

Sickness absence: self-reported and objective risk factors

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Absence from work in the Netherlands is partly caused by the work itself and therefore work-related interventions could be part of the solution. Such interventions should not only be aimed at risk factors highlighted by employees themselves, but should also focus on those factors that are found to be important in a more objective and evidence-based way. For instance, employees may be reluctant to attribute sickness absence to emotionally demanding factors or intimidation by colleagues or superiors, and are more likely to overestimate the psychological and physical demands of the job.

Since 2003, TNO Work and Employment has been carrying out the Netherlands Working Conditions Survey (Nationale Enquête Arbeidsomstandigheden, NEA) every second year (Van den Bossche and Smulders, 2004). In 2003, nearly 24,000 employees were invited to participate, and almost 10,000 did, representing a 42% response rate. Part of the survey aimed to investigate the impact of work-related risk factors on absence from work. Knowing the cause of illness may help in designing interventions to prevent high rates of absenteeism. De Vroome, Smulders and Van Vuuren present an analysis of the survey results in their 2005 publication, *Absence as a result of working conditions or self-reported reasons*.

Study approaches

The study used two different approaches. First, the workers were asked for the total number of days absent from work in terms of several well-known work-related risk factors, such as: job demands, emotionally demanding work, physically demanding work, repetitive workload, intimidation or bullying by colleagues, sexual harassment, violence by customers, accidents at work and working with potentially dangerous substances. The reported total number of days' absence was then statistically linked to the various risk factors. This enabled an objective assessment of the work-related absence and the risk factors relating to that absence.

In the second approach, the workers were asked to estimate how many days they thought they had been absent due to each of the abovementioned risk factors. In this way, an impression was formed of the amount of absent days the respondents attributed to work-related risk factors.

Risk factors

Figure 1 summarises the results of the first (regression) approach and Figure 2 outlines the results of the second 'attributional' approach using the self-reported reasons for absence. It is noteworthy that both approaches provide a similar overall picture. The statistical 'cause and effect' approach concludes that 39.4% of all sick days taken are due to work-related risk factors, while the survey respondents attribute a similar percentage (42.7%) to factors related to work.

Figure 1: Percentage of sick days statistically due to risk factors at work

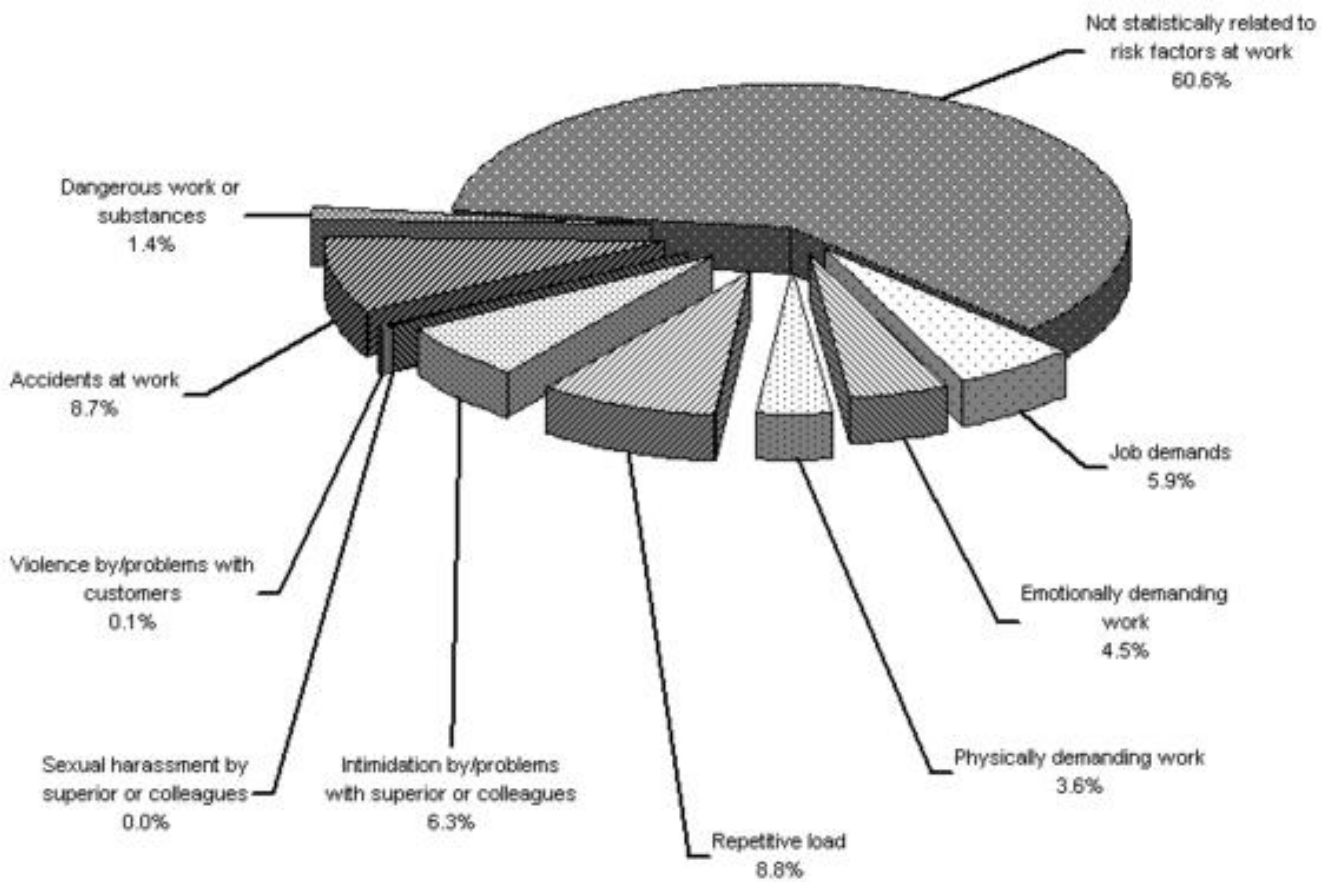


Figure 1: Percentage of sick days statistically due to risk factors at work

Note: Subgroup having at least one sick day in the year of the survey. No. of respondents = 5,476.

Source: NEA, 2003

Figure 2: Percentage of sick days attributed by respondents to risk factors at work

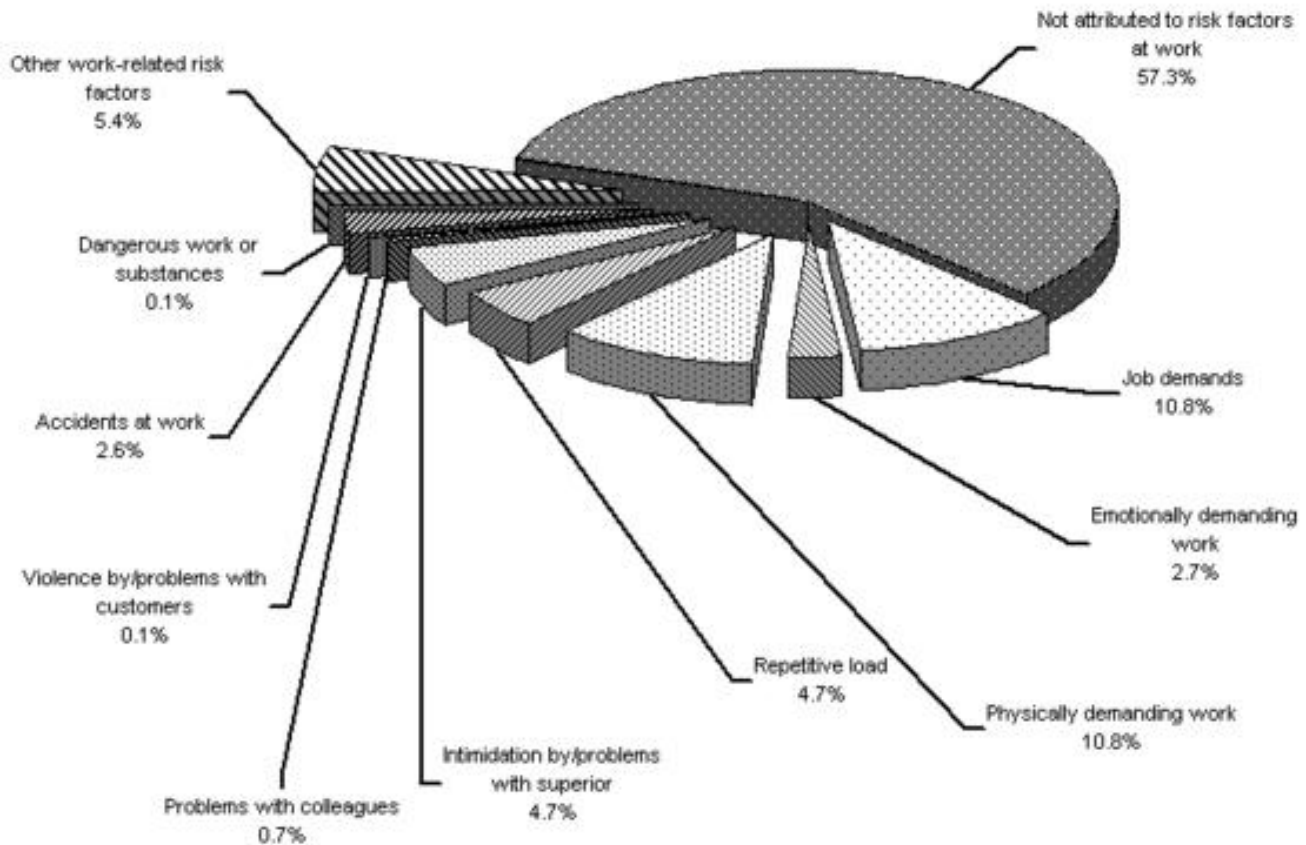


Figure 2: Percentage of sick days attributed by respondents to risk factors at work

Note: Subgroup having at least one sick day in the year of the survey. No. of respondents = 5,476.

Source: NEA, 2003

Both approaches imply that a substantial part of all sick days recorded are the result of risk factors at work; therefore, work-related interventions could alleviate the extent of these risk factors.

Despite the similarities, there are also some interesting differences between the two sets of results. More sick days are attributed to job demands (10.8%) than appears plausible by the statistical cause and effect approach (5.9%). It seems that the respondents themselves overestimate the effect of high job demands. The same applies to the risk of physically demanding work. Although the statistical approach concludes that only 3.6% of all sick days are due to the pressures of physically demanding work, no less than 10.8% of the sick days are attributed to physically demanding work by the respondents themselves.

Conversely, emotionally demanding work, repetitive workload, intimidation by or problems with superiors or colleagues, and accidents at work appear to have more impact on being absent from work (statistical approach) than the respondents indicate themselves (attribution approach).

Relevance to prevention

It may be concluded that some 40% of the number of sick days are found to be related to work. This implies that work-related interventions could have a considerable effect on preventing work-related absence.

These analyses also indicate that information on work-related risk factors for absence may be quantified both by statistically-related cause and effect, as well as by self-attributed causes for absence. However, certain risk factors appear to be somewhat overestimated, and others underestimated, using the self-reported reasons approach. In the latter approach, psychosocial and physical job demands appear to be overestimated as risks for absence, whereas emotional job demands, repetitive workload, intimidation and accidents at work appear to be underestimated in this 'attributional' way of questioning.

Reasons for results variations

The discrepancy between the number of days statistically due to particular risk factors and the number of days attributed to particular risk factors may be the effect of several intertwined processes. Under-attributing the effect of a particular risk factor may be due to the fact that an employee is not always aware of the deleterious effects of that particular risk factor. Additional analyses of the effects of accidents at work, for instance, led to the conclusion that the long-term and/or the psychological effects of such an accident were related to sickness absence (Venema and de Vroome, 2005). The employee would probably not always be consciously aware of those long-term and/or psychological consequences and, in the questionnaire, would have focused primarily on the immediate days lost due to the physical damage clearly as a result of that accident.

The effects of the risks of both emotionally demanding and repetitive work are possibly underestimated by the respondents because the effects of these risk factors are relatively unobtrusive at first and take a relatively long time to develop into sickness and absence. This may also partly explain the hesitancy regarding intimidation and harassment at work; moreover, attributing one's absence explicitly to this risk factor may be psychologically difficult for the employee and/or may be regarded as socially undesirable.

On the other hand, people are not as reluctant to attribute their absence to job demands and/or physical demands, as these are more psychologically and socially acceptable. Thus, it appears that more sick days are attributed to these risk factors, in comparison to what might be expected on the basis of the results of the more objective statistical cause and effect approach.

References

Bossche, S.N.J. van den and Smulders, P.G.W., De Nationale Enquête Arbeidsomstandigheden (NEA) 2003: Methodologie en globale resultaten (Netherlands Working Conditions Survey 2003: Methodology and overall results), Hoofddorp, TNO Work and Employment, 2004.

Venema, A. and de Vroome E., Invloed van persoons- en werkkenmerken op de (psychische) gevolgen van arbeidsongevallen (Impact of person and work characteristics on the (psychological) consequences of work accidents) , submitted 2005.

Vroome, E.M.M., Smulders, P.G.W. and Vuuren, C.V. van., Verzuim als gevolg van arbeidsrisico's en zelf opgegeven verzuimredenen (Absence as a result of working conditions or self-reported reasons), Hoofddorp, TNO Work and Employment, 2005.

Ernest de Vroome, TNO Work and Employment