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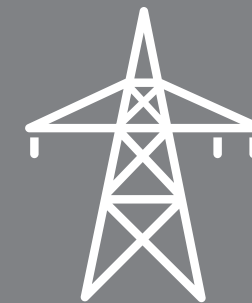
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## Guide for Risk Assessment in Small and Medium Enterprises

# 5

## Mental Workload

Identification and Evaluation of Hazards; Taking Measures



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INTERNATIONAL SOCIAL SECURITY ASSOCIATION

*Section for Electricity  
Section for Iron and Metal  
Section for Machine and System Safety*

**Guide for  
Risk Assessment in  
Small and Medium Enterprises**

# 5

## Mental Workload

**Identification and Evaluation  
of Hazards;  
Taking Measures**



## Introductory Note

This brochure is to meet the demand for the identification and evaluation of mental workload.

The information is divided into the following chapters:

1. **Basic information**
2. **Identification in the enterprise**
3. **Work organisation**

**Annex 1**  
**Checklists and evaluation list**

**Annex 2**  
**Information on conducting written anonymous surveys with employees in the enterprise**

### Note:

This brochure is dealing exclusively with the European aspects, laid down in the directive for protection of workers at work (89/391/EEC and single directives). For specific national aspects please look up the respective legal transpositions (see page 24).

The present series of brochures is not intended to deal with the documentation of evaluated risks, since the pertinent rules and regulations differ widely in the individual member states.

Other topics treated in this series of brochures organised along the same lines and already published or being prepared are:

- **Noise**
- **Hazards arising from machinery, equipment and materials**
- **Chemical hazards**
- **Hazards arising from electricity**
- **Hazards arising from fire and explosions**
- **Hazards arising from whole-body/hand-arm vibrations**
- **Falls**
- **Physical strain/stress (e.g. heavy and one-sided work)**

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# 1. Basic information

Work should be a source of health in the sense of enhancing motivation and personal development.

Work promotes health when it satisfies the basic human needs. Besides materially securing one's livelihood, there is the need

- for self-determination (take decisions, be able to follow one's interests and own goals, participation)
- to develop competence (master challenges and be able to act in a meaningful way)
- for a sense of belonging and gain recognition (achieve acceptance and respect, receive support, experience a positive gratification balance)

Apart from the question of what should not prevail in the company (prevent conditions which lead to illness) a health-promoting company policy should also ask and answer the question of what should prevail (creation of resources). Healthy employees, also means motivated employees, perform better, show steadier attendance at their job and remain loyal to the company for a longer time. This way makes them an important economic factor for the enterprise.

**Work must not cause illness – this is vital; a large share of the prevention efforts in the enterprise focuses on this maxim.**

Improperly organised work not only has negative effects on employees' perform-

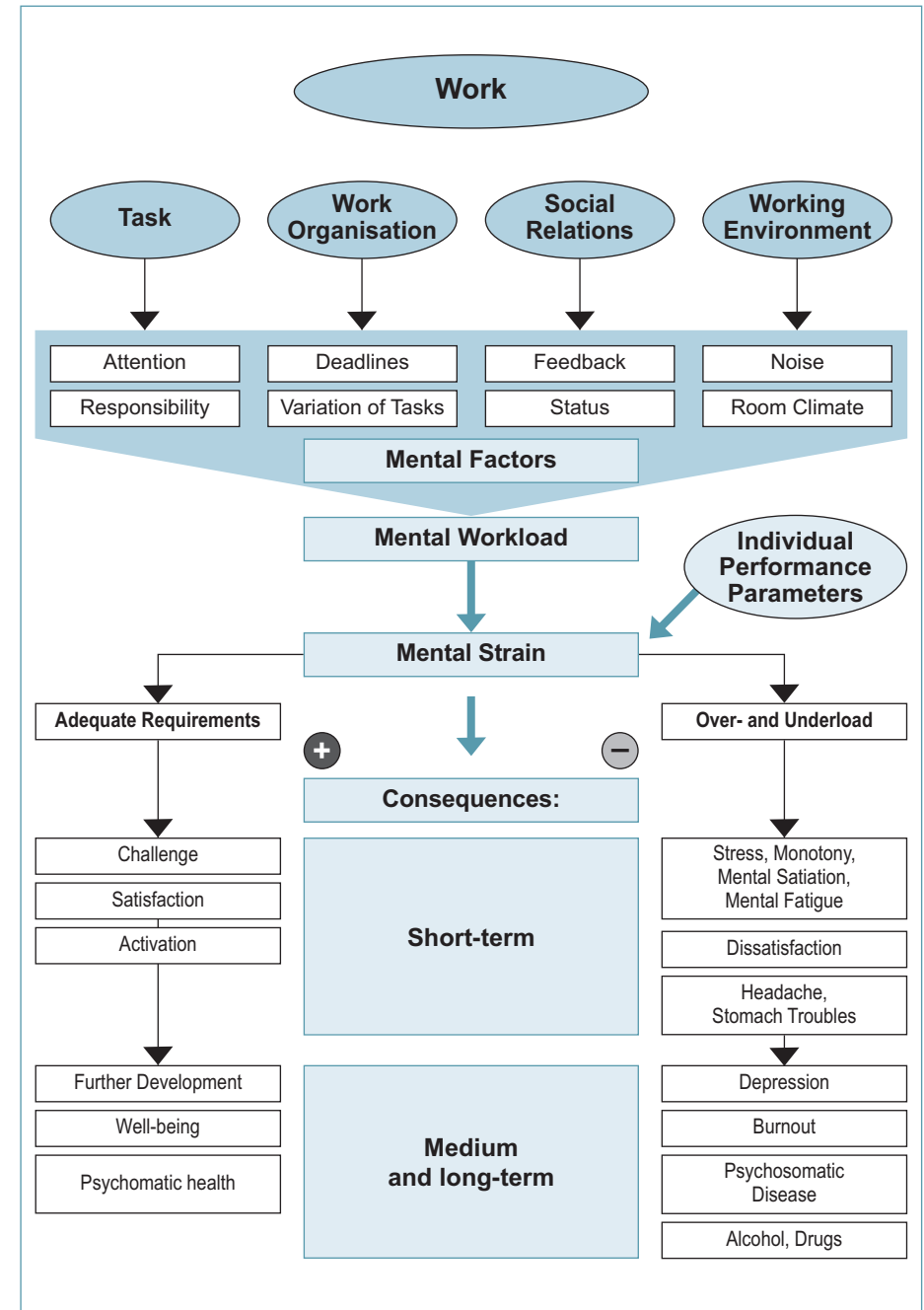
ance but in the long run may also cause permanent damage to health.

Signs that workload and requirements can no longer be coped with include:

- complaints of employees about mental workload and physical problems at the workplace
- reduced motivation, poor company climate, mobbing, addictive behaviour
- infighting for competences, insufficient coordination, duplication of work
- lack of flexibility and commitment on the part of employees
- downtimes due to absenteeism, sickness leaves, fluctuation
- rejects, need for reworking, complaints
- failure to comply with deadlines, both internally and vis-à-vis customers or business partners
- excessive overtime work, additional requirements in terms of time and material
- excessive throughput times, inventories and overhead costs.

Mental workload and requirements are perceived and coped with differs from employee to employee. The employees personal performance parameters (capabilities, skills, experience, and state of health) differ from individual to individual and each of them will use his or her very own strategy to cope with a given workload.

Figure 1: Connection between mental workload and mental strain



Every employee has a different strain under the same conditions.

While a difficult task may be considered a positive challenge by one employee, it is seen as stressful by another.

In dependence on the individual's performance parameters and coping strategies we have different consequences of mental strain.

These may be positive ones, i.e.

- consequences **conducive** to health and development or negative ones, i.e.
- consequences that may **impair** health and development.

The figure 1 illustrates the connection between mental workload and mental strain.

**Mental workload is defined as “the total of all assessable influences**

**impinging upon a human being from external sources and affecting it mentally“** (DIN EN ISO 10 075-1).

Occupational overload or underload may have short-term consequences (stress, monotony, mental satiation and mental fatigue), which may tend to become long-term consequences such as psychosomatic or mental diseases whenever the employee has to cope with unfavourable working requirements over a prolonged period of time.

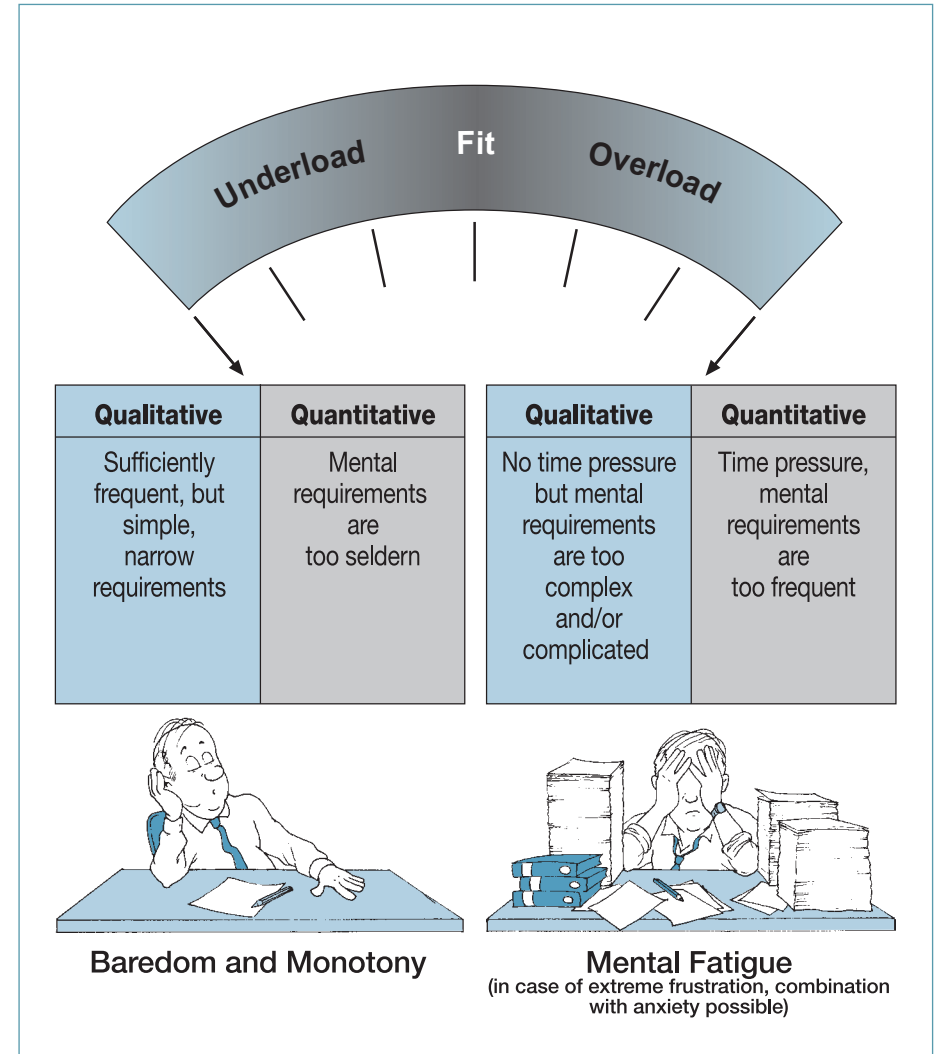
It is therefore necessary to identify and assess possible causes of mental overload or underload and to define appropriate measures that may help to avoid detrimental short-term effects.

In the following we will discuss these short-term consequences, offer assistance for their identification and assessment and recommend measures for proper work organisation.

## 1.1 | Short-term consequences of mental overload and underload

Possible discrepancies between objective work requirements and individual performance parameters to cope with them may lead to mental overload or underload:

Figure 2: Underload and overload



### ● Mental overload

Individual performance parameters fall short of work requirements.

Qualitative mental overload will arise if the person in question has insufficient or inadequate qualifications for a given job or if his/her communicative or social competences are insufficient.

Quantitative mental overload will arise if too many tasks are to be coped with at the same time, if the work schedule does not allow for buffer times or if the department is understaffed.

Negative short-term consequences of mental overload are experienced as stress or mental fatigue.

A stress experience may be characterised by anxiety. People tend to be nervous and irritated. "Exam nerves" and the uncomfortable feelings they give rise to are a familiar example.

We talk about mental fatigue when fatigue occurs before an activity is completed, i.e. before the end of the workday. It will be experienced when there is simply too much to do or there are too many conflicting tasks to be coped with. It may, however, also be due to extreme physical efforts, such as having to lift or carry heavy loads for hours and hours.

### ● Mental underload

In the case of mental underload the individual performance parameters are in excess of objective requirements.

Qualitative mental underload will arise when the employee is overqualified for a given job, a situation that may occur in connection with streamlining, staff reductions or mergers. Qualitative mental underload will also occur if an individual cannot live up to his or her personal targets or ambitions.

Quantitative mental underload is normally experienced when people do not have enough work to do during a given period of time. Well-known examples are monitoring or controlling tasks. Quantitative mental underload will also occur in connection with monotonous or repetitive tasks.

Negative short-term consequences of mental underload include the feeling of monotony and mental satiation.

The experience of monotony is caused by long periods of monotonous or repetitive tasks. The employee tends to experience a kind of fatigue similar to dozing or drowsing, which disappears immediately when the task is changed.

Mental satiation can be defined as a state of restlessness and nervousness. It may be caused by a negative attitude towards a repetitive task or situation or may be due to the conflict between one's own ambitions and the conditions prevailing at the workplace. Employees have described this experience as a feeling of "marking time" or "not getting anywhere".

## 2. Identification in the Enterprise

The identification of mental workload (and resources) is not an everyday affair. Most enterprises have hardly any experience and routine with this.

In addition, the employees to be interviewed or observed react could perhaps even react sceptically or take a defensive stance, if the sense and purpose of a survey or another form of recording data on mental workload are ambiguous – especially as this is a very personal dimension of the work experience.

The following section contains recommendations for small and medium enterprises on what needs to be observed in the planning and carrying out of such a survey.

Anonymous employee surveys in writing are possible from group sizes  $N \geq 10$ . If this method is applicable, further information (see Annex 2) needs to be observed.

### 2.1 Identification and evaluation of mental workload in companies with a maximum staff of 10 persons ( $N \leq 10$ )

On account of the different causes of the negative effects of mental workload individual checklists have been drawn up for the rough assessment of stress, mental fatigue, monotony and mental satiation. Each checklist contains features of activities, working conditions, performance and behaviour.

#### Use of the checklists

The use of the checklists for rough assessment is subject to the agreement of all persons involved.

The assessment of features in companies  $N \leq 10$  is based on **the observation of work processes** and subsequent **group discussions**.

Applicable features are ticked off, those not applicable remain blank. Experience

has shown that a brief introduction into the objectives, meaning and usefulness of the results may prove helpful. This introduction can be done on an individual basis or in groups.

#### ● Instructions for observation

Watch the activities in question on several days (in all 3 to 4 hours)! Study the definitions of the features of stress, mental fatigue, monotony and mental satiation! Try to find out whether any of these features apply to the workplace in question! Tick them off in the checklist!

#### Note:

As an external observer you cannot judge the features listed under performance and behaviour.

● **Instructions for group discussions**

Prepare the group for the discussion and the results of the analysis!

Read out the features individually and discuss them with the group to find out whether they apply or not. Tick off applicable features.

Group discussions are confidential, and no details may be divulged to third parties.




**Note:**

It is recommended to train moderators.

● **Evaluation of results for companies  $N \leq 10$  (Observation)**

In each checklist the ticked off features (other than the features experience, performance and behaviour) are added up.

Whether action has to be taken or not can be seen from the following table:

| No Risk   | Increased Risk  | High Risk   |
|---|---|---|
| need for action regarding some features   | redesign recommended  | redesign urgently required  |
|  |  |  |
| 1 to 3 features ticked off  | 4 to 6 features ticked off  | 7 to 10 features ticked off   |

**2.2 | Identification and evaluation of mental workload in companies with a staff of more than 10 persons ( $N > 10$ )**

On account of the different causes of the negative effects of mental workload individual checklists have been drawn up for the rough assessment of stress, mental fatigue, monotony and mental satiation. Each checklist contains features of activities, working conditions, performance and behaviour.

**Use of the checklists**

The use of the checklists for rough assessment is subject to the agreement of all persons involved.

The assessment of features in companies ( $N > 10$ ) is based on **the observation of work processes and interviewing the employees in question.**

In the case of activities performed by several employees, **group discussions** in health and safety circles may be organised to acquire data. Applicable features are ticked off, those not applicable remain blank. Experience has shown that a brief introduction into the objectives, meaning and usefulness of the results may prove helpful. This introduction can be done on an individual basis or in groups.

● **Instructions for observation**

Watch the activities in question on several days (in all 3 to 4 hours)! Study the definitions of the features of stress, mental fatigue, monotony and mental satiation! Try to find out whether any of these features apply to the workplace in question! Tick them off in the checklist!

**Note:**

As an external observer you cannot judge the features listed under performance and behaviour.

● **Instructions for interviews**

Study the definitions of the features of stress, mental fatigue, monotony and mental satiation! Try to find out whether any of these features apply to the workplace in question! Tick them off in the checklist!

● **Instructions for group discussions**

Prepare the group for the discussion and the results of the analysis!

Read out the features individually and discuss them with the group to find out whether they apply or not! Tick off applicable features!

Group discussions are confidential, and no details may be divulged to third parties.

**Note:**




It is recommended to train moderators.

● **Evaluation of results for companies  $N > 10$  (Interviews)**

The data are evaluated quantitatively in relation to the number of ticked off answers per feature (expressed as percentages). The probability of the presence of a mental factor is the greater the more employees performing identical or similar tasks have ticked off the feature in question. If the external observers have also frequently ticked off this feature, it is probable that action is urgently required.

The more features in the checklist are ticked off as “applicable”, the greater the risk of negative consequences of mental workload requiring corrective action. A qualitative evaluation of the replies can be done irrespective of their number, provided the features are ticked off as important by the employees, for instance in the health and safety circle. This too may indicate the need for corrective action.

For each feature in the checklist the need for corrective action is assessed on the basis of the number of affirmative answers obtained from the group:

| No Risk   | Increased Risk  | High Risk   |
|---|---|---|
| need for action regarding some features   | redesign recommended  | redesign urgently required  |
|  |  |  |
| 0 to 33 %   | 34 to 66 %  | 67 to 100 %   |

The need for action is more urgent if the external observers have come to the same conclusions as the interviewees.

**Note:**

In order to obtain more detailed data on negative consequences of work and to be able to redesign activities so that overload and underload can be avoided it is recommended to cooperate with work, company and organisation psychologists. The results of self-assessment and external assessments can

be compared by means of the work sheets (evaluation checklist, see Annex 1). In the case of external assessment the section performance and experience will be blackened since these features are not subject to observation by external observers.

The following figure gives an example for evaluation. Note that the features 2, 3 and 4 are important stress-inducing factors. They were ticked off both by the employees and the external observers.

**Example: Evaluation Checklists**

Work area/Professional group:\*) **Assembly line**

Task:\*) **Packing**

**Checklist 1: Stress**

| Features | Self   |       | Assessment   |       |
|----------|--------|-------|--|-------|
|          | Number | %     | External Number  | %     |
| 1        | 2      | 13,3  | –  | –     |
| 2        | 11     | 73,3  | 2  | 66,7  |
| 3        | 10     | 66,7  | 2  | 66,7  |
| 4        | 15     | 100,0 | 3  | 100,0 |
| 5        | –      | –     | –  | –     |
| 6        | –      | –     | –  | –     |
| 7        | 8      | 53,3  | 1  | 33,3  |
| 8        | 5      | 33,3  | 1  | 33,3  |
| 9        | 2      | 13,3  | –  | –     |
| 10       | 6      | 40,0  | –  | –     |
| 11       | 3      | 20,0  | <b>These features can only be assessed by the employees.</b> |       |
| 12       | 2      | 13,3  |  |       |
| 13       | –      | –     |  |       |
| 14       | –      | –     |  |       |
| 15       | 5      | 33,3  |  |       |
| 16       | 4      | 26,7  |  |       |

**Number of checklists evaluated**

Self-assessment: 15

External assessment: 3

\*) Details where necessary

**2.3 | Discussion regarding results in the enterprise**

There are no binding requirements in general as regards feedback of the results in the enterprise.

The following steps have proved to be useful:

1. Convening a staff meeting to enable discussion, or discussing the results in smaller groups; in some cases a written comment is also possible.

2. Convening a separate meeting with management and leaders.

3. In both discussion rounds not just the main areas of focus and deficiencies should be discussed, but should also include resources. As regards the latter, it needs to be checked whether they are available to a sufficient extent or if they should be further developed.



# 3. Work Organisation

## 3.1 | Procedure in the enterprise

When deducing and implementing measures of workplace design the following workplace holders should also be involved. Within the framework of health and safety or quality circles measures can be worked out in the form of moderated group work.

The following procedure can be recommended:

1. The results should be evaluated in the group with regard to their importance. In a next step the group should consider which changes are actually desirable or at all possible. Only realistic changes should be planned.

2. The management should deal constructively with all requests for changes/measures. A schedule should be established and responsible persons appointed. Operational and financial resources should be provided to allow implementation.
3. Implemented measures must be checked with regard to their effectiveness (= evaluation). Due to changes in the work environment repeating the recording of mental workload at regular intervals is recommended.

## 3.2 | Ways

Whenever there is a **risk of mental overload** measures should be taken to reduce the scope of work and to develop organisational and technical resources, which should be combined with specific measures targeted at the

individual in question, such as further training or the enhancement of individual resources. Whenever there is a **risk of mental underload** it is advisable to increase the scope of work (Figure 3).

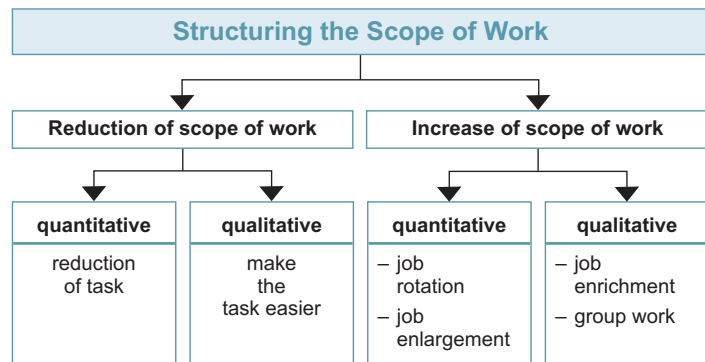


Figure 3: Structuring the scope of work

### ● Reduction of the scope of work

In cases of mental overload due to a high work volume or under time pressure a task reduction is recommended. This means that the tasks at workplaces with mental overload should be reduced or transferred to other workplaces with equal or similar tasks.

Mental overload caused by high complexity or insufficient competences of the workplace holders can be counteracted with a qualitative reduction of the scope of work. Here it needs to be considered who is better suited for carrying out the task or who could take over parts of the task.

### ● Increase of scope of work

In case of mental underload, which is marked by too little need for action, e.g. monitoring technical or chemical processes, or by repetitive execution of the same few movements of hands, e.g. work at an assembly line, a change of task or a task enrichment through same or similar movements of the hand can be of help. This way the cycle time is increased.

Mental underload which occurs when the workers' qualification is much higher than the demands made on them can be avoided if, besides the existing job, tasks of higher value have to be carried out, e.g. if the organisation or monitoring of own work is transferred to the employees.

## 3.3 | Measures

To prevent the risk of mental overload or underload measures can be taken that help avoid the experience of negative short-term consequences.

Such measures aim at

### ■ avoiding stress

1. reducing potential stressors, e.g. by.
  - creating degrees of freedom (in terms of time or content)
  - providing for support by colleagues or superiors
  - detailed structuring of tasks

2. enhancing personal resources
  - targeted training and further training
  - self-management (time management, coping with stress)
  - change of attitude (reduce perfectionism and competitiveness/rivalry)
  - accompanying measures: balanced diet and sports

### ■ avoiding mental fatigue

1. providing for regular breaks
  - recommendation: many short breaks
  - introduction of short breaks at regular intervals
  - breaks conducive to recreation

2. enhancing personal resources
  - training mental and physical performance parameters
  - ensuring optimal internal representations by targeted learning

Through the introduction of short breaks systems mental fatigue can be prevented. In addition, the number of errors and mistakes is reduced and overall performance enhanced.

#### ■ **avoiding monotony**

- scheduled change of activity (see figure)
- varied activities
- introduction of group work

After a change of activity the experience of monotony disappears promptly. This is why introducing a scheduled change of activity (= job rotation) is recommended.

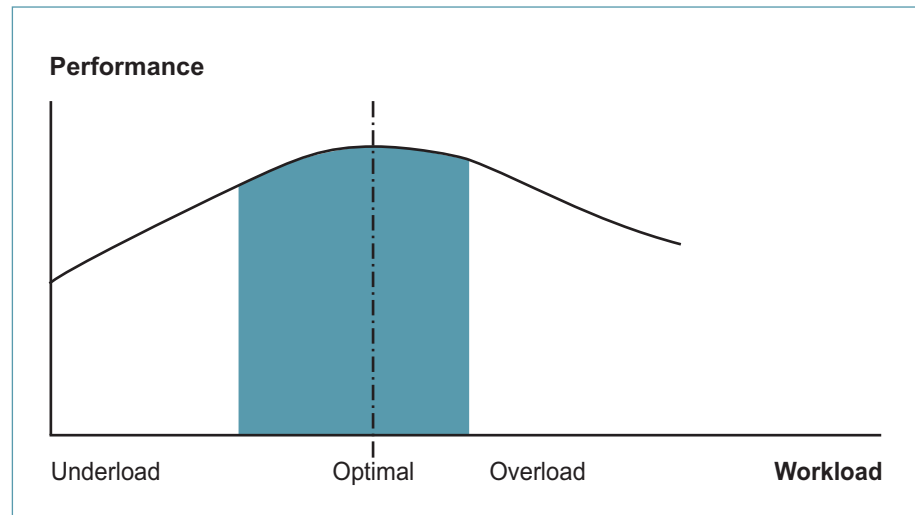
#### ■ **avoiding mental satiation**

- changing the organisational structure
- reducing stringent time schedules
- enhancing transparency
- making employees aware of the consequences of errors
- direct and timely feedback on progress and results of work
- involving employees in important decisions and restructuring efforts
- delegating responsibilities
- assigning jobs in line with qualifications and skills

#### **The objective of the design is to optimise performance and workload.**

A precondition for this is an optimal ratio between the performance requisites, such as qualification, capabilities and skills, and the intensity and type of mental workload (See figure 4).

Figure 4: Performance and workload



## Checklist 1: Stress

Work area/Professional group:\*) \_\_\_\_\_

Task:\*) \_\_\_\_\_

The list contains features that indicate the experience of stress at work. Are these features applicable?

Please mark with a cross the features accordingly.

| At work  |                       |  |
|--|-----------------------|--|
| 1  | <input type="radio"/> | the responsibility is too high.  |
| 2  | <input type="radio"/> | frequent deadlines and time pressure occur.                                      |
| 3  | <input type="radio"/> | frequent disturbances and interruptions occur.                                   |
| 4  | <input type="radio"/> | instructions leave little room for the execution of work.                        |
| 5  | <input type="radio"/> | decisions must be taken without sufficient information.                          |
| 6  | <input type="radio"/> | demands are contradictory, e.g. conflicts between keeping deadlines and quality. |
| 7  | <input type="radio"/> | there is a lack of support from colleagues and superiors                         |
| Are there any additional influences, e.g.                |                       |  |
| 8  | <input type="radio"/> | social tensions exist.   |
| 9  | <input type="radio"/> | frequent lack of staff exist.  |
| 10   | <input type="radio"/> | the future of department or enterprise is uncertain.                             |
| Features from the areas of performance and behaviour     |                       |  |
| At work  |                       |  |
| 11   | <input type="radio"/> | I very often overlook or disregard information.                                  |
| 12   | <input type="radio"/> | I often feel that I am losing overview.  |
| 13   | <input type="radio"/> | I tend to make mistakes more often.  |
| 14   | <input type="radio"/> | I am not sure whether I do everything correctly.                                 |
| 15   | <input type="radio"/> | I am restless and nervous.   |
| 16   | <input type="radio"/> | I am afraid that I will not be able to cope with my task.                        |
| Features 11 to 16 can only be assessed by the employees. |                       |  |

\*) Details where necessary

## Checklist 2: Mental Fatigue

Work area/Professional group:\*) \_\_\_\_\_

Task:\*) \_\_\_\_\_

The list contains features that indicate the experience of mental fatigue at work. Are these features applicable?

Please mark with a cross the features accordingly.

| At work  |                       |   |
|--|-----------------------|---|
| 1  | <input type="radio"/> | only executive tasks are carried out (with attention).  |
| 2  | <input type="radio"/> | no preparation or organisation is necessary for the task, the process or results don't have to be checked by the workers. |
| 3  | <input type="radio"/> | there is hardly any feedback about the work process or the work results.  |
| 4  | <input type="radio"/> | there is no or hardly any opportunity to cooperate or communicate with colleagues.  |
| 5  | <input type="radio"/> | an on-sided or forced body posture is necessary.  |
| 6  | <input type="radio"/> | the freedom of body movements is restricted.  |
| 7  | <input type="radio"/> | breaks are hardly possible.   |
| Are there any additional influences, e. g.               |                       |   |
| 8  | <input type="radio"/> | impaired visibility (e. g. due to insufficient lighting, dust, vapours, etc.).  |
| 9  | <input type="radio"/> | poorly designed tools (e. g. unfavourable position of displays and controls).   |
| 10   | <input type="radio"/> | annoying working environment (e. g. noise).   |
| Features from the areas of performance and behaviour     |                       |   |
| At work  |                       |   |
| 11   | <input type="radio"/> | I need more and more time to perform my task during working time.   |
| 12   | <input type="radio"/> | I fail to notice my own mistakes in time.   |
| 13   | <input type="radio"/> | I feel exhausted and tired.   |
| 14   | <input type="radio"/> | my concentration decreases.   |
| 15   | <input type="radio"/> | I have to overcome fatigue.   |
| 16   | <input type="radio"/> | I feel strong need for a rest.  |
| Features 11 to 16 can only be assessed by the employees. |                       |   |

\*) Details where necessary

## Checklist 3: Monotony

Work area/Professional group:\*) \_\_\_\_\_

Task:\*) \_\_\_\_\_

The list contains features that indicate the experience of monotony at work. Are these features applicable?

Please mark with a cross the features accordingly.

| At work  |                       |   |
|--|-----------------------|---|
| 1  | <input type="radio"/> | the tasks are predominantly operational (e. g. monitoring of processes etc.).                   |
| 2  | <input type="radio"/> | the tasks are boring.   |
| 3  | <input type="radio"/> | the tasks are monotonous and repetitive.  |
| 4  | <input type="radio"/> | permanent attention is required, without something to do (e.g. waiting for a signal or a call). |
| 5  | <input type="radio"/> | cooperation with others is not required.  |
| 6  | <input type="radio"/> | talking with others is not possible.  |
| 7  | <input type="radio"/> | the skills and knowledge of the workers are not sufficiently used.                              |
| Are there any additional influences, e. g.               |                       |   |
| 8  | <input type="radio"/> | the workroom is overheated.   |
| 9  | <input type="radio"/> | the workroom is too dark.   |
| 10   | <input type="radio"/> | continuous exposure to monotonous noise.  |
| Features from the areas of performance and behaviour     |                       |   |
| At work  |                       |   |
| 11   | <input type="radio"/> | I feel I'm not challenged enough.   |
| 12   | <input type="radio"/> | my performance (e.g. quality and quantity) of my work often decreases.                          |
| 13   | <input type="radio"/> | my reaction time tends to get longer.   |
| 14   | <input type="radio"/> | I do other things or my thoughts wander although permanent attention would be required.         |
| 15   | <input type="radio"/> | I feel bored.   |
| 16   | <input type="radio"/> | I doze off or daydream.   |
| Features 11 to 16 can only be assessed by the employees. |                       |   |

\*) Details where necessary

## Checklist 4: Mental Satiation

Work area/Professional group:\*) \_\_\_\_\_

Task:\*) \_\_\_\_\_

The list contains features that indicate the experience of mental satiation at work. Are these features applicable?

Please mark with a cross the features accordingly.

| At work  |                       |   |
|--|-----------------------|---|
| 1  | <input type="radio"/> | There is a tight work schedule.   |
| 2  | <input type="radio"/> | strict instructions regarding contents are given.   |
| 3  | <input type="radio"/> | there is no chance of avoiding or postponing the task.  |
| 4  | <input type="radio"/> | the employees are not sufficiently informed.  |
| 5  | <input type="radio"/> | there is hardly any feedback.   |
| 6  | <input type="radio"/> | there is too little responsibility.   |
| 7  | <input type="radio"/> | employees are given tasks that do not correspond to their qualifications or competencies.                             |
| Are there any additional influences, e. g.               |                       |   |
| 8  | <input type="radio"/> | deficits regarding leadership.  |
| 9  | <input type="radio"/> | poor company climate, mobbing.  |
| 10   | <input type="radio"/> | poor working conditions (e. g. rooms, equipment, materials).  |
| Features from the areas of performance and behaviour     |                       |   |
| At work  |                       |   |
| 11   | <input type="radio"/> | I „work to rule“.   |
| 12   | <input type="radio"/> | I have little chance to make use of my qualifications.  |
| 13   | <input type="radio"/> | I am not sure about sense and purpose of my task regarding the overall result (of the working group, the enterprise). |
| 14   | <input type="radio"/> | I am marking time and not getting anywhere.   |
| 15   | <input type="radio"/> | I am disgruntled, angry and irritated.  |
| 16   | <input type="radio"/> | I am dissatisfied.  |
| Features 11 to 16 can only be assessed by the employees. |                       |   |

\*) Details where necessary

## Checklist:

This Form can be used for the checklists 1 to 4.

Work area/Professional group:\*) \_\_\_\_\_

Task:\*) \_\_\_\_\_

Enter in the list below how often the individual features were ticked off and, where applicable, compare results of self-assessment and external assessment:

| Features   | Self   |   | Assessment      |   |
|--|--------|---|-----------------|---|
|  | Number | % | External Number | % |
| 1  |        |   |                 |   |
| 2  |        |   |                 |   |
| 3  |        |   |                 |   |
| 4  |        |   |                 |   |
| 5  |        |   |                 |   |
| 6  |        |   |                 |   |
| 7  |        |   |                 |   |
| 8  |        |   |                 |   |
| 9  |        |   |                 |   |
| 10   |        |   |                 |   |
| 11   |        |   |                 |   |
| 12   |        |   |                 |   |
| 13   |        |   |                 |   |
| 14   |        |   |                 |   |
| 15   |        |   |                 |   |
| 16   |        |   |                 |   |
| <b>These features can only be assessed by the employees.</b> |        |   |                 |   |
| <b>Number of checklists evaluated</b>                        |        |   |                 |   |
| Self-assessment:   |        |   |                 |   |
| External assessment:   |        |   |                 |   |

\*) Details where necessary

In larger enterprises and work groups a written anonymous survey with employees it is meaningful to get all employees involved in the change processes.

Below please find recommendations on what needs to be considered when planning and conducting such surveys.

### **1. Put confidence-building measures into place.**

Only if the employees render information voluntarily and frankly will a survey yield usable results.

- Inform the staff about the planned recording of mental workload and resources. If there is a works council or staff committee, they should be involved at an early stage.
- Guaranteeing anonymity and data protection is vital. Data misuse must be ruled out when recording as well as during the evaluation period of surveys in writing.
- Please plan on when and how to give feedback on the results to the staff.

### **2. Invest in planning and preparation**

- A survey just for the sake of a survey does not make sense. Already at an early stage consider what will happen to the results, how they will be processed further and who will be involved in elaborating necessary changes or solutions.
- Consider early enough as to which groups of employees should be evaluated separately (e.g. persons with the same activity). Before starting the survey, the questionnaires must be marked (encoded) accordingly.

### **3. Execution and evaluation**

- Ensure a high degree of participation in the survey. The following needs to be considered:
  - When is the most appropriate time?
  - How do I reach employees in the field or part-time employees?
  - How is distribution and return of the questionnaires organised?
  - Are all conversant in the respective language or do I need instruments in another language?
  - Do gender-specific differences need to be considered?
  - Are other differences like religion or ethnicity important?
- Ensure that the evaluation of written recordings is conducted by a neutral entity and that sub-groups are only evaluated when anonymity is guaranteed.

### **4. Feedback and measures**

- A feedback of the results is absolutely mandatory. Plan this at an early stage and consider which form and media are appropriate for this feedback.
- By and large mutual discussion is meaningful. A mutual discussion can already be seen as an initial measure.
- Get representatives of the employees involved in the setting up of priorities, planning and implementing measures. Taking part means being able to identify.
- Give reasons why something cannot be implemented or must be deferred to a later date.
- After a certain time (evaluation) check the effectiveness of measures – e.g. in the form of a new survey.

### **5. Establish a continuous communication and process structure**

- Each survey or observation is a distinct form of communication. It should not remain to be merely a one-off feature. Make it possible for employees to regularly bring forward ideas, proposals and complaints on the subject of working conditions and that these are looked into – e.g. in the framework of an employee suggestion programme or through regular group discussions.
- A basic system for dealing with all questions regarding health and safety of employees is possible by introducing a health and safety management system.



## National Contact Persons

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**Notes:** The employer, entrepreneur is responsible for recording mental workload. In each phase, especially during implementation, he can call on experts.

For any additional information, please contact: