

# Work-attributed stress

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## 1 Introduction

In the Dutch legislation is written that the employer must establish a policy to prevent and reduce stressors that causes stress. Named stressors are: aggression & violence, bullying, sexual harassment, discrimination and workload. Workload has a very broad definition, namely: all quantitative and qualitative aspects of the workplace. Symptoms of stress are tension, depressed, mental fatigue and exhaustion that cause health complaints. The definition of psychosocial risk in the workplace has led to a new approach. Work-attributed stress is offering a new perspective to understand stress in the work situation. Philosophical the approach is based on the idea that the psychological phenomena work-attributed stress is the indivisible whole of a symptom of stress and stressor(s) on which the symptom is attributed. The given holistic definition of work-attributed stress (figure 1.1) has implications, not only theoretical but also for the way of measurement. The interview-method (Signaleringsmethode werkdruk) and the questionnaire (Vragenlijst werkdruk) are operationalizations of the theoretical model how work-attributed stress can be measured.

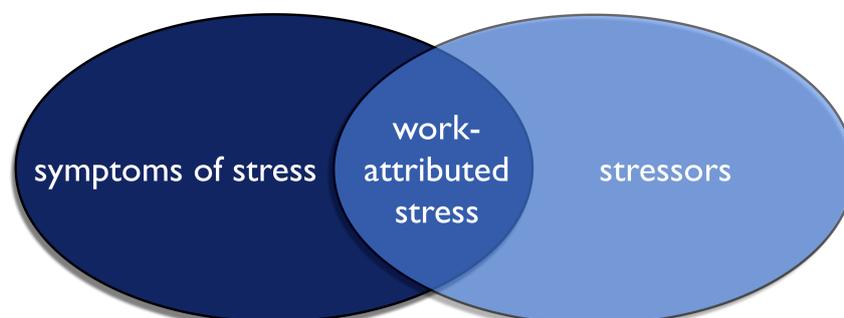


Figure 1.1: The holistic model of Work-attributed stress

## 2 Interview-method 'Signaleringsmethode werkdruk' (2001)

The 'Signaleringsmethode werkdruk' of the Dutch Labour inspectorate is a tight protocolized half-structured interview. By means of this method, inspectors register the frequencies of work stress symptoms that a worker experienced, and attribute, to nine beforehand-appointed stressors. The validity and the reliability of the method were examined. Also is the inter subjectivity of scoring of inspectors of the Dutch Labour inspectorate examined. The content validity has been examined examining if the method forms a one-dimensional scale. This was not the case. The method exists of two scales. The first scale is named 'Stress by qualitative stressors'. The second scale is named 'Stress by quantitative stressors'. The convergent validity has been examined comparing the method with three scales of the Dutch questionnaire VBBA. The method convergences with the scales

'Concerns / Worrying' and 'Recuperation needs' and convergence with the scale 'Pleasure in your work'. The criterion validity is examined by the standardized linear correlation between the method and the scale Recuperation needs. The examination of the reliability is examined by the homogeneity of the scale. The investigation made clear that the 'Signaleringsmethode werkdruk' is a reasonable reliable scale is. The reliability of the subscale 'Stress by qualitative stressors' is bad because these only three items included. The examination of the inter subjectivity of the scoring by inspectors has been carried out with a multilevel analyses. Furthermore, it has become clear that the inspectors the scale applied uniform, but there are differences between the use of three of the nine items.

### **3 Questionnaire 'Vragenlijst werkdruk' (2006)**

The questionnaire is an instrument for wider en deeper investigation of the risk on different organisational levels and also for sector level. The questionnaire consists of 24 so-called double questions. Each double question consists of two questions. First, the employee is asked if he in or by work has to do with a particular symptom of stress. If so, then is the employee asked to what predetermined stressor(s) the symptom of stress is attributed.

The validity and the reliability of the questionnaire are also examined. The content validity of the symptoms of stress and the stressors has been examined examining if the method forms one-dimensional scales. This was not the case. The symptom of stress exists of four scales. The scales are called: tension, depressed, mental fatigue and exhaustion. The stressors are also divided into four categories, namely: qualitative (not time given) stressors, contacts, quantitative (time given) stressors and other (organizational) stressors. The convergent and the concurrent validity have been examined by comparing the method with the scale 'Recuperation needs' of the Dutch questionnaire VBBA. The method convergences pretty good with 'Recuperation needs' but the concurrent validity is bad. The reason lies in the way the norms have been established as the chosen level of prevention. The standardization of the questionnaire focuses on primary prevention, prevention of health problems. While the standardization of the scale 'Recuperation needs' focused on secondary prevention, absenteeism by mental complaints. The examination of the reliability is examined by the homogeneity of the scales. The investigation made clear that the method is a reliable questionnaire. There is a strong indication found that workers make wrong attributions to target their experienced symptoms to stressors. Further research is still needed. Also to underlying causes, for instance a 'lack of control' in the work situation.

### **4 Example 'Inspection-project Junior medical specialists'**

On 22 April 2007 the Dutch television program 'Zembla' paid attention on the high workload and long working times of junior medical specialist how followed training in the Dutch hospitals. This leads to questions in the Dutch parliament. De inspectorate was asked to investigate the working conditions of these particular employees. The Dutch labour inspectorate follows a two lines policy: inspections on company level and on sector level challenging the sector organisations to develop tools and solutions to solve the risk on company level.

### *Inspection on company level*

Step 1: After the introduction by the inspector, the inspector was collecting e-mail addresses of the employees who were exposed to the working environment, in this case all junior medical specialists in 30 hospitals.

Step 2: With a web application, the questionnaire was used to investigate how often the workers experienced symptoms of stress and which stressors are the most important for explaining these symptoms.

Step 3: The work & organisation psychologist has written for every single team a (standard) report and send the report to the inspector. The measurement of symptoms of stress and the stressors to which the symptoms are attributed gives insight into what measures may to prevent or to restrict work-attributed stress.

Step 4: The inspector discussed the results with the employer. On this basis, a plan has to be established and measures have to taken by the employer. In this project the most hospitals had to make a new or better plan.

### *Intervention on sector level*

On sector level the survey shows that between 75-81% of the symptoms of stress can be explained by 13 of the 15 predetermined stressors (n = 1142 employees). Not all stressors are equally important. In addition, between 28-32% of the psychosomatic health complaints, can be explained by 6 stressors. Not all stressors are equally important. There is also found a link with illness days, 6 stressors can explain approximately 6-7% of absence. Also, not all stressors are equally important.

After reporting and several presentations of the results, the two sector organisations make appointments with the inspectorate how they could help the hospitals. The sector organisation of the academic hospitals made a program to educate the trainers of the juniors to improve their leadership. The sector organisation of the common hospitals made a program to improve the planning of the working times.

## **5 Future**

There is some research needed to perfect the model, especially on the role of control of the employee, the role of the co-workers and senior (or team leader) in relation to the labour situation. More inspections are needed, but that is difficult to realise because a lack of capacity. More data gives the opportunity to investigate what measures are the best and in what situation. We can learn a lot with the help of the instruments and on the long term we can better prescribe what measures should be taken.

With the use of a web application we partly inspect on distant shore. That gives new opportunities for the inspectorate but also for the inspectors. Efficient use of the available time is very important. On the other way new knowledge, such as management of change can be developed to improve the way of intervention. We did a big innovation but there is still a lot to do.