

Studienbeiträge zum European Working Conditions Observatory (EWCO)



Work-related Stress

The case of Germany

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Abstract

The latest reports from the health insurers AOK and Barmer stress that employees' mental health problems often relate to work-related stress or the demands made on the employee at work. Whilst different findings are available from several sources, it should be noted that the topic of work-related stress and the psychological health of employees has been accorded special attention due to the high economic losses and the long recovery period associated with mental health problems. Health insurers, governmental agencies and social partners have acknowledged the rising importance of work-related stress. However, they take different approaches on how to deal with the issue.

1 Monitoring work-related stress at the national level

1.1 Monitoring work-related stress at the national level

In 2008, the Joint German Occupational Safety Strategy (Gemeinsame Deutsche Arbeitsschutzstrategie, GDA) was formulated by the National Occupational Safety Conference (Nationale Arbeitsschutzkonferenz, NKA), to institutionalise cooperation between the federal ministries of labour and of the interior, several regional states, the statutory industrial accident insurers and the social partners. It focuses on prevention and 'well-being at work'.

The GDA's working programme comprises eleven strategic objectives encompassing topics related to occupational health, safety and accident prevention in certain occupations or sectors. The signatories to the strategy are currently about to enact appropriate programmes to realise their aims. However, since a first evaluation of the programmes is scheduled for 2010 (another is to follow in 2012), in-depth information on stress is not yet available from this source. The following sources, however, provide an overview of work-related stress:

The Federal Ministry of Labour and Social Affairs (Bundesministerium für Arbeit und Soziales, BMAS) provides several sources for information.

- An annual national report on the development of health and safety at work in Germany is released by BMAS (as required by the Social Code, i.e. Sozialgesetzbuch VII, SGB 7). The report published for 2005 focuses amongst other things on work-related stress. It analyses the different data sets available and information from the international and national level.
- In February 2008, the BMAS also published the report of a research project it had commissioned, 'Organisational Culture, Quality of Work and Employee Commitment in Companies in Germany'. The survey and concluding analysis were carried out by the Psychonomics Research Institute and the Department of Economic and Social Psychology at the University of Cologne. A sample survey was conducted from April to October 2006. Altogether, 68,151 employees in 314 companies were asked to complete a standardised questionnaire as part of an employee survey. A total of 37,151 complied, corresponding to a response rate of 58%. In addition, a senior ex-

ecutive or a department manager in each of the same companies was interviewed to provide a management survey (Vogel, 2008).

- The so-called Absenteeism Report conducted by WIdO, the scientific research institute of the AOK, a statutory health insurer, and the University of Bielefeld focuses in its 2009 edition on work and the psyche. The report analyses the data on absenteeism available from the AOK's 9.7 million employed insurants in 2008. Whilst the gender ratio of AOK insurants is the same as that of the employed population as whole, younger insurants (up to 29 years) are overrepresented and older insurants (35 to 44 years) underrepresented in this sample. It should be noted that 37% of AOK insurants work in the service sector (national level: 33.4%), nearly 25% in manufacturing (similar to the national average) and 13.1% in sales (national level: 14.6%). With only 1.9% (national level: 3.7%) and 1.1% (national level: 3.5%) respectively, employees working in education and for banks and insurers are underrepresented among AOK insurants.
- Another statutory health insurer, Barmer, publishes a similar annual report analysing the sick days of its insurants. In the 2009 report, the data on 1,418,673 employed persons insured by Barmer were analysed. It should be noted that a full 66.5% of Barmer insurants are female.
- A third statutory health insurer, Technische Krankenkasse, conducted a survey on stress-related issues (referred to below as the TK Survey) in co-operation with the F.A.Z. Institute. In January 2009, 1,014 people between the ages of 14 and 65 years were surveyed on behalf of the insurer by the Berlin Forsa Institute. The survey was carried out by means of telephone interviews using standardised questionnaires.

Finally, several other studies and analyses have been used to compare and contrast the information given in the documents mentioned above:

- The Institute for Economic and Social Research, part of the Hans Böckler Foundation (Wirtschafts- und Sozialwissenschaftliches Institut in der Hans-Böckler-Stiftung, WSI) has run its WSI Works Council Survey since 1997. The principal aim of the survey is to give an overview of the situation of works councils (in the private sector) and staff councils (in the public sector) and to monitor industrial relations at the establishment level in Germany. The main survey is carried out every second year. Several special surveys on such topics as the reconcilability of family and working life (2003), health and workplace (2004) and innovative capability and health at the workplace (winter 2008/2009) have also been produced.
- In 2007, the Confederation of German Trade Unions (Deutscher Gewerkschaftsbund, DGB) introduced a new index called Decent Work (Gute Arbeit) to measure the quality of work and incomes in Germany. The index is composed of 31 questions on the demands made, and the resources available, at the workplace and individually experienced strain. Answers to the questions are grouped into three sub-indexes, which are weighted equally. The first relates to the resources available for the employee at the workplace, i.e. training and development measures, career opportuni-

ties, support from colleagues, the quality of management, etc. The second index measures the physical and emotional demands made on the employee at the workplace, e.g. in terms of working hours and work intensity, pressure from deadlines, pressure to perform well, etc. The third index assesses the income situation of the respondent and asks for an evaluation of his or her career prospects. Since its launch in 2007, the questionnaire has been circulated annually in a postal survey administered by the market research institute TNS-Infratest. In 2009, the random sample consisted of 7,930 employees, representing every age, region, income group, sector and company size according to their actual proportion in the total population.

- As the Absenteeism Report shows, the Federal Institute for Occupational Safety and Health (Bundesanstalt für Arbeitsschutz und Arbeitsmedizin, BAuA) in cooperation with the Federal Institute for Vocational Education and Training (Bundesinstitut für Berufsbildung, BIBB) conducted an employee survey in 2005/2006. The survey sample comprised 20,000 employees. The survey includes questions on employees' jobs, workplaces, education.

Further research findings and analyses were included to provide additional details for some of the questions.

1.2 Data on the overall level of work-related stress

The TK Survey shows that stress affects the majority of the German population. Persons aged between 30 and 39 years were most affected by stress, listing work-related stress as the main reason for their situation. The TK Survey states that 33% of employees were stressed constantly or frequently. This share rises to 36% for employees in executive positions.

For the special evaluation of the WSI Works Council Survey carried out between September 2008 and January 2009, 1,700 works council members were interviewed about their establishment's innovative capabilities, working conditions and occupational health. 79% of all works council members interviewed stated that the psychological strain for employees at the workplace had risen from 2006 to 2008. Employees working under intense time pressure and pressure to perform well all the time were reported in 84% of all the establishments surveyed. Given that an average of 43% of all employees in an establishment was affected, the survey concludes that such working conditions were not an unusual phenomenon.

2 Risk factors for work-related stress

2.1 Quantitative demands: workload, working hours, quantity and intensity of work

As outlined above, in the WSI Works Council Survey 79% of all works council members interviewed stated that psychological strain at the workplace had risen from 2006 to 2008. In detail, 67% of the works councils surveyed named deadlines and time pressure as the foremost reasons for stress. Another 47% indicated that employees had a too high workload.

Similarly, the TK Survey shows that the causes of stress are most often related to deadline pressures or working at high speed. In 2009, 52% of those surveyed indicated that they were subject to these conditions. Another 33% listed information overload and the pressure to be available at all times as stress factors. Especially for well-educated employees and employees in executive positions constant availability, checking e-mails after office hours or on weekends has blurred the line between leisure and working time. 28% also complained of a too heavy workload. In this context, the TK Survey refers to information provided by the Federal Association for Information Technology, Telecommunications and New Media (Bundesverband Informationswirtschaft, Telekommunikation und neue Medien, BITKOM) according to which up to 80% of e-mails received are not related to employees' work but can be regarded as spam.

Apart from deadline pressures and a heavy workload, the DGB Decent Work Index moreover notes for 2009 that 16% of respondents in full-time positions worked 46 to 50 hours a week. Only 4% wished to do so. Over 10% worked over 50 hours a week and within those only 1% willingly. Longer hours were mostly worked by employees in the security sector or by part-timers (here defined as persons working less than 34 hours a week). The DGB Index notes the connection between working hours and employees' assessment of their work. Employees who evaluated their working situation as bad worked more than the average at weekends, on late or night shifts or according to other shift systems. All in all, 40% of the employees surveyed indicated that their needs were given little or no consideration when working hours were arranged. Concerning the quality of work, 53% of those employees highly affected by deadlines or time pressure also reported having suffered different health problems at various times within a two-month period.

2.2 Qualitative demands: emotional and cognitive demands at work

As the survey on corporate culture on behalf of the BMAS shows, 77% of the employees surveyed were fairly, very or completely satisfied with their work in 2006. However, criticism was made of their companies' commitment to the promotion of the work-life balance and implementation health care measures. In detail, 66% of those surveyed indicated a lack of company support for balancing their working and private lives.

In addition to work-life balance issues, the WSI has analysed (in its special survey on innovative capability and health at the workplace, winter 2008/2009) how companies' innovation processes affect employees. Only 7% of establishments were not affected by any kind of innovation. 70.5% of all works council members surveyed stated that since 2006 innovations at the establishment level had been accompanied by new skill requirements. Furthermore, 80% of works council members reported that working hours had been changed in the process of innovation.

2.3 Relations at work

The Absenteeism Report 2009 analyses the data of the employee survey conducted by the BAuA and BIBB in 2005/2006. A comparison between different groups of workers, i.e. shift and non-shift workers, gives some insight into their relationship with colleagues/managers. Fewer shift workers (55%) than non-shift workers (59.7%) indicated that they received the necessary support from superiors. Whilst team-work was highly

rated in general, at 85.8% the share of shift workers who were satisfied with their cooperation with colleagues was somewhat lower than that of non-shift workers (88%). Moreover, the TK Survey from 2009 indicates that more than every fifth person interviewed suffered from conflicts with colleagues or superiors.

2.4 Autonomy, decision latitude and room for manoeuvre

In the TK Survey, 21% of the participants felt burdened due to their lack of control over their working conditions. In the DGB Index, 42% of those surveyed indicated that their working schedules changed often or very often according to the demands of their company. Nearly a third of the employees surveyed worked varying schedules, e.g. in shifts or at completely irregular intervals. For 35% of those interviewed weekend work was frequent or very frequent. On the other hand, 30% stated that they never worked on Saturdays and/or Sundays.

2.5 Individual and collective mechanisms for employees' involvement

In the survey on corporate culture on behalf of the BMAS, 36% of the respondents reported that they received sufficient approval of, or praise for, their work and were involved in the decision-making process on issues concerning their work. Amongst relevant issues, employees indicated that they considered top-down communication, especially on changes, and communication between different departments or divisions to be insufficient.

The special survey on innovative capability and health at the workplace by the WSI sheds light on the collective mechanisms for employees' involvement in organisational change. Over 70% of the works council members surveyed claimed to have been included in their companies' innovation process since 2006. A full 90% of them even reported having supported the process with their own ideas and proposals. However, in 79% of the establishments conflicts between the management and the works council sometimes arose during the process. These conflicts were usually over the potential negative ramifications of the innovation process for the staff. The following issues were listed most often by the works council members as reasons for conflicts with the management: motivation of staff (73.4%), adaptation of working conditions (69.1%), ramifications for employment (66.6%), impact on working hours (66.4%), suitability of proposed measures (59%), impact on pay (57.5%) and training of employees (54.8%).

2.6 Role of the employee in the organisation

The TK Survey highlights the fact that many employers expect a high degree of proactive behaviour and self-organisation. Employees, on the other hand, are often unsure of their tasks and the companies' goals. Unclear instructions or briefings by superiors often hinder the development of action strategies by employees. Nearly 30% of the employed interviewees described this situation as a strain.

2.7 Conflicts of value and organisational justice

Companies' reward systems were criticised by the employees participating in the survey on corporate culture on behalf of the BMAS. For example, only 24% of the respondents felt that they received a fair share of their firm's profits. Another 38% of the respondents,

however, believed that benefits such as wages and promotion were commensurate with their efforts.

2.8 Precariousness of work

The Absenteeism Report 2009 also refers to the “Study of Health in Pomerania” conducted on behalf of the Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung, BMBF) and the Ministry for Social Affairs of the Federal State of Mecklenburg Western-Pomerania between 1997 and 2001. The study analysed the health of the population in the rural districts of eastern and northern Western-Pomerania. The data of 1,943 individuals were analysed for the study.

The study findings show that precarious job situations led to drug and alcohol abuse and higher numbers of smokers. Furthermore, employees working in precarious situations more often felt uneasiness. Such employees scored higher in the following categories: daily lack of energy (28.5% compared to 18% for those in secure employment); unhappy every day (25.5% and 18.5% respectively). The report concludes that depressions taking the form of unhappiness and lack of energy more often affect employees working in precarious work situations.

If there are no surveys or large scale research programmes available, please provide information on how stress is measured/assessed in other sources: qualitative research data on stress risk assessment at company level or sectoral level, studies with a focus on specific occupations, etc.

3 Work-related stress outcomes

3.1 Individual outcomes

The Absenteeism Report 2009 notes that the illnesses which cause the most sick days amongst AOK insurants are musculoskeletal disorders (MSDs), with a share of 24.2% in 2008 (2004: 25.2%). In 2008, injuries and respiratory diseases, with shares of 12.6% and 12.5% respectively (13.2% and 12% in 2004), ranked second and third. Fourth place was taken by psychological diseases with a share rising from 7.8% in 2004 to 8.3% in 2008.

The analysis by Barmer produces a similar ranking. MSDs were responsible for 23.3% of all sick days in 2004, compared with 23.7 % in 2008. In second place are respiratory diseases (2004: 16.2%; 2008: 14.6%). However, the share of Barmer insurants diagnosed with a mental illness is much higher than among AOK members. The share of psychological or behavioural disorders rose from 13% in 2004 to 16.8% in 2008. Injuries and intoxications ranked fourth (2004: 8.8%; 2008: 8.1%).

Moreover, the AOK and Barmer reports both point out the gender differences which exist in sickness-related issues. According to the latest data, from 2008, 11.1% of female AOK insurants were absent from work due to mental health problems, 4.8 percentage points higher than the male proportion. Female AOK insurants are also more often affected by depression than their male counterparts. In 2008 more than a quarter of the psychological diseases diagnosed amongst female insurants were related to depression

symptoms. Male insureds of the AOK, on the other hand, faced greater mental health problems due to psychotropic substances, such as alcohol and tobacco. The male share of such diseases was four times higher than that for women. These statistics are supported by the analysis made by Barmer. In the latter case, 18.5% of the female insureds were affected by psychological or behavioural diseases in 2008, compared with 13.5% of the male insureds. As with the occurrence of disease amongst AOK insureds, Barmer members absent from work due to a psychological or behavioural disorder were most often diagnosed with depression symptoms. The Barmer Report shows that 27.2% of its insureds' sick days were caused by depressions.

Both reports also point to the longer recovery period which psychological diseases require. For example, in 2008 AOK insureds took an average of 18.6 days to recover from neurotic, stress or somatoform disorders. This recovery period must be considered short in comparison to other psychological diseases. Whilst affective disorders, such as depressions or manias, rank second amongst the psychological diseases diagnosed for AOK insureds in 2008 (38%), these disorders had longer recovery periods averaging 28.6 days. The Barmer Report confirms the longer recovery period for psychological and behavioural diseases, which averaged 39.1 days for its affected insureds in 2008.

In this context, it should be noted that data provided by the statutory health insurers, such as AOK and Barmer, reveals the overall health of their insureds. The data on stress outcomes cannot be differentiated according to the stress factors involved, of which work is only one. For example, a closer look at the category of psychological diseases amongst AOK insureds shows that in 2008 nearly half of all such diagnoses (46.7%) were related to neurotic, stress or somatoform disorders.

The Absenteeism Report notes that such disorders can be caused by great distress from different sources, e.g. job loss, divorce or the death of a close relative. Both reports, however, highlight the fact that mental health problems are often related to demands made on employees at the workplace. In this context, it is worthy of note that the recovery period for depressions, for example, varies with the occupation of the insured. The Barmer Report states that in 2008 social workers were absent from work recovering from depression for an average of 53.5 days. At 50.7 days, nurses and other care staff had the second longest recovery period. Recovery periods for clerical and bank employees were shorter, with an average of 44.3 and 40.8 sick days respectively.

3.2 The social construction of stress by group of workers

The reports of the health insurers and other studies point to the fact that certain groups of workers are more exposed to work-related stress. Amongst these are shift-workers, executives and hospital staff.

The Absenteeism Report 2009 shows that shift work usually correlates with a higher strain potential, with fewer resources available for employees to cope with such strains, e.g. support from superiors or relevant training courses. In this context the report refers to the results of the employee survey conducted in 2005/2006 by the BAuA and BIBB, which shows that 54.7% of shift-workers reported having often worked under pressure of deadlines (in contrast to 53.1% of non-shift workers). A greater difference exists for those often working at high speed: 54% of shift-workers were affected compared to only

40.7% of non-shift workers. Piece numbers, minimum output and working within a given time frame were often relevant for 41.2% of shift-workers (non-shift workers: 27.7%).

Moreover, shift-workers were less often able to control their work than non-shift workers. In the BAuA/BIBB employee survey, 50.5% of shift workers indicated that they could often plan their own work (non-shift workers: 76.5%). Only 27.7% of shift-workers had control over their allocated workload (non-shift workers: 37.3%). Finally, 41.1% of shift workers were able to decide when to take a break (non-shift workers: 61.2%)

Apart from the quantitative demands on employees, the BAuA/BIBB survey also reports that 14.9% of shift-workers claimed to be put under emotional strain by their work, compared with only 11.1% for employees not working shifts. Finally, 64.9% of shift-workers reported doing monotonous work in which the working process/operation had to be repeated in every detail. This again compares to a lower share of 46.8% for non-shift workers.

Concerning the working conditions of executives, the Absenteeism Report 2009 points to the PARGEMA study conducted on behalf of the Hans Böckler Foundation. The study results show that around 40% of employees in executive positions often or always lack the material or human resources to complete their work. Furthermore, around two thirds of the executives surveyed stated that unscheduled interruptions to their work made it harder for them to reach their goals. Indeed, the same number of respondents claimed that they rarely or never achieved their goals.

Finally, the Absenteeism Report 2009 includes a chapter on the psychological health of hospital employees. Around 11% of all employees work in the hospital sector, mostly as nurses, geriatric nurses, doctors or in auxiliary positions. The development in the hospital sector is characterised by a rising number of patients and by more tasks being performed by the hospital staff. Hospitals are often restructured to become business entities. As a result, staff often has to adjust their work to economic criteria, which in turn have to be reconciled with the qualitative approach of medical and nursing practice. The report concludes that the employees in the hospital sector often feel strained due to several factors. First of all, from their point of view the heavy responsibilities is not sufficiently compensated, e.g. by social or professional approval. Secondly, the rising time pressure leads to permanent conflicts concerning the adequate health care for patients.

3.3 Organisational outcomes

In the survey on corporate culture carried out on behalf of the BMAS, about half of the workers surveyed gave a positive assessment of the management's leadership abilities, the promotion of professional development, the team spirit, fairness, and involvement of employees in decision-making in their firms. The survey regards the implementation of employee-oriented values and measures as a precondition for employees' commitment to their companies.

Employees' commitment was measured by the degree of pride in their companies ('say'), their willingness to exert themselves on the company's behalf ('serve') and finally their wish to remain with their companies in the future ('stay'). In this context, the study reveals that almost two thirds of the employees were proud to work for their current

company (63%). Another two thirds of the respondents were prepared to put in extra effort for their employer (63%). However, the proportion of employees who can be regarded as highly committed with respect to all of these three dimensions (say, serve, stay) totalled only 40%. Data on absence from work is provided in the next section.

3.4 Labour Market or Societal level outcomes

Whilst there is no precise information on the costs of stress in general, figures are available for costs generated by psychological diseases. First of all, the Absenteeism Report 2009 shows that amongst its insurants the number of days absent from work due to mental health problems rose from 136.7 days (6.3 cases per 100 AOK-insurants) in 2000 to 158.7 days (7.2 cases per 100 AOK-insurants) in 2005 and finally to 181.8 days (8.1 cases per 100 AOK insurants) in 2008.

Sectoral differences are significant, e.g. days absent from work for psychological reasons are nearly twice as high in the tertiary sector as in the building sector, according to the Absenteeism Report 2009. The report also states that in 2007, 47.9 million days of absence from work were registered due to psychological diseases and abnormal behaviour. Therefore, the BAuA estimates that in this year labour productivity was reduced by approximately € 8 billion by this factor.

In addition to the loss in labour productivity there are also high costs for medical treatment, rehabilitation and care. Costs for the treatment of psychological and behavioural disorders were estimated by the Federal Statistical Office (Statistisches Bundesamt Deutschland, destatis) to have amounted to nearly € 26.7 million in 2006, i.e. € 3.3 billion more than in 2002. When costs are analysed by gender, women took the greater share with 63%. In 2006, costs for women had risen by 13% since 2002, those for men by 16%.

4 Interventions on work-related stress management

4.1 Interventions, work-related stress management and their effectiveness

As required by the Occupational Health and Safety Act (Arbeitsschutzgesetz, ArbSchG), in force since 1996, companies employing ten or more employees must document the results of risk assessments, the measures taken to reduce risk and the results of follow-up assessments. These risk assessments must also test for mental stress at the workplace. The Works Councils Survey offers deeper insights into the implementation of such risk assessments in companies.

In 2004, 2,177 works council and 1,396 staff council members participated in the survey. The survey covers establishments with at least 20 employees in all sectors. Ahlers and Brussig analysed the data of the survey, which show that 50.1% of all establishments surveyed participated in a risk assessment between 1996 and 2004. However, smaller establishments lagged behind in conducting such assessments. Only 29.4% of establishments with up to 50 employees had taken part in one. This compares to a share of 61.4% among the larger establishments with over 1,000 employees. The researchers additionally investigated the quality of risk assessments. Only 23.3% of all establishments tested for psychological stress at the workplace.

These results are complemented by the findings of the WSI Works Council Survey on innovative capability and health at the workplace from winter 2008/2009. The special survey indicates that 46% of the establishments had conducted a risk assessment. Out of these 29% had included psychological strains in their risk assessment. When the works council members surveyed were asked to name reasons for the difficulties in implementing risk assessments which also test for psychological strains at the workplace, the following issues were brought up:

- The topic of psychological work-related strain was hard to handle (89%),
- Hardly anyone knows how to conduct a risk assessment (69%),
- Health issues are constantly postponed due to other management priorities (64%),
- Unclear responsibilities on the part of the employer (54%),
- The benefits of a risk assessment are questioned (43%),
- Cost arguments raised by the employer (40%),
- Risk assessments are too elaborate (40%),
- Risk assessments are not known (34%),
- Works council is overworked (32%).

46% of the works council members surveyed indicated that when holistic risk assessments are carried out, the initiative comes from external organisations/counsellors. Establishments furthermore named different reasons for carrying out a holistic risk assessment: In 38% of all cases, the employees' excessive workload was identified as a reason. In 24 % of cases, a preceding restructuring had been the catalyst.

4.2 Organisations are promoting these interventions

Interventions are promoted at all three levels. At the national level, for example, the BMAS Report 2005 describes possible strategies for the prevention of violence at the workplace. Furthermore, the statutory health insurers naturally support companies in establishing healthy workplaces for their staff.

At the sectoral level, the German Confederation of Employers' Associations (Bundesvereinigung der Deutschen Arbeitgeberverbände, BDA) has acknowledged the rising significance of employees' mental health in a pamphlet. The BDA stresses that companies can promote employees' health by the establishment of workplace health promotion programmes, including stress- and time-management measures. Counselling of stressed employees by psychologists and conflict-management courses can also be considered. However, the BDA also underlines employees' individual responsibility for their (mental) health.

As mentioned above, the DGB has set up its own index to measure the quality of work and income. Questions on work-related stress were not only designed into the questionnaire, but also play a role in the DGB's other work. On its website, the DGB offers information on the definition, causes and consequences of work-related stress, highlighting the fact that the causes of work-related stress to be reduced or avoided include psychological, social and physical stressors. Whenever necessary, affected employees should be offered help. The DGB finally notes that insecure jobs and unemployment must be considered the greatest stress factors of all.

4.3 Implementation level of interventions

The Absenteeism Report 2009 and the annual report of the Barmer statutory health insurance both emphasise that work-related stress has to be countered at different levels. Measures by the health insurers are usually characterised by a holistic approach to health, i.e. they are available for all three intervention levels.

As a first step, health insurers can help companies to assess the healthiness of their working conditions and the current health of their employees. At the secondary level, employees can be offered stress reduction measures (fitness exercises, relaxation exercises or team-building workshops). Barmer offers workshops for executives and managers in which they are sensitised to their own views on health, their importance as role models in the company and the impact managers' own health or (un-)healthy behaviour have on their staff. They learn which situations and circumstances can lead to stress at work (the connection between psychosocial strain and resources at the workplace), how to deal with stressed staff and with addiction (smokers, workaholics). Finally, at the tertiary level, information, advice and workshops on how to deal with cases of burn-out syndrome, depression and other stress-related outcomes are available.

The BMAS Report 2005 takes a similarly holistic approach to dealing with violence at the workplace. The report distinguishes between technical, organisational and personal measures. These last are directed at the employee endangered by violence and include information on the risks at work as well as training courses on how to recognise and avoid potential conflicts and aggressive behaviour. Technical security measures can include the separation of clients and employees by physical barriers, surveillance of employees by means of closed circuit television cameras, the installation of adequate lighting and a clear layout for indoor and outdoor facilities. Such measures are to be enhanced by public announcements of their installation/existence to deter potential aggressors.

Organisational measures to avoid or reduce the possibility of violence at the work place and thereby reduce stress include teamwork in work situations that involve a greater risk of employees being threatened or attacked. Where single work places cannot be avoided, employees are to be in regular contact with a third person. Customer-friendly opening hours, the prevention of long waiting times, information on delays can all help to reduce the risk of violence.

Finally, the BMAS report 2005 stresses the need to support employees who have had to endure violence at their work place. Such support can be provided by an uninvolved colleague, who serves as a confidant, or an external expert, such as a psychologist. Therapy and courses of rehabilitation are to be offered in cases of need. Measures to cope with violence at the workplace have to consider and include all the different sets of persons involved, i.e. not only the victims, but also their assistants, colleagues and supervisors.

4.4 Common instruments to measure stress at organisational

As outlined above, the occupational health and safety laws require companies to carry out a risk assessment, including assessments of the psychological health of their em-

ployees. The design of such a risk assessment can vary, though, since the law does not prescribe a specific procedure. However, the Federal Institute for Occupational Safety and Health does recommend procedures which are designed to help companies to carry out a detailed risk assessment which also tests for stress.

One of them is described in the working paper 'Stress-Mind-Health. The START procedure for the risk assessment and risk management of work-related stress', published on behalf of the Hans Böckler Foundation (Satzler/Geray, 2009). To carry out a risk assessment of mental stress, different steps have to be taken at the establishment level.

Whilst the START procedure describes the complete cycle to be followed to carry out a successful risk assessment for mental stress, it also includes instruments for measuring stress at the organisational level. The working paper highlights the fact that mental stress can be measured by different tools, such as written questionnaires filled in by employees and questions discussed verbally in health circles or similar groups. External evaluations of the company and its workplaces can supplement the risk assessment.

The authors of the working paper note that written questionnaires should be kept simple. A non-standardised questionnaire tailored to the company's needs and written in the language used by the staff usually improves the acceptance of the survey. The survey should be conducted using anonymous questionnaires. Open questions can be included to get a clearer picture of the stress level in the company. If the company is designing a questionnaire for the first time, the draft should be checked by an expert. The START questionnaire also works with selected areas of enquiry, such as vocational training, managers, available space, time pressure etc., as appropriate for the company's needs. Not every company has to test for every single aspect of psychological stress.

To ensure the anonymity of the employee data collected, the staff must be briefed on the procedures for a risk assessment and how the questionnaire works. It is recommended that members of the works council are involved in conducting the survey, e.g. to distribute and collect questionnaires. Participation in the survey should be optional since coercion usually leads to faulty results. Furthermore, employees must be given enough time to fill in the questionnaire. Once the survey has been completed, the data collected must be evaluated. Evaluations are usually supported by computer-assisted analysis. It is recommended that the evaluation starts with an assessment of the overall situation determining the mental stress risk for all participants. As a second step there should be a detailed analysis of, for instance, stress risks in single departments or areas of work.

The results of such surveys are to be contrasted with on-site assessments of stress levels. On-site assessments are often a combination of company inspections and inspections of workplaces (checklists can be used and discussions with employees at their workplace facilitated). In a final assessment of the findings, the company must compare the current risk results with the intended health situation of its employees. The working paper points to several standards laid down in occupational health and safety laws and regulations or established by the German Standards Institute (Deutsches Institut für

Normung, DIN), which can serve as point of reference when assessing the measures to be taken.

4.5 Stress management: examples of good practice and their effectiveness

The 'New Quality of Work' initiative (Initiative Neue Qualität der Arbeit, INQA) was launched in 2001. INQA is a joint initiative by the Federal Government, the regional states, trade unions, employers' and business associations, social security organisations, foundations and individual companies (Stettes, 2007). INQA highlights good practice at the establishment level.

At the sheltered workshop for the disabled in Hoffnungstal, one of the largest facilities run by the state of Brandenburg, a training programme was organised for the nearly 140 non-disabled staff, 60% of whom are female, with an average age of 43 years. The salient features of the initial assessment were time-pressure, a lack of communication between the staff and the management and conflicts amongst non-disabled and disabled co-workers.

The training course took an everyday experience as a starting point to show how even the most difficult situations can be handled. The participants, employees and managerial staff, were trained in different fields: Communication skills were developed to solve conflicts and to instruct effectively, time- and stress-management skills improved. Topics included training on how to organise a work day, how to conduct a meeting and how to present one's own ideas in a confident manner.

A survey to monitor the effects of the training was conducted two years later. The results showed that the communication style and the job satisfaction of all survey participants had improved. More than half of the respondents indicated that conflicts with disabled co-workers had diminished. One third of the respondents stated that fewer conflicts arose among the total staff.

Another positive example is provided by a stress-prevention measure conducted for bus and train drivers. The statutory industrial accident insurance associations for this sector developed a computer-based training programme designed to reduce drivers' stress. In detail, it seeks to train drivers' abilities to anticipate critical situations. It also improves their coordination and control skills.

The programme is divided into two parts. One informs the drivers of the causes and consequences of stress and possible preventative measures. The second part is made up of exercises which simulate 20 situations from the drivers' everyday working life. A final test assessed the participants' newly acquired knowledge. The results of these training programmes show that the number of sick days taken by the drivers was reduced. Fewer drivers left the job due to unfitness. In general, the drivers' job satisfaction had risen because work-related strains were reduced.

4.6 Public discussions and/or interventions on stress due to organisational change and restructuring

The reports from the health insurers AOK and Barmer both point to the ongoing debate on the causes of the increase in mental health problems, i.e. whether more people are actually falling ill or more cases are being diagnosed. As mentioned above, both reports stress that employees' mental health problems often relate to work-related stress or the demands made on the employee at work. The topic of work-related and other stress outcomes has been accorded special attention due to the high economic losses caused by stress and the long recovery period associated with mental health problems. Moreover, the broader issue of work organisation has been debated by the social partners, including the German Metalworkers Union (Industriegewerkschaft Metall, IG Metall) and the Employers' Associations for the Metal and Electrical Industry (Arbeitgeberverbände der Metall- und Elektroindustrie, Gesamtmetall). A summary of the debate is available from the EWCO network (Krämer, 2009).

5 Commentary

Many approaches presented in this study concentrate on the impact of work-related stress on employees' health and possible intervention strategies. However, the improvement of working conditions must be based not only on an analysis of employees' needs but also take into account companies' need to be competitive in a global market. Measures to prevent or deal with work-related stress in companies should be negotiated between social partners, i.e. between works council and management at the establishment level or the union and management at the sectoral level or directly between the employee and employer. In this way, the needs of both sides can be taken into account.

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Questionnaire

Q1 Monitoring work-related stress at the national level

1. Are there any instruments in place to monitor work-related stress at the national level, for example, national surveys, sectoral studies, epidemiological studies, action research, or other research programmes? Please describe the main sources of information available on work-related stress in your country (coverage, methodology, definitions used, etc.).
2. Provide, if available, data on the overall level of work-related stress based on the identified sources. If possible, identify the main trends in this matter presenting data (e.g. for the last five years).

Q2 Risk factors for work-related stress

Based on the main or most used monitoring instruments available (identified in Q1), please provide information on the following risk factors for stress.

Note: If available, please provide information on the main changes or trends in text. Any tables with figures illustrating those trends should be included in annex (if possible, breakdown the data by gender and/or other relevant variables).

1. Quantitative demands: workload, working hours, quantity and intensity of work.
2. Qualitative demands: these refer to emotional and cognitive demands at work and may include work-life balance issues, complexity of work, dealing with angry clients and suffering patients, feeling afraid, having to hide emotions, etc.
3. Relations at work which may include social support from colleagues or supervisor, management style and relationships with colleagues/managers/the organisation; violence and harassment at work.
4. Autonomy, decision latitude and room for manoeuvre: control over work, including control over pace of work and over job content and decision-making power; predictability of work, use and possibility to develop skills.
5. Individual and collective mechanisms for employees' involvement, particularly in relation to organisational change and change management, including communication of change.
6. The perception of the role that the employee holds in the organisation and whether the employee is clear about what is expected of them in terms of their job; clarity of the management changes, i.e., how organisations manage and communicate change; motivation; over commitment and reward.
7. Conflicts of value and organisational justice.

8. Precariousness of work (i.e. nature of the employment contract).

If there are no surveys or large scale research programmes available, please provide information on how stress is measured/assessed in other sources: qualitative research data on stress risk assessment at company level or sectoral level, studies with a focus on specific occupations, etc.

Q3 Work-related stress outcomes

Please provide information (including references to the sources or studies) on stress-related outcomes:

1. Individual outcomes (e.g. mental health illnesses, including depression and anxiety, and physical illnesses, such as cardiovascular diseases, musculoskeletal disorders (MSDs), disabilities, fatigue and sleeping problems);
2. The social construction of stress by group of workers: can you provide references and main findings of research discussing this issue; factors acknowledged as stressful by some group of workers; groups which refer to stress or not to describe unsatisfactory situations
3. Organisational outcomes (effects that individual stress outcomes have on organisations, e.g. absence from work, job satisfaction, morale, level of commitment, productivity, and the impact of these outcomes on organisations' costs, performance, or innovation capacity);
4. Labour Market or Societal level outcomes (the 'costs' to society of stress). This could include issues such as higher levels of unemployment and of recipients of incapacity benefits, costs to health and welfare systems, loss of productivity.

Q4 Interventions on work-related stress management

1. What relevant information is available about interventions on work-related stress management and their effectiveness?
2. Are any interventions in place to prevent or manage work-related stress? If so, what kind of interventions are they? Please describe them making reference to coverage, effectiveness, since when they are in place, etc.
3. Which organisations are promoting these interventions? E.g. at national level (health and safety authority, labour inspectorate, social partners, government), at sectoral or at company level?
4. Are the interventions devised to be implemented at the primary (action on causes) / secondary (action on individuals) or tertiary (action on the consequences of stress) stage?

5. Are any common instruments to measure stress at organisational level being used, developed, tested or assessed? Please describe them, indicating since when they are in place.
6. Please identify and describe up to three examples of good practice and their effectiveness in terms of stress management, with a special focus on the lessons learned. These can be at national, sectoral or organisational level.
7. Are there any public discussions and/or interventions that address specifically the identification, prevention and management of stress due to organisational change and restructuring? If yes, please summarise them.

Q5 Commentary

Please provide your own/your institution/centre view on work-related stress, referring to, for example, national debates about the topic or any other issue considered important from your national perspective which was not covered by this questionnaire.