the health and life of others.

Challenging or difficult tasks can cause psychosocial strain especially if workers are unable to leave work behind when they are off duty [40]. High expectations at work are known to be linked to mental exhaustion, psychosomatic disorders and the inability to detach oneself from one's work [40]. The combination of high expectations and lack of control has been proven to increase the risk of, for example, fatal heart disease [41]. Work must be challenging, but it must not be continuously too difficult or complex. High (quantitative and) qualitative job demands are likely to make work a dominant force in an individual's life, which can lead to burnout [42].

Challenging or difficult interactions with customers are psychosocial workload factors especially among customer service and health care professionals. For example, worry over complaints and patients' unrealistic expectations are known to affect doctors' mental health [43]. Challenging or difficult interactions with customers and the resulting negative feelings are mentally draining. These negative effects are particularly common among workers who need to establish long-term relationships with patients or students. Such interactions are rarely reciprocal, which can be disheartening. The need to hide one's own feelings when interacting with customers is also known to increase the risk of mental health problems [44]. Having to fake emotions leads to similar psychosomatic effects. Having to deal with the negative emotions of others causes stress and increases the risk of depression [45]. Open discussions about difficult customers with colleagues and, if necessary, supervisors relieves the strain.

The risk of workplace violence is a major psychosocial workload factor, as it can cause workers to feel unsafe and worry about their own health [46] as well as creating a sense of lack of control [47]. Experiences of workplace violence are known to affect stress levels, productivity and performance [48]. It is also known that awareness of the risk of violence alone is enough to cause stress and other mental and physical symptoms [49].

## 4.4. Workload factors relating to the social functionality in the work community

Workload factors relating to the social functionality in the work community are factors associated with social dynamics and interaction in the workplace.

### 4.4.1 Interaction and cooperation among workers

| How often have the following issues caused you harmful strain at work during the past six months? | Not at all | Rarely | Occasionally | Fairly often | Very often | Does not apply to my work |
|---|---|---|---|---|---|---|
| 17. Problems related to mutual cooperation and interaction between colleagues | 1 | 2 | 3 | 4 | 5 | 6 |
| 18. Lack of support from colleagues in performing the work | 1 | 2 | 3 | 4 | 5 | 6 |

Lack of cooperation and interaction between workers can be a source of psychosocial strain, as it not only affects workers emotionally but can also have a direct impact on performance (due to, for example, lack of communication). Alongside the meaningfulness of work and clear job descriptions, social relationships and trust within a work community are known to be among the most important positive psychosocial factors that promote workers' well-being[44]. Efficient cooperation within a work community and with partners and customers requires healthy interaction. Both colleagues and managers can be a source of social support. Lack of support and toxic relationships have a negative impact on well-being and increase stress levels [50]. Most jobs involve a lot of interaction both within one's own team and with other members of the organisation. Access to help and support and healthy relationships are vital from the perspective of mental workload. The frequency, duration and quality of interactions are also important.

Lack of support from colleagues can be a major source of psychosocial strain for workers with challenging jobs. Epidemiological studies show that lack of social support at work increases the risk of stress-related disorders [50] and coronary heart disease [51]. The risk of burnout is known to increase as support from colleagues and managers decreases, while an increase in feedback and praise boosts work motivation. Working alone is an extreme example of a situation where there is a total lack of support from colleagues.

## 4.4.2 Interaction and relationships with managers

| How often have the following issues caused you harmful strain at work during the past six months? | Not at all | Rarely | Occasionally | Fairly often | Very often | Does not apply to my work |
|---|---|---|---|---|---|---|
| 19. Problems related to cooperation and interaction with the supervisor | 1 | 2 | 3 | 4 | 5 | 6 |
| 20. Lack of support from the supervisor in performing the work | 1 | 2 | 3 | 4 | 5 | 6 |

Problems with relationships and interaction with managers can be a source of psychosocial strain that has a direct negative impact on workers emotionally as well as often leaving them feeling as if they have little social support [50]. Pressure at work and lack of organisational support are believed to be two of the most important work-related stressors [52], and both are within the management's control. Management and leadership together are the single most important factor affecting job satisfaction and sickness absences. Efficient management and leadership promote well-being at work and improve performance.Interactive and inclusive management styles increase workers' well-being by helping them to see their role as part of the bigger picture and encouraging them to come up with innovative solutions. Unfair decisions can increase mental health problems and therefore sickness absences as well as the risk of serious heart conditions. Task-specific management styles that take advantage of goal-setting and feedback also promote well-being.

Lack of support from managers is a key psychosocial workload factor especially among workers with challenging jobs and overworked employees. On the other hand, lack of managerial and organisational support and unfairness are known to have a negative impact on subjective health regardless of any psychosocial stressors at work [53]. Giving social feedback allows managers to show their interest in each individual. For feedback to have a positive impact, it must be fair and proportional to each individual's work and input. Negative or unfair feedback causes stress and lowers work motivation. Managers can also use feedback as a way to show appreciation. Feeling appreciated increases workers' well-being and promotes health, while its absence lowers motivation and feeds negative emotions. [42]

### 4.4.3 Harassment or other recurring inappropriate treatment occurring in my work community

| How often have the following issues caused you harmful strain at work during the past six months? | Not at all | Rarely | Occasionally | Fairly often | Very often | Does not apply to my work |
|---|---|---|---|---|---|---|
| 21. Harassment or other recurring inappropriate treatment occurring in my work community | 1 | 2 | 3 | 4 | 5 | 6 |
| 22. Discrimination based on age, state of health, origin, opinion or another reason related to the employee's person | 1 | 2 | 3 | 4 | 5 | 6 |

Harassment and other forms of recurring inappropriate treatment at work can be a major source of psychosocial strain that can even lead to severe post-traumatic stress [54]. Bullying and psychological abuse at work are a threat to workers' mental and physical health. Meta-analyses show that workplace bullying is linked to, among other things, psychological and physical problems, burnout and lack of job satisfaction [55]. Bullying causes high levels of stress, anxiety and depression. Even members of the work community who are not bullied themselves can suffer from workplace bullying. The effects of sexual harassment on well-being and health are similar [16].

Discrimination refers to unfair or inappropriate treatment of individuals based on their age, health, origin, opinion or other personal characteristics. Discrimination in general is known to be linked to workers' health [56], and discrimination based on origin, for example, appears to have negative health implications [57]. Ageism has been studied from the perspective of both young people and the elderly. Unfair treatment reduces job satisfaction and increases the risk of health issues such as fatigue, anxiety and depression [16]. Combined with job insecurity, unfair decisions that single out individual workers in an organisation are known to lead to more frequent sickness absences [58]. Unfair treatment is known to impact negatively on workers' well-being [59].

## 4.5. Health-endangering work-related strain

| | Not at all | Rarely | Occasionally | Fairly often | Very often |
|---|---|---|---|---|---|
| 23. Does your work cause such workloads, which weaken your physical or mental health? | 1 | 2 | 3 | 4 | 5 |

The other questions in the survey are designed to provide information about individual psychosocial workload factors, whether these factors are causing the respondents strain and whether there are any risk factors that can have negative implications on health. Psychosocial strain does not necessarily lead to negative effects, if workers also have access to resources to deal with the strain or if there is a system in place for reducing the risks. The last question is designed to give occupational safety and health inspectors more information about any potential negative effects of work-related strain in general. However, it is important to analyse respondents' answers to this question keeping in mind that it is not just psychosocial factors that contribute to perceived strain.

Work-related strain can lead to health problems over time, if workers do not get a chance to recover or if their workloads are particularly high or the same issue keeps recurring. There are also factors that can damage health the very first time they occur.

# References

[1] Työsuojeluvalvonnan ohjeita 1/2018. Psyko-sosiaalisen työkuormituksen valvonta.

[2] Sonnentag, S. and Zijlstra, F.R. (2006). Job Characteristics and Off-Job Activities as Predictors of Need for Recovery, Well-Being, and Fatigue. Journal of Applied Psychology, 91, 330-350. http://dx.doi.org/10.1037/0021-9010.91.2.330

[3] Hakanen, J. & Perhoniemi, R. (2007). Työ-hyvinvoinnin myönteiset voimavarakehät – kolmen vuoden seurantatutkimus. Työterveyslaitos. Loppuraportti. 62 s. Saatavissa: https://docplayer.fi/2911506-Tyohyvinvoinnin-myonteiset-voima-varakehat-kolmen-vuoden-seurantatutkimus.html

[4] Työsuojeluhallinnon julkaisuja 2/2017. Psykososiaalinen kuormitus työpaikalla.

[5] Schaufeli W. & Enzmann D. (1998). The burnout companion to study and practice: A critical analysis. Taylor & Francis, London.

[6] Bosma Hans, Marmot Michael G, Hemingway Harry, Nicholson Amanda C, Brunner Eric, Stansfeld Stephen A et al. (1997). Low job control and risk of coronary heart disease in whitehall ii (prospective cohort) study BMJ; 314 :558

[7] Kuper, H. & Marmot, M. (2003). Job strain, job demands, decision latitude, and risk of coronary heart disease within the Whitehall II study. Journal of Epidemiology & Community Health 57, s. 147–153

[8] Karasek R & Theorell T. (1990). Healthy Work. Basic Books Publishers, New York. 392 s.

[9] Honkonen T, Lindström K & Kivimäki M. (2003). Psykososiaalinen työkuormitus mielenterveydenhäiriöiden etiologiassa. Duodecim 119, s. 1327–1333.

[10] Salminen, S., Perttula, P., Hirvonen, M., Perkiö-Mäkelä, M. & Vartia, M. (2017). Link between haste and occupational injury. Work 56, pp. 119–124.

[11] Virtanen, M., Heikkilä, K., Jokela, M., Ferrie, J., Batty, G., Vahtera, J. & Kivimäki, M. (2012). Long Working Hours and Coronary Heart Disease: A Systematic Review and Meta-Analysis, American Journal of Epidemiology, Volume 176, Issue 7, Pages 586–596. https://doi.org/10.1093/aje/kws139

[12] Virtanen, M., Singh-Manoux, A., Ferrie, J., Gimeno, D., Marmot, M., Elovainio, :, Jokela, M., Vahtera, J. & Kivimäki, M. (2009). Long Working Hours and Cognitive Function: The Whitehall II Study, American Journal of Epidemiology, Volume 169, Issue 5, Pages 596–605, https://doi.org/10.1093/aje/kwn382

[13] Työterveyslaitos. 2019. Työaikojen kuormittavuuden arviointi. Saatavissa: https://www.ttl.fi/tyontekija/tyoaika/tyoaikojen-kuormittavuuden-arviointi

[14] Virtanen, M., Stansfeld, SA., Fuhrer, R., Ferrie, JE. & Kivimäki, M. (2012). Overtime Work as a Predictor of Major Depressive Episode: A 5-Year Follow-Up of the Whitehall II Study. PLoS ONE 7(1): e30719. https://doi.org/10.1371/journal.pone.0030719

[15] Bergbom, B., Vesala, H., Leppänen, A., Sainio, M., Mukala, K. & Smolander, A. (2011). Kansainvälisten työmatkojen kuormittavuus sekä terveys- ja hyvinvointivaikutukset. Työterveyslaitos. Saatavissa: https://www.tsr.fi/documents/20181/40645/107078Loppuraportti.pdf/4c19d668-2052-4f85-904c-30e016a2ee8b

[16] Ahola, K., Aminoff, M., Hannonen, H. ym. Työkuormituksen arviointimenetelmä TIKKA. 2015. Työterveyslaitos, Helsinki.

[17] Työterveyslaitos. Kognitiivinen ergonomia. Saatavissa: https://www.ttl.fi/tyontekija/aivot-tyossa/aivojen-hyvinvointi/

[18] Weigl, M., Müller, A., Angerer, P., ym. (2014). Workflow interruptions and mental workload in hospital pediatricians: an observational study. BMC Health Serv Res;14:433–439.

[19] Elfering, A., Grebner, S. & Ebener, C. (2015). Workflow interruptions, cognitive failure and near-accidents in health care, Psychology, Health & Medicine, 20:2, 139–147, DOI: 10.1080/13548506.2014.913796

[20] Launis, M. & Lehtelä, J. (toim.). (2011). Ergonomia. Työterveyslaitos, Tampere 2011. 406 s.

[21] Haka, M., Haapakangas, A., Keränen, J., Hakala, J., Keskinen, E. and Hongisto, V. (2009). Performance effects and subjective disturbance of speech in acoustically different office types – a laboratory experiment. Indoor Air, 19: 454-467. doi:10.1111/j.1600-0668.2009.00608.x

[22] Johansson, G. (1989). Stress, autonomy, and the maintenance of skill in supervisory control of automated systems. Journal of Applied Psychology 38, 1:45–46.

[23] Borritz, M., Bültmann, U., Rugulies R ym. (2005). Psychosocial work characteristics as predictors for burnout: findings from 3-year follow-up of the PUMA Study. Journal of Occupational and Environmental Medicine 47, 10: 1015–1025.

[24] Schütte, S., Chastang, JF., Malard, L. et al. (2014). Psychosocial working conditions and psychological well-being among employees in 34 European countries. Int Arch Occup Environ Health 87: 897.

[25] Richter, S ., Marsalek, K., Glatz, C. & Gundel, A. (2005). Task-dependent differences in subjective fatigue scores. Journal of Sleep Research, 14: 393–400. doi:10.1111/j.1365-2869.2005.00473.x

[26] Kalakoski, V., Käpykangas, S., Valtonen, T., Selinheimo, S., Koivisto, T., Paajanen, T., & Louhimo, R. (2018). Kognitiivisen ergonomian parantaminen hoitotyössä: Satakunnan sairaanhoitopiirin kehittämishanke. Työterveyslaitos.

[27] Väänänen, A., Koskinen, A., Joensuu, M., Kivimäki, M., Vahtera, J., Kouvonen, A. & Jäppinen, P. (2008). Lack of Predictability at Work and Risk of Acute Myocardial Infarction: An 18-Year Prospective Study of Industrial Employees. American Journal of Public Health 98, 2264_2271.

[28] Misra, S., & Stokols, D. (2012). Psychological and Health Outcomes of Perceived Information Overload. Environment and Behavior, 44(6), 737–759. https://doi.org/10.1177/0013916511404408

[29] Paridon, H. & Kaufmann, M. (2010). Multitasking in work-related situations and its relevance for occupational health and safety: Effects on performance, subjective strain and physiological parameters. Europe's Journal of Psychology, North America, 6.

[30] Karasek, R. (1990). Lower health risk with increased job control among white collar workers. J. Organiz. Behav., 11: 171–185. doi:10.1002/job.4030110302

[31] Kalliomäki-Levanto, T. (2009). Keskeytykset ja katkokset työn etenemisessä: edeltävät tekijät, epäjatkuvuusolosuhteet ja selviytyminen tietotyössä. Työ ja ihminen tutkimusraportti 36. Helsinki, Työterveyslaitos.

[32] Baethge, A. & Rigotti, T. (2013). Interruptions to workflow: Their relationship with irritation and satisfaction with performance, and the mediating roles of time pressure and mental demands, Work & Stress, 27:1, 43–63, DOI: 10.1080/02678373.2013.761783

[33] Trafton, J. G., Altmann, E. M., Brock, D. P., & Mintz, F. E. (2003). Preparing to resume an interrupted task: effects of prospective goal encoding and retrospective rehearsal. International Journal of Human-Computer Studies, 58(5), 583–603. doi:10.1016/S1071-5819(03)00023-5

[34] Mark, G., Gudith, D. & Klocke, U. (2008). The cost of interrupted work: more speed and stress. Proceedings of the SIGCHI (Conference on Human Factors in Computing Systems) p. 107–110.

[35] Kalliomäki-Levanto, T., Ukkonen, A., & Kalakoski, V. (2016). Ratkaisuehdotuksia keskeytyvään työhön: Keskeyttävien työolomuutosten ennakointimalli tietointensiivisen työskentelyn parantamiseksi. Työterveyslaitos: Julkari http://urn.fi/URN:ISBN 978-952-261-684-5 (pdf)

[36]  Frese, M., & Zapf, D. (1994). Action as the core of work psychology: A German approach. In H.C. Triandis, M.D. Dunnette & L.M. Hough (Eds.), Handbook of industrial and organizational psychology, Vol. 4, 2nd ed. (pp. 271–340). Palo Alto, CA, US: Consulting Psychologists Press.

[37]  Sonnentag, S., Reinecke, L., Mata, J., & Vorderer, P. (2018). Feeling interrupted—Being responsive: How online messages relate to affect at work. Journal of Organizational Behavior, 39(3), 369–383. doi:10.1002/job.2239

[38]  Berland, A., Natvig, G. & Gundersen, D. (2008). Patient safety and job-related stress: A focus group study. Intensive and Critical Care Nursing, Volume 24 (2), Pages 90–97.

[39]  Menotti, A. & Seccareccia, F. (1985). Physical activity at work and job responsibility as risk factors for fatal coronary heart disease and other causes of death. Journal of Epidemiology & Community Health 39:325–329.

[40]  Sonnentag, S., Binnewies, C., & Mojza, E. J. (2010). Staying well and engaged when demands are high: The role of psychological detachment. Journal of Applied Psychology, 95(5), 965–976.

[41]  Kivimäki, M., Leino-Arjas, P., Luukkonen, R., Riihimäki, H., Vahtera, J., Kirjonen, J. et al. (2002). Work stress and risk of cardiovascular mortality: prospective cohort study of industrial employees BMJ 325 :857.

[42]  Tuomivaara, S., Leppänen, A. & Kalimo, R. (2002). Journalistien työuupumusta ennustavat tekijät. Työ ja ihminen 16 (3), s. 270–285.

[43]  Cooper, C., Rout, U. & Faragher. B. (1989). Mental health, job satisfaction, and job stress among general practitioners. British Medical Journal 298: 366.

[44]  Freimann, T., & Merisalu, E. (2015). Work-related psychosocial risk factors and mental health problems amongst nurses at a university hospital in Estonia: A cross-sectional study. Scandinavian Journal of Public Health, 43(5), 447–452. https://doi.org/10.1177/1403494815579477

[45]  Molander, G. (2003). Työtunteet – esimerkkinä vanhustyö. Työterveyslaitos, Helsinki 2003.

[46]  Fagerström, V., Länsikallio, R. & Sipponen, J. (2015). Stop väkivallalle kouluissa ja päiväkodissa. Työterveyslaitos, Tietoa Työstä, 53 s. Saatavissa: http://urn.fi/URN:ISBN%20978-952-261-529-9%20 (PDF)

[47]  Rodwell, J. & Demir, D. (2014). Addressing workplace violence among nurses who care for the elderly. The Journal of Nursing Administration 4(3):152-157

[48]  Gates, DM., Gillespie, GL., Succop, P. (2011). Violence against nurses and its impact on stress and productivity Nurs. Econ. 29(2): 59–66.

[49]  Leino T. (2013). Work-related violence and its associations with psychosocial health: a study of Finnish police patrol officers and security guards. People and work research reports 98. Finnish Institute of Occupational Health, 13–82.

[50]  Nieuwenhuijsen, K., Bruinvels, D. & Frings-Dresen, M. (2010). Psychosocial work environment and stress-related disorders, a systematic review, Occupational Medicine, Volume 60, Issue 4, Pages 277–286, https://doi.org/10.1093/occmed/kqq081

[51]  Barth, J., Schneider, S. & von Känel, R. (2010). Lack of Social Support in the Etiology and the Prognosis of Coronary Heart Disease: A Systematic Review and Meta-Analysis. Psychosomatic Medicine: Volume 72 - Issue 3 -p 229–238. doi: 10.1097/PSY.0b013e3181d01611.

[52]  Vagg, P. & Spielberger, C. (1998). Occupational stress: Measuring job pressure and organizational support in the workplace. By Journal of Occupational Health Psychology, Vol 3(4), 294–305

[53] Kivimäki, M., Ferrie, JE., Head, J., et al. (2004). Organisational justice and change in justice as predictors of employee health: the Whitehall II study. Journal of Epidemiology & Community Health 58:931–937.

[54] Leymann, H. & Gustafsson, A. (1996). Mobbing at work and the development of post-traumatic stress disorders, European Journal of Work and Organizational Psychology, 5:2, 251–275, DOI: 10.1080/13594329608414858

[55] Nielsen, M. & Einarsen, S. (2012). Outcomes of exposure to workplace bullying: A meta-analytic review, Work & Stress, 26:4, 309–332, DOI: 10.1080/02678373.2012.734709

[56] Pavalko, EK., Mossakowski, KN. & Hamilton, VJ. (2003). Does Perceived Discrimination Affect Health? Longitudinal Relationships between Work Discrimination and Women's Physical and Emotional Health Source: Journal of Health and Social Behavior, Vol. 44, No. 1, pp. 18–33

[57] de Castro, A., Gee, G. & Takeuchi, D. (2008). Workplace Discrimination and Health Among Filipinos in the United States. American Journal of Public Health 98, 520_526, https://doi.org/10.2105/AJPH.2007.110163

[58] Elovainio, M., van den Bos K., , Linna, A., Kivimäki, M., Ala-Mursula, L., Pentti, J. & Vahtera, J. (2005). Combined effects of uncertainty and organizational justice on employee health: Testing the uncertainty management model of fairness judgments among Finnish public sector employees. Social Science & Medicine, Volume 61, Issue 12, Pages 2501–2512, ISSN 0277-9536.

[59] Schütte, S., Chastang, JF., Malard, L. et al. (2014). Psychosocial working conditions and psychological well-being among employees in 34 European countries. Int Arch Occup Environ Health 87: 897.

# Development and testing of the questionnaire

The psychosocial workload factors survey is based on the Finnish Occupational Safety and Health Administration's definition of psychosocial workload factors. According to the Occupational Safety and Health Administration's Psychosocial Workload Enforcement Guidelines 1/2018, psychosocial workload factors are factors relating to the content of work, the way in which work is organised and social dynamics at work.

The survey technique was piloted by occupational safety and health inspectors in two phases. The first phase involved piloting the survey in connection with 80 inspections. The answers given by workers in these workplaces were analysed statistically and qualitatively to improve the survey, and the respondents were asked to give feedback on the relevance of the questions. The occupational safety and health inspectors involved in the piloting also gave feedback and relayed employers' and employees' comments on the survey.

The validity of the technique was tested by examining the relevance of the questions from the perspective of the Regional State Administrative Agencies' enforcement policies and legal obligations and by comparing them against questions that have proven important in previous surveys. The answers were analysed statistically to establish the basic distribution, correlations between questions and Cronbach's alpha coefficients for the three question categories.

The basic distribution and the 'Does not apply to my work' answers provided more information about the questions that respondents found relevant from the perspective of work-related strain.

The answers given to the open-ended question at the end of the survey correlated well with the numerical results. The reliability of the survey was tested in respect of each of the three themes, and the internal consistency of the questions in each category was measured using Cronbach's alpha coefficients. The test provides information about how effectively questions in a survey measure the same phenomenon and whether there are any questions that could potentially weaken the survey's internal consistency. However, it is important to note that not all questions that measure the same phenomenon always correlate strongly with each other, and the internal validity of a questionnaire therefore also needs to be tested by other means (in this case, a test based on the Finnish Occupational Safety and Health Act and the Finnish Occupational Safety and Health Administration's Enforcement Guidelines was performed).

Based on the analyses, two questions were dropped from the first version of the survey, two questions were split in two, two questions were revised or reworded, and one new question was added. The questionnaire was proofread to ensure its user-friendliness.

The new, revised questionnaire was piloted in connection with 25 inspections, and the answers were again analysed in the same manner as during the first piloting phase. The revised version of the survey produced higher Cronbach's alpha values, which suggests that the revisions were justified and that the final version of the questionnaire lends itself well to being an efficient enforcement tool for Regional State Administrative Agencies.

## Thematic testing in phases 1 and 2

| Theme | Phase/version 1 | | Phase/version 2 | |
| --- | --- | --- | --- | --- |
| | Number of questions | Cronbach's alpha coefficient | Number of questions and changes | Cronbach's alpha coefficient |
| Workload factors relating to the way in which work is organised | 7 questions | 0.709 | 7 questions (1 split to make 2 questions, 1 removed) | 0.787 |
| Workload factors relating to the content of the work | 8 questions | 0.768 | 9 questions (1 split to make 2 questions, 2 revised) | 0.825 |
| Workload factors relating to the social functionality in the work community | 6 questions | 0.824 | 6 questions (1 removed, 1 added) | 0.870 |

Regional State
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# Psychosocial workload factors

**Workplace:** ........................................................................................................................................................................

The Occupational Safety and Health authority is utilising this survey to examine the employees' experiences on **harmful workload factors** for the OSH enforcement. Based on the survey responses, enforcement measures can be targeted on issues which are most often causing strain for the employees.

Survey responses are provided anonymously and they are processed confidentially. Individual responses will not be disclosed to the employer. During the occupational safety and health inspection, the results of the survey are presented to the employer on a group level, so that no individual respondent can be identified.

## Workload factors relating to the way in which work is organised

Workload factors relating to the way in which work is organised concern the ways how work and work tasks are planned and distributed and how the preconditions for performing work are ensured.

| How often have the following issues caused you **harmful** strain at work during the past six months? | The situation is good | | | | The situation is bad | |
| --- | --- | --- | --- | --- | --- | --- |
| | Has not caused strain at all | Has caused strain rarely | Has caused strain occasionally | Has caused strain fairly often | Has caused strain very often | Does not apply to my work |
| 1. Unclear job descriptions or responsibilities | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. Unrealistic or unreasonable goals | 1 | 2 | 3 | 4 | 5 | 6 |
| 3. Excessive workload relative to working hours | 1 | 2 | 3 | 4 | 5 | 6 |
| 4. Working outside regular working hours | 1 | 2 | 3 | 4 | 5 | 6 |
| 5. Irregular working hours, shift work or night work | 1 | 2 | 3 | 4 | 5 | 6 |
| 6. Disadvantages, faults or malfunctions related to equipment or the work environment | 1 | 2 | 3 | 4 | 5 | 6 |
| 7. Factors interfering with concentration at work (e.g. noise) | 1 | 2 | 3 | 4 | 5 | 6 |

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Psychosocial workload factors

## Workload factors relating to the content of the work

Workload factors relating to the content of the work are factors associated with the work tasks and the nature of the work.

| How often have the following issues caused you **harmful** strain at work during the past six months? | The situation is good | | | | The situation is bad | |
|---|---|---|---|---|---|---|
| | Has not caused strain at all | Has caused strain rarely | Has caused strain occasionally | Has caused strain fairly often | Has caused strain very often | Does not apply to my work |
| 8. Lack of variation, monotony | 1 | 2 | 3 | 4 | 5 | 6 |
| 9. Working with unclear instructions or expectations | 1 | 2 | 3 | 4 | 5 | 6 |
| 10. Information overload or uncontrolled information flow | 1 | 2 | 3 | 4 | 5 | 6 |
| 11. Performing several tasks simultaneously | 1 | 2 | 3 | 4 | 5 | 6 |
| 12. Constant interruptions while working | 1 | 2 | 3 | 4 | 5 | 6 |
| 13. High responsibility related to the work (e.g. responsibility over the safety and health of others or financial accountability) | 1 | 2 | 3 | 4 | 5 | 6 |
| 14. Challenging or difficult work tasks | 1 | 2 | 3 | 4 | 5 | 6 |
| 15. Challenging or difficult situations with customers | 1 | 2 | 3 | 4 | 5 | 6 |
| 16. Threat of violence related to the job | 1 | 2 | 3 | 4 | 5 | 6 |

Regional State
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Occupational Safety and Health

Psychosocial workload factors

# Workload factors relating to the social functionality in the work community

Workload factors relating to the social functionality in the work community are factors associated with the cooperation and interaction in the work community.

| How often have the following issues caused you **harmful** strain at work during the past six months? | The situation is good | | | | The situation is bad | |
|---|---|---|---|---|---|---|
| | Has not caused strain at all | Has caused strain rarely | Has caused strain occasionally | Has caused strain fairly often | Has caused strain very often | Does not apply to my work |
| 17. Problems related to mutual cooperation and interaction between colleagues | 1 | 2 | 3 | 4 | 5 | 6 |
| 18. Lack of support from colleagues in performing the work | 1 | 2 | 3 | 4 | 5 | 6 |
| 19. Problems related to cooperation and interaction with the supervisor | 1 | 2 | 3 | 4 | 5 | 6 |
| 20. Lack of support from the supervisor in performing the work | 1 | 2 | 3 | 4 | 5 | 6 |
| 21. Harassment or other recurring inappropriate treatment occurring in my work community | 1 | 2 | 3 | 4 | 5 | 6 |
| 22. Discrimination based on age, state of health, origin, opinion or another reason related to the employee's person | 1 | 2 | 3 | 4 | 5 | 6 |

Regional State
Administrative Agency
Occupational Safety and Health

Psychosocial workload factors

## Health-endangering work-related strain

|  | Not at all | Rarely | Occasionally | Fairly often | Very often |
|---|---|---|---|---|---|
| 23. Does your work cause such strain, which weakens your physical or mental health? | 1 | 2 | 3 | 4 | 5 |

24. If you want, please specify to the occupational safety and health inspector in more detail the factors which cause harmful strain in your work.

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Aluehallintovirasto
Työsuojelu

# Työn psykososiaaliset kuormitustekijät

**Työpaikka:** ..............................................................................................................................

Työsuojeluviranomainen selvittää tällä kyselyllä työntekijöiden kokemuksia työn **haitallisista kuormitus-tekijöistä** työsuojeluvalvontaa varten. Vastausten perusteella valvontaa voidaan kohdistaa asioihin, jotka kuormittavat työntekijöitä erityisen usein.

Kyselyyn vastataan nimettömänä ja vastaukset käsitellään luottamuksellisesti. Yksittäisiä vastauksia ei anneta työnantajalle. Työsuojelutarkastuksella kyselyn tulos esitetään työnantajalle ryhmätasolla niin, ettei yksittäistä vastaajaa voi tunnistaa.

## Työn järjestelyihin liittyvät kuormitustekijät

Työn järjestelyihin liittyvät kuormitustekijät koskevat työn ja työtehtävien suunnittelua, jakamista ja työn tekemisen edellytyksistä huolehtimista.

| Kuinka usein seuraavat asiat ovat kuormittaneet **haitallisesti** sinua työssäsi edeltävän 6 kk:n aikana? | Hyvä tilanne | | | | Huono tilanne | |
| | Ei ole kuormittanut lainkaan | Kuormittanut harvoin | Kuormittanut silloin tällöin | Kuormittanut melko usein | Kuormittanut erittäin usein | Ei koske työtäni |
|---|---|---|---|---|---|---|
| 1. Epäselvyydet tehtävän-kuvissa tai vastuissa | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. Epärealistiset tai kohtuuttomat tavoitteet | 1 | 2 | 3 | 4 | 5 | 6 |
| 3. Liiallinen työmäärä työaikaan nähden | 1 | 2 | 3 | 4 | 5 | 6 |
| 4. Työskentely varsinaisen työajan ulkopuolella | 1 | 2 | 3 | 4 | 5 | 6 |
| 5. Epäsäännölliset työajat, vuorotyö tai yötyö | 1 | 2 | 3 | 4 | 5 | 6 |
| 6. Työvälineisiin tai työ-ympäristöön liittyvät epäkohdat, puutteet tai toimintahäiriöt | 1 | 2 | 3 | 4 | 5 | 6 |
| 7. Työhön keskittymistä häiritsevät tekijät (esim. melu, häly) | 1 | 2 | 3 | 4 | 5 | 6 |

Aluehallintovirasto
Työsuojelu

Työn psykososiaaliset kuormitustekijät

## Työn sisältöön liittyvät kuormitustekijät

Työn sisältöön liittyvillä kuormitustekijöillä tarkoitetaan työn luonteeseen ja työtehtäviin liittyviä tekijöitä.

| Kuinka usein seuraavat asiat ovat kuormittaneet **haitallisesti** sinua työssäsi edeltävän 6 kk:n aikana? | Hyvä tilanne | | | | Huono tilanne | |
| --- | --- | --- | --- | --- | --- | --- |
| | Ei ole kuormittanut lainkaan | Kuormittanut harvoin | Kuormittanut silloin tällöin | Kuormittanut melko usein | Kuormittanut erittäin usein | Ei koske työtäni |
| 8. Vaihtelun puute työssä, työn yksitoikkoisuus | 1 | 2 | 3 | 4 | 5 | 6 |
| 9. Toimiminen epäselvien ohjeiden tai odotusten pohjalta | 1 | 2 | 3 | 4 | 5 | 6 |
| 10. Liiallinen tietomäärä tai hallitsematon tietotulva | 1 | 2 | 3 | 4 | 5 | 6 |
| 11. Usean eri asian tekeminen samanaikaisesti | 1 | 2 | 3 | 4 | 5 | 6 |
| 12. Työn tekemisen jatkuva keskeytyminen | 1 | 2 | 3 | 4 | 5 | 6 |
| 13. Työn suuri vastuullisuus (esim. muiden turvallisuudesta ja terveydestä tai taloudellinen vastuu) | 1 | 2 | 3 | 4 | 5 | 6 |
| 14. Haastavat tai vaikeat työtehtävät | 1 | 2 | 3 | 4 | 5 | 6 |
| 15. Haastavat tai vaikeat tilanteet asiakastyössä | 1 | 2 | 3 | 4 | 5 | 6 |
| 16. Työhön liittyvä väkivallan uhka | 1 | 2 | 3 | 4 | 5 | 6 |

**Aluehallintovirasto**
Työsuojelu

<div align="right">Työn psykososiaaliset kuormitustekijät</div>

## Työyhteisön sosiaaliseen toimivuuteen liittyvät kuormitustekijät

Työyhteisön sosiaaliseen toimivuuteen liittyvillä kuormitustekijöillä tarkoitetaan työyhteisön yhteistyöhön ja vuorovaikutukseen liittyviä tekijöitä.

| Kuinka usein seuraavat asiat ovat kuormittaneet **haitallisesti** sinua työssäsi edeltävän 6 kk:n aikana? | Hyvä tilanne | | | | Huono tilanne | |
| --- | --- | --- | --- | --- | --- | --- |
| | Ei ole kuormittanut lainkaan | Kuormittanut harvoin | Kuormittanut silloin tällöin | Kuormittanut melko usein | Kuormittanut erittäin usein | Ei koske työtäni |
| 17. Ongelmat työntekijöiden keskinäisessä yhteistyössä ja vuorovaikutuksessa. | 1 | 2 | 3 | 4 | 5 | 6 |
| 18. Liian vähäinen tuki työtovereilta työn tekemiseen. | 1 | 2 | 3 | 4 | 5 | 6 |
| 19. Ongelmat yhteistyössä ja vuorovaikutuksessa esimiehen kanssa. | 1 | 2 | 3 | 4 | 5 | 6 |
| 20. Liian vähäinen tuki esimieheltä työn tekemiseen. | 1 | 2 | 3 | 4 | 5 | 6 |
| 21. Työyhteisössäni ilmenevä häirintä tai muu toistuva epäasiallinen kohtelu. | 1 | 2 | 3 | 4 | 5 | 6 |
| 22. Syrjivä kohtelu iän, terveydentilan, alkuperän, mielipiteen tms. henkilöön liittyvän syyn perusteella. | 1 | 2 | 3 | 4 | 5 | 6 |

Aluehallintovirasto
Työsuojelu

Työn psykososiaaliset kuormitustekijät

## Terveyttä heikentävä työkuormitus

|  | Ei lainkaan | Harvoin | Silloin tällöin | Melko usein | Erittäin usein |
|---|---|---|---|---|---|
| 23. Aiheuttaako työsi sellaista kuormitusta, joka heikentää fyysistä tai henkistä terveyttäsi? | 1 | 2 | 3 | 4 | 5 |

24. Tarkenna halutessasi työsuojelutarkastajalle, mikä sinua kuormittaa haitallisesti työssäsi.

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Regionförvaltningsverket
Arbetarskyddet

# Arbetets psykosociala belastningsfaktorer

**Arbetsplats:** ...........................................................................................................................................

Med denna enkät utreder arbetarskyddsmyndigheten för tillsynsändamål hur arbetstagarna upplever arbetets **skadliga belastningsfaktorer**. Utifrån svaren kan tillsynen inriktas på förhållanden som belastar arbetstagarna speciellt ofta.

Respondenterna svarar anonymt och svaren behandlas konfidentiellt. Enskilda svar ges inte till arbetsgivaren. Vid en arbetarskyddsinspektion presenteras enkätresultaten för arbetsgivaren på gruppnivå så att en enskild respondent inte kan identifieras.

## Belastninsfaktorer som anknyter till organisering av arbetet

Belastningsfaktorer som anknyter till organiseringen av arbetet gäller planeringen och fördelningen av arbete och arbetsuppgifter, och säkerställandet av förutsättningarna för att utföra arbetet.

| Hur ofta har följande saker belastat dig i arbetet på ett **skadligt sätt** under de senaste 6 månaderna? | Bra situation | | | | Dålig situation | |
| --- | --- | --- | --- | --- | --- | --- |
| | Har inte belastat alls | Har sällan belastat | Har då och då belastat | Har rätt ofta belastat | Har mycket ofta belastat | Gäller inte mitt arbete |
| 1. Oklarheter i uppgifts-beskrivningar eller ansvar | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. Orealistiska eller orimliga målt | 1 | 2 | 3 | 4 | 5 | 6 |
| 3. För mycket arbete i förhållande till arbetstiden | 1 | 2 | 3 | 4 | 5 | 6 |
| 4. Arbete utanför den egentliga arbetstiden | 1 | 2 | 3 | 4 | 5 | 6 |
| 5. Oregelbundna arbetstider, skiftarbete eller nattarbete | 1 | 2 | 3 | 4 | 5 | 6 |
| 6. Missförhållanden, brister eller funktionsstörningar i anslutning till arbets-redskap eller arbetsmiljö | 1 | 2 | 3 | 4 | 5 | 6 |
| 7. Faktorer som gör det svårt att koncentrera sig på arbetet (t.ex. buller, oljud) | 1 | 2 | 3 | 4 | 5 | 6 |

Regionförvaltningsverket
Arbetarskyddet

Arbetets psykosociala belastningsfaktorer

## Belastningsfaktorer som anknyter till arbetets innehåll

Med belastningsfaktorer som anknyter till arbetets innehåll avses faktorer som anknyter till arbetets karaktär och arbetsuppgifterna.

| Hur ofta har följande saker belastat dig i arbetet på ett **skadligt sätt** under de senaste 6 månaderna? | Bra situation | | | | Dålig situation | |
|---|---|---|---|---|---|---|
| | Har inte belastat alls | Har sällan belastat | Har då och då belastat | Har rätt ofta belastat | Har mycket ofta belastat | Gäller inte mitt arbete |
| 8. Bristande variation, enformigt arbete | 1 | 2 | 3 | 4 | 5 | 6 |
| 9. Att arbeta utifrån oklara anvisningar eller förväntningar | 1 | 2 | 3 | 4 | 5 | 6 |
| 10. För stor mängd information eller okontrollerat informationsflöde | 1 | 2 | 3 | 4 | 5 | 6 |
| 11. Flera uppgifter samtidigt | 1 | 2 | 3 | 4 | 5 | 6 |
| 12. Ständiga avbrott i arbetet | 1 | 2 | 3 | 4 | 5 | 6 |
| 13. Stort ansvar i arbetet (t.ex. ansvar för andras säkerhet och hälsa, eller ekonomiskt ansvar) | 1 | 2 | 3 | 4 | 5 | 6 |
| 14. Krävande eller svåra arbetsuppgifter | 1 | 2 | 3 | 4 | 5 | 6 |
| 15. Utmanande eller svåra situationer i kundarbete | 1 | 2 | 3 | 4 | 5 | 6 |
| 16. Hot om våld i anslutning till arbetet | 1 | 2 | 3 | 4 | 5 | 6 |

Regionförvaltningsverket
Arbetarskyddet

Arbetets psykosociala belastningsfaktorer

# Belastningsfaktorer i anslutning till arbetsgemenskapens sociala funktion

Med belastningsfaktorer i anslutning till arbetsgemenskapens sociala funktion avses faktorer som anknyter till samarbete och interaktion på arbetsplatsen.

| Hur ofta har följande saker belastat dig i arbetet på ett **skadligt sätt** under de senaste 6 månaderna? | Bra situation | | | | Dålig situation | |
| --- | --- | --- | --- | --- | --- | --- |
| | Har inte belastat alls | Har sällan belastat | Har då och då belastat | Har rätt ofta belastat | Har mycket ofta belastat | Gäller inte mitt arbete |
| 17. Problem i samarbetet och interaktionen mellan arbetstagarna | 1 | 2 | 3 | 4 | 5 | 6 |
| 18. För lite stöd av arbetskamraterna i att utföra arbetet | 1 | 2 | 3 | 4 | 5 | 6 |
| 19. Problem i samarbetet och interaktionen med chefen | 1 | 2 | 3 | 4 | 5 | 6 |
| 20. För lite stöd av chefen i att utföra arbetet | 1 | 2 | 3 | 4 | 5 | 6 |
| 21. Trakasserier eller annat återkommande osakligt bemötande i min arbetsgemenskap | 1 | 2 | 3 | 4 | 5 | 6 |
| 22. Diskriminerande bemötande på grund av ålder, hälsa, ursprung, åsikt eller liknande personliga egenskaper. | 1 | 2 | 3 | 4 | 5 | 6 |

Regionförvaltningsverket
Arbetarskyddet

Arbetets psykosociala belastningsfaktorer

## Arbetsbelastning som försämrar hälsan

|  | Inte alls | Sällan | Då och då | Rätt ofta | Mycket ofta |
|---|---|---|---|---|---|
| 23. Orsakar ditt arbete sådan belastning som försämrar din fysiska eller mentala hälsa? | 1 | 2 | 3 | 4 | 5 |

24. Om du vill kan du specificera för arbetarskyddsinspektören, vilka faktorer som orsakar skadlig belastning i ditt arbete.

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