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***Globalisation, organisational culture and
workplace safety; is there a connection?***

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Summary

This study is an effort to find a connection between the high number of people on sick leave, the occupational health situation at the workplace, and stronger market competition and globalisation forces. The basis for the study is statistics, mainly on injuries and diseases, interviews with people in different positions with either long experience within the safety and health situation or otherwise having insight into organisations' internal situation, and a literature review. There is strong evidence that market competition and technological development forces companies to down-sizing, reorganizing, out-sourcing, relocalisations to low cost countries etc. to deal with the tougher market climate. These changes can create a high pressure on the work force in the form of higher work load and a higher tempo but also job insecurity causing stress and burn outs as consequences. The study shows that there is some support for the suggestion that the work force experience harsher work environment. An increase in sick leave over the last years can be found in 'softer factors' like organisational causes, higher tempo and work load. The internal culture is an agglomeration of attitudes, norms and values guiding the behaviour of the work force. The internal culture is to some extent reflecting the outer environment causing the organisations to navigate in harsher surroundings in order to survive. This paper builds on the combination of statistical data, case histories and literature. On the basis of the analysis I argue that there are indications of an emerging new organisational culture following the increased market economy and globalisation. This is one of many possible explanations of growing strains in the workplace and work-related sickness and poor health.

Content

Summary	2
Introduction.....	4
<i>Health problems</i>	4
<i>Globalisation</i>	6
<i>Culture</i>	7
<i>Organisational culture</i>	8
<i>The assumed causal chain</i>	10
Method.....	11
Results	14
<i>What are the signs in statistics?</i>	14
<i>What are the signs of changing conditions in organisations?</i>	21
Discussion.....	25
References.....	29
Other sources – statistics, magazines & newspapers.....	31

Introduction

Individuals, companies, organisations and nation states live in a context characterised by social change and transformation mainly based on technological change. We have instant access to the rest of the world by internet causing the world come closer and invade our lives. We have also seen the world change totally due to the system change in the former socialist countries and the breaking up of Soviet Union. All this ‘instability’ creates pressure on us as human beings and consequently on us as work force. As society, as organisations, as groups and as individuals we will react to this and these reactions will probably be manifested in changed patterns of living and working, probably also in new norms and values i.e. our society and its culture will gradually change. As sociology is the science of society with its organisations and interrelating individuals it is of special interest to study from a sociological standpoint these interrelations and also include, among other things, norms and values which are essential to make relations and collective actions possible. One domain of special interest is the possible link and impact from the globally ever-changing conditions, via changing organisational cultural context, on work force and what effects these changes can have on the well being of the employees. By studying statistics over time on selected manifestations related to health, safety and injuries we expect to see impacts from changing working environment conditions. Similarly by interviewing people who personally have experienced the changes from within organisations, we can get a richer view of the phenomena seen in the statistics and reported in literature.

Health problems

At the same time as we learn about the market economy, free trade and a global world, we get other signals saying that we have problems with people suffering from stress. Statistics from Swedish Work Environment Authority (SWEA) show an increase in psychosocial problems among the work force. Likewise statistics from Swedish National Institute of Public Health show an increase in using sedatives because of sleeping problems. Maslach and Leiter (2000) give several examples of health problems due to an increased burden in the work place.

According to a representative of the SWEA it is obvious that organisational downsizing and, consequently, a higher workload on the employees will increase the risk for higher stress and injuries (Metro, 23 July 2004). “Organisations are becoming leaner and meaner” (Burke,

2002, 1) is another example of this view. Also, Kaminski (2001) and the European Agency for Safety and Health at Work (2002) have argued that there is a higher risk of accidents for workers on fixed term contracts and temporary work compared to those with permanent jobs.

Figure 1 shows an estimation of past, present and future development of work environmental health problems in mining industry in Sweden. The diagram is constructed by an officer at the Swedish Work Environment Authority from collected estimations from safety and health officers in mining industry about the development concerning health and safety problems. The overall picture shows a decrease in physical/chemical health problems but a rise in stress and musculoskeletal disorders.

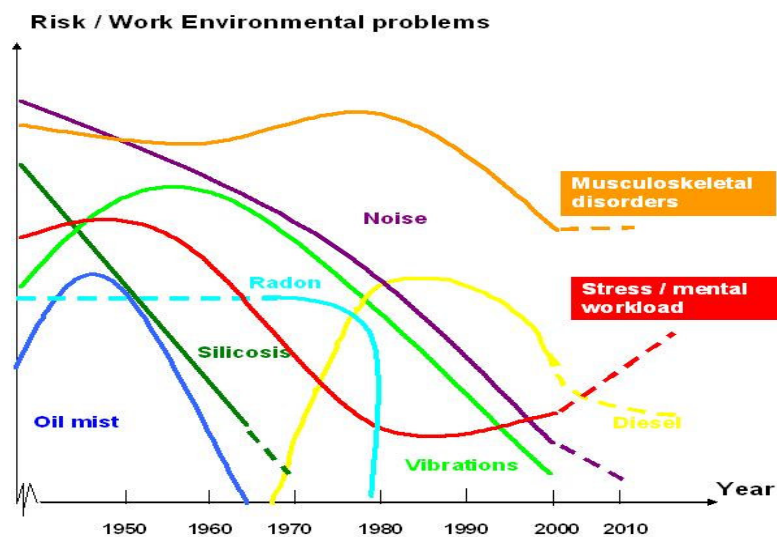


Fig 1. Estimations made by health & safety officers in mining industry showing the experienced development of some selected categories. Source: Arbetsmiljöverket

Several sources (e.g. Civilingenjören 7/2004; NyTeknik 34/2004; Martin & Schumann, 1997; Klein, 2002; Maslach & Leiter, 2000; Magnusson, 2003; Flanagan & Gould, 2003, refers to two OECD reports; ILO, 2003; Kaminski, 2001) argue that transnational companies and globalisation are fostering new types of work organisations and new patterns of exposure to risks in companies.

This is the argument to be discussed in this paper: the assumed connection between globalisation and work-related health problems.

Globalisation

According to Castells (2000) technological development and especially the information technology leads to radical changes in our ways of living, our way of organising work and hence the society. The social changes are dramatic because of the transformation processes in technology and economy. The new technology compresses time and space, breaking up existing boundaries between individuals, organisations, and nation states. Capital flows easily and instantly between countries. Economic transactions, personal contacts and relations, information exchange etc. have passed beyond the limitations of state boundaries and are no longer tied to the 'local' (Bauman, 2000; Castells, 2000; Tomlinson, 1999; Otter, 2003). The process of change from mass scale production to more diversified production with more service content and new forms of employment also includes less structured working hours, distance working and/or individualised solutions (Magnusson, 2003; European Agency, 2001; Metro, 7 July 2004).

The role of the nation state is changing due to high pressure from the globalised market (Reberg, 2003). Transnational companies are no longer limited to act within one nation. Instead they move their production resources and capital freely around the world where the economical and political situation suits their objectives best (Bauman, 2000; Dunn, 2004). Bauman also argues that it will be more and more difficult for the nation state to maintain the difference between the inner and outer market except for the very narrow sense of controlling territory and population.

Private life is also influenced by globalisation. Products from all over the world are available in local stores. Tele-working, internet, mobile & video communication, distance learning and similar phenomena influence our relations to others. Individuals are always 'on line' and reachable. The communication is split from the bearer in the sense that s/he does no longer have to physically meet and face the other person (Bauman, 2000).

Waters (quoted in Dunn, 2004, 4) defines globalisation as "a social process in which the constraints of geography on social and cultural arrangements recede and in which people become increasingly aware that they are receding". Shortly globalisation could, by the words of Tomlinson (1999, 2), be described as a complex connectivity by which he means "the rapidly developing and ever-densening network of interconnections and interdependences".

Globalisation involves every part of our society and influences our daily life, whether or not we are conscious of it. In the concept of globalisation we feel the dynamic forces behind the changes we experience.

Culture

Culture is often understood as the phenomenon which deals with values, norms and emotions in contrast to the rational science (Miegel & Johansson, 2002). Elias (quoted in Miegel, 2002, 13) argues that civilisation and culture developed in relation to each other but gradually they have drifted apart. Culture according to Elias embraces the human side like art, books, religious and philosophical systems where the people's distinctive character will be manifested. Alvesson understands culture as "a system of common symbols and meanings" and continues by quoting Kunda "the shared rules governing cognitive and affective aspects of membership in an organization, and the means whereby they are shaped and expressed" (2002, 3). Hofstede (1997, 4) sees culture as "patterns of thinking, feelings and acting". Most of it is acquired during early childhood and hence will be very difficult to change. As a complement, or maybe as a contrast, to the common use of culture as 'refinement of the mind' (*culture one* according to Hofstede), Hofstede uses the analogy of programming computers and calls these [cultural] patterns for mental programming, "software of the mind" (*culture two*). The programming starts with the family and continues in different settings during the course of life.

"Culture (two) is a collective phenomenon, because it is at least partly shared with people who live within the same social environment, which is where it is learned. It is *the collective programming of the mind which distinguishes the members of one group or category of people from another*" (ibid. 5, italics in original).

According to Hofstede the concept of culture is well covered by four manifestations. Differences in culture are thus manifested in *symbols* like words, gestures; *heroes* with characters prized in the actual society; *rituals* like ceremonies or ways of paying respect to others; *values* meaning broad tendencies of preferences distinguishing between e.g. evil - good; normal - abnormal, ugly - beautiful. "Culture is learned, not inherited" (ibid. 5).

Tomlinson (1999) argues at length how globalisation matters for culture and vice versa how culture matters for globalisation. "Cultural signification and interpretation constantly

orientates people, individually and collectively, towards particular actions” (ibid. 25). Every action is performed in a context of a broader cultural understanding. This is in agreement with the ideas of Alvesson that culture is creating the meanings through which we interpret our experiences and let our actions be guided, “cultural meanings guide thinking, feeling and acting” (Alvesson, 2002, 5).

Shortly we can describe culture as our ways of understanding and our mental programming. If globalisation could be seen as expressing dynamic and changing forces, culture is more to be seen as manifestations and as guidance for our interpretations and actions.

Organisational culture

The organisation is a place where all influences, forces, changes and individuals meet with a certain (historic) structure and manifestations. The concept of organisation culture has got a great interest the last decades of the 20th century. “Organizations foster, develop, and elicit attitudes in their members, and from the outside organizational culture is to a great extent a function of and results in attitudes” (Salo & Svenson, 2001, 22). Most researchers agree upon the following six aspects: culture is a property of the group; it engages emotions as well as intellect; it is based on shared experiences; it is infused with symbols; it continuously changes due to changing circumstances; it incorporates contradictions, paradoxes and confusion (Ibid).

Some researchers also make a difference between corporate culture and organisational culture (Linstead & Grafton-Small in Edelman, 2001). The managers and board are putting forward the corporate culture by rituals, routines, values etc. The organisational culture on the other hand is shared by the workers and is formed by the tasks performed, and re-interpretations of the corporate culture in order to serve the interests of the workers. The workplace is a place where several cultures meet. Also among the workers different sub-groups and sub-cultures will prevail. The same rule given to an organisation and its sub-groups will get different interpretations and meanings and thus different behaviours and consequences (Alvesson, 2002). One problem today is the rapid change of an organisation’s surroundings (Salo & Svenson, 2001). All factors are more or less unstable and there will be a mixture of opinions, sub-cultures and ideas coming and going. Some of these factors are carried by the employees and managers, others by the society or the ‘locality’ and still others by global forces. Moldenes (in Edelman, 2001) uses the concept of “cultural cross-road” to

describe this diversity and mixture. There exists a multitude of contradictions and interpretations, 'voices'. According to Røvik (2000) the coming and going of opinions and management programmes leave residues in the organisation in the form of language, rituals, instructions or the like.

According to Schein "the concept [of organisational culture] is hard to define, hard to analyze and measure, and hard to manage" (Schein 1992, xi). The understanding of culture plays a critical role if managers want to understand the organisation, stimulate learning and lead a change. Most organisational changes also involve changes in culture according to him. Schein continues that leadership and culture are two sides of the same coin in that culture on the level of groups and organisations is created, developed, manipulated, managed and changed by the influence of management. Schein takes an evolutionary perspective on organisational culture in that leaders impose their values and assumptions on their groups. The organisations with its sub-groups will in turn adapt to these values and assumptions. Managers more than others contribute in the shaping of meanings and ideas held by those they interact with (Alvesson, 2002). Culture formation is according to Schein a "*striving toward patterning and integration*" (1992, 11, italics in original) in that we as humans need stability, consistency and meaning. Culture formation also involves a socialisation process passing on the group's norms, rituals, attitudes, assumptions to new members of the group.

The relation between organisational culture and performance is of high interest and many, both managers and researchers agree on an existing relation. Alvesson (2002, 2) however argues that it is "difficult to establish a clear and causal link between culture and something else. Trying to do so easily implicates a rather simplistic view on culture that seriously underestimates its theoretical potential and value". According to Alvesson on the causality between organisational culture and performance:

"it is common sense that something that we can call 'corporate culture' will have an impact on many types of actions in organizations and consequently also on corporate financial results. Any such influence may, however, be lost among all the factors and interaction patterns that have something to do with these results" (ibid. 55).

On the assumptions of technical cognitive interest obviously practitioners and managers want to separate any corporate phenomena into variables and then seek causal relations and correlations. Alvesson shows the difficulty of splitting culture into different variables as it

often becomes a tautological reasoning in that the outcome often is a part of the culture itself as well as the culture is also an aspect of the outcome. "Culture affects results in subtle, complex ways and cause-effect thinking can seldom appreciate this" (ibid, 58). As culture is 'meaning' and take a part in everything in an organisation there is no sense of seeing culture as a causal factor behind specific outcomes. The difficulty on finding casual relations is also depending on the problems with evaluation; there is a lot of coincidence, chance and complexity. It is not easy to say how a unit performs, how well or badly, due to time-horizons, ambiguity and arbitrariness of performance indicators, effects of milking and skimming etc. The changes in organisations give more freedom to the employees but this involves at the same time increased pressure and responsibility.

The assumed causal chain

This study wants to illuminate the connection between the process of globalisation and the increased rate of injuries/diseases among Swedish workers. Many employees experience strain and burn outs. I assume this could be because the work force experience high pressure when management slim their organisations in order to improve competition and increase productivity. A leaner production and higher responsive organisations also demand higher involvement by the employees. I also assume that a possible side-effect in this process is that the concern for personal occupational health is lost due to too much focus on productivity and cost reduction. More employees also experience organisational changes frequently and less stability both within the company and the surrounding situation. This because on top, the forces of globalisation influences the culture and the surroundings of the organisation.

Analytical questions:

To what extent if any can the changes seen about the health situation be explained by the changes in market situation and globalisation? Can evidence be found showing that globalisation and market changes have had an impact on companies and work places?

The theme of my thesis is thus:

Is there a connection between globalisation, organisational culture and employees' health?

The analyses will be based on a combination of sources and materials: statistics on work-related health problems in Sweden, analysis of literature on contemporary organisational changes and their effects on organisational culture, and their relationship to globalisation. In this context *employee's safety* means that the employee should not be injured by accidents or suffers diseases by prolonged exposure to physical/chemical hazards or/and especially psychosocial conditions in the workplace.

Method

In order to find material for my theme the sources for information were literature and research reports, statistics on health and injuries, and interviews of people familiar with the development in their own organisation or otherwise have seen the development taking place. Hofstede (1997) points out clearly that the background of the author / researcher is easily seen in the reports / books, so does my background influence my study. As originally a chemical engineer and working in industry for 11 years I have now changed profession and have for the last 2 years been working with employee's health and safety at the Swedish Work Environment Authority (SWEA). SWEA is in charge of the workers health and safety at work places in Sweden and actively engaged in reducing the work-related absence. This fact, that SWEA is my employer and actively engaged in the area of the theme of my paper, has an influence on my perspectives and analyses. Also my use of concepts will be influenced by this background. Similar it will unconsciously influence my choice of authors and related research field. During the past years I have also let myself be influenced by reading books and articles, looking at certain TV-programmes, listening to politicians, searching for information on certain topics, etc. This 'mental programming', to use the words of Hofstede, I can neither neglect during this study nor turn off. However, I have consciously tried to reduce the influence by relying on different sources. The final conclusion will of course suffer from the same reason.

The experiences collected and presented in figure 1 by Stig Adolfsson at SWEA (personal communication) stimulated me in this study. Could it be that statistics from other sectors showed the same tendencies? The statistics from paper mill and pulp industry was compiled by the statisticians at SWEA while I myself searched and compiled the statistics concerning the transport sector. SWEA has for the years 2004-2006 elected six areas for special attention

and one of those areas is the transport sector which caught my interest as it is a little bit different from mining and paper mill & pulp industries.

Literature research

There is an advantage of basing the study of the results of others' research and experiences. The concepts will be more easily and broadly covered. However, there is also a trap in the selection of literature and researchers. Depending on my own assumptions, belief and prior experiences, conscious or unconscious, there is a risk that the literature will be tendentially selected. Still I have tried to find literature covering the concepts with different point of views. I have also tried to get literature from different fields, not only organisational sociology and psychology though I have to admit that few macro-economical authors are represented. The review is by no means totally covering the subject. The selection and consequently non-selection of researchers and literature give a certain bias. There are authors applauding the idea of free trade and its consequences and benefits for society and individuals but those are not covered in this study.

Statistics

Mainly I have studied statistics from Swedish Work Environment Authority (SWEA) who collects data on injuries and accidents. SWEA also makes surveys on experienced stress and workload. There are quite a lot of statistics and it was not possible to include more than a few. I have focused on statistics confirming reports from others and statistics showing psychosocial and/or organisational problems. The advantage of statistics should be its objectivity and neutrality. Figures are figures. But a problem with statistics is the collection of data. Behind the figures there are changing conditions and reporting systems hidden, which happened in the beginning of the 1990's. Changes in legislation cause companies to report more or less depending on the benefits or penalties. Changing criteria and groupings give new results making it difficult to compare data over the years. A slight difference in questioning from one survey to another can also cause different answers. This has for instance happened in the questionnaire about experienced work related problems. The compulsory reporting on severe accidents is also influenced by collective branch history or similar cases/accidents being prosecuted by the authority. Special campaigns and actions from the inspectorate also influence the rate of reporting accidents. Statistics compared over time is also influenced by changing demographic changes. So statistics have to be interpreted cautiously especially if the circumstances behind the collection of data are not known.

Figure 1 shown in the introduction is compiled from the experiences from company health/medical personnel, safety personnel and/or inspectors either at the plants or at the work environment inspectorate. That means that the diagram reports the experienced development, not actual figures. The other diagrams/figures in this study are based on actual cases reported to the authority or from surveys performed by the SWEA. The term 'Reported diseases/injuries' used in the diagrams does not mean that the injuries are legally approved as injuries caused by working conditions. It only means that the accident / experienced injury was reported to the authority.

Interviews with key personnel

I have interviewed people working for several years in industry or in relation to industrial activities. Most of the interviewees are somehow working in the field of Safety, Health and Environment (SHE) even though they work with/see the issues from different viewpoints. I have also visited and interviewed a representative from an unemployment fund. The interviewees were selected due to their experience in their profession respectively.

In total 4 people were interviewed. The following abbreviations will be used when referring to the interviewees:

- AE - representative from an unemployment benefit fund who has partly reintroduced manual paper work
- BA - Quality, Health, Safety, Environment manager at a medium-sized international chemical company who has been working at different levels and at different positions in the same company for approximately 25 years.
- BB - newly retired engineer and group leader, international experience from similar companies, worked in an industry producing highly hazardous materials.
- FL - representative from Swedish Work Environment Authority

The interviews were semi structured leaving the interviewee lots of room for developing his/her thoughts. A more structured interview I considered too limited on a vague concept. People being interviewed rely on memories and interpretations of the past and as such subjected to change over time. They are also influenced by the interviewer's way of expressing her-/himself giving new interpretations and mental images to the interviewee.

Concepts used in the interviews are probably not shared in detail between interviewee and interviewer. One interviewee expressed another problem; his attitude had changed over time, being increasingly more pessimistic. What implications does that have on his memories, comparisons and interpretations of past events? Still another problem is the selection of interviewees. The selection was mainly done out of personal contacts. This will probably mean that I and the interviewees in some respect share some basic assumptions. Neither is the quantity sufficient. Finally the resulting compilation can introduce new interpretation and errors. Still interviews are of interest in that they can lift forward personal experiences which otherwise would be lost in aggregated results. The reported opinions from the interviewees can give a subjective confirmation on statistics and changes over time but conclusions can hardly be based solely on them.

In this study I have searched and used quantitative statistical data in order to show the actual situation of workers health in Sweden. I have collected both quantitative and qualitative data by searching other reports and literature in order to find out what other researchers have concluded about the situation. I have also collected some qualitative data by interviewing people either presently or previously active in the field of safety and health issues. By combining different sources and types of data I think a clearer picture will emerge showing a possible connection between the overall global changes and the hard facts experienced on the shop floor.

Results

What are the signs in statistics?

According to the European Agency (2002a) there has been an improvement in occupational safety during the past decades, at least concerning more severe accidents and death casualties. This is also confirmed by statistics from SWEA (www.av.se) where death casualties in Sweden have decreased to a rather stable rate of approximately 50-60 deaths annually for the last 10-15 years.

If we look at reported injuries in other sectors we can in figures 2 and 3 see the same tendencies as in figure 1, namely that the chemical/physical health problems have decreased while at the same time psychosocial problems have increased. The increase in psychosocial

diseases is maybe not so dominant in the diagrams but the relative increase from a low initial level is high.

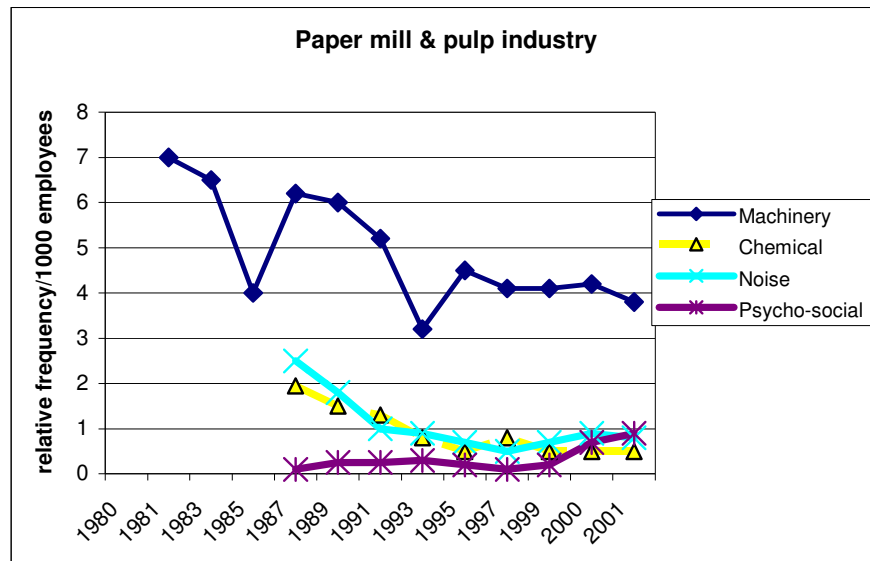


Fig 2. Reported injuries from paper mill and pulp industry showing the development in some selected categories. Source: Arbetsmiljöverket

The interview with BA partly confirms this picture. The company have fewer problems with chemicals because the company have reduced the use of them. However he have also seen in his own department a decline from 5 safety officers to 2 during the 10 years he has been in office. That means that less people still have the same responsibility / making the same job.

If we in figure 4 look at the reported causes for the reported diseases in the psychosocial category (total number of all sectors) we first of all find that more women than men are affected. One reason why women are more affected than men by the psychosocial health problems can be that they dominate certain sectors like health care, children care, schools, service sectors etc. where the 'soft' problems predominate.

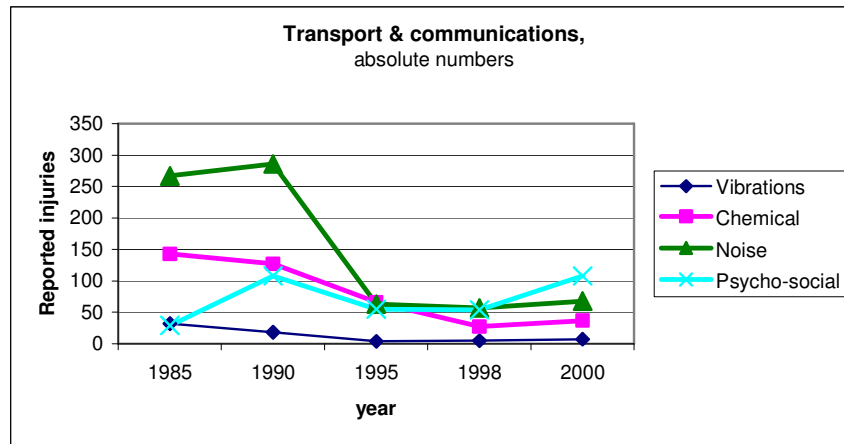


Fig 3 . Reported injuries from the transport and communication sector during the years 1985-2000 showing the development in some selected categories.
Source: Arbetsmiljöverket

The Swedish Social Insurance Authority (Riksförsäkringsverket, RFV for short, 2002) reports indications on worsened psychosocial working conditions. This has been especially noticed in the public sector and for women. Many of these jobs are very often on irregular schedules. Secondly we see that most of the causes reported can be attributed to organisational settings and factors like high workload, high tempo and frequent organisational change and less on individual and relational causes. Even if these organisations are not directly influenced by the market forces, they are under high pressure for higher efficiency, downsizing, less allotment and to some extent also outsourcing. In jobs where both physical and psychosocial problems exist, and where men to a higher degree are employed, the RFV report suggests an explanation that probably the diagnoses are shifted in favour towards the physical causes instead of the psychosocial ones when possible.

The process of structural change in industry is continuing with automation, out-sourcing, sale, and relocalisation. For example the Nordic Paper Journal (Nordisk Papperstidning, 2/2004) reports a decline in available jobs in the Swedish and Finnish pulp and paper industry by approximately one fourth from 80000 to 62000 since the beginning of the 1990s. The outsourcing has largely affected sectors like cleaning, security and food services and not so much graduated engineers.

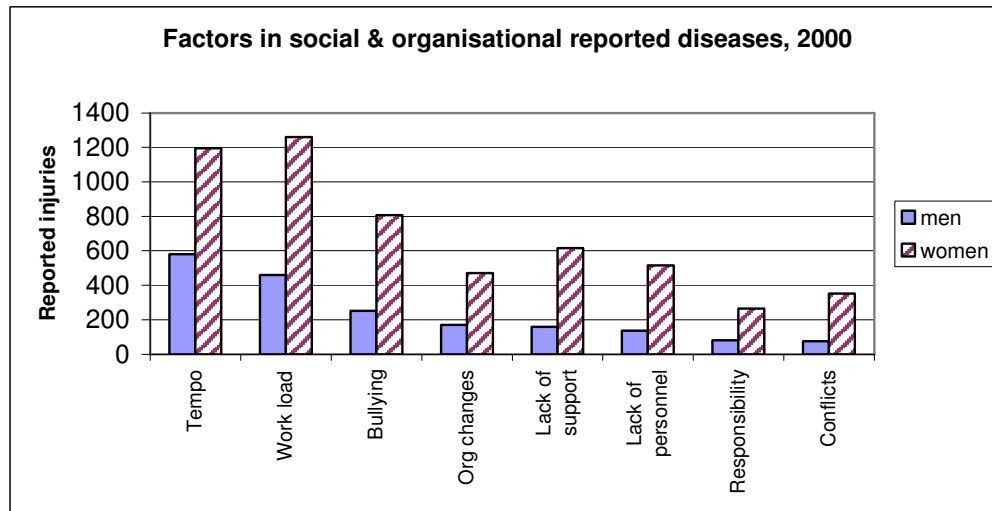


Fig 4. Predominant factors behind social and organisational reported diseases, year 2000. The same individual can report several causes. Source: Arbetsmiljöverket

Statistics from 1997-2000 in figure 5 show an increase in average sick leave due to organisational/social factors. Both for women and for men there is a steady increase during these years. Partly this increase can be explained by an ageing work force. But according to a governmental commission this explains only one third of the increase (SOU 2002:62). Even in the age groups where there is no demographic change, there has been an increase in sick-leave (Du & Jobbet, 1/2003).

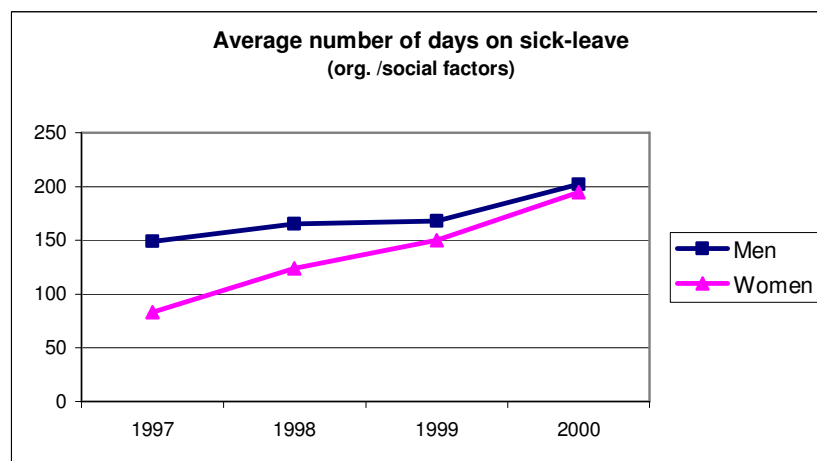


Fig 5. Average number of days on sick-leave due to organisational/social factors. Source: Arbetsmiljön 2003.

Even the actual number of people on sick-leave shows in figure 6 a dramatic increase since 1997. According to an investigation made by the Swedish Ministry for Social Affairs, the high sick leave in Sweden, as well as in some other countries, is difficult to explain. It can for example not be attributed to different practices and judgments made by the doctors (RoD, 40/2003). RFV has also made an investigation (2003a) in which sick leave and poor psychosocial working conditions are linked to each other. RFV use the Demand Control model of Karasek and Theorell (see Theorell, 2003) as a foundation for the investigation and interpretation of the results. According to a survey 2002 those on sick leave for a longer period experienced strain to a higher degree in their work due to higher psychological demands than ‘normal population’.

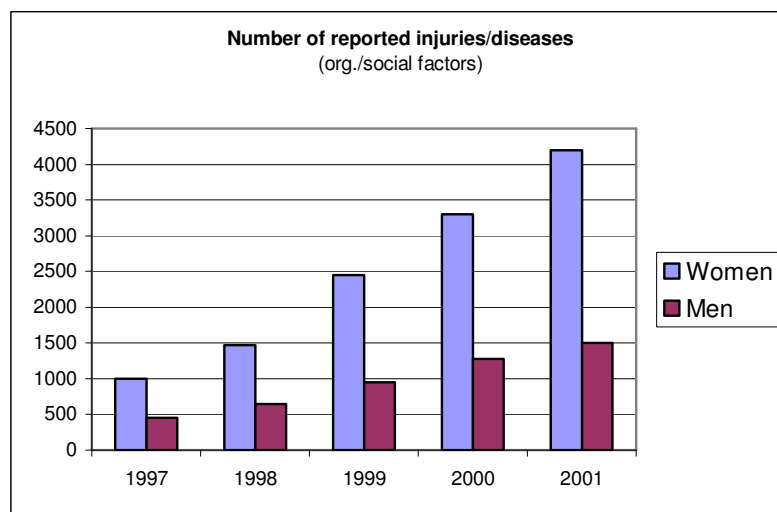


Fig 6. Number of sick-leave due to organisational/social factors. Source: Arbetsmiljön 2003.

Comparing different surveys RFV also concluded that during the 1990's the proportion of relaxed jobs has decreased while at the same time the “active” jobs (according to the Demand-Control model) and those with high tension have increased. In other words the psychosocial working conditions have worsened. The magazine *Du & Jobbet* (1/2003) reports that the public employers e.g. hospitals, child care, schools etc. have suffered under severe economical strain. Employees working with people can not be replaced by machine, instead they have to meet downsizing with less pauses, more patients or care takers, and experience increased pressure. Cox, Griffiths & Rial-González (2000, 71) report that, for caring

professions, “responsibility for people is associated with emotional exhaustion and the depersonalisation of relationship with patients”.

Changing situations in both working situation and daily life interplay and contribute to a higher stress according to a report from NIOSH (2002). Studies imply that higher job demands and/or longer working hours “may pose a disproportionate risk for women” in that women normally take more responsibility for family life (ibid. 3). The NIOSH report also lifts forward indirect effects of downsizing and reorganisations in that access to occupational health services and programs may be affected.

According to Arbetarskydd (6/2004), figure 7, the number of reported work environmental violations and successful prosecutions have increased during the last years after a decline in the beginning of the 1990s. There is no explanation given to the increase - decrease of the cases. It could be that more violations to the legislation are prosecuted, but could also be that companies actually committed more violations to the work environment regulation. Other statistics (included in the diagram) show that during the last years in 1990s less inspections were done by the inspectorates due to reduced work force, still more violations were prosecuted. Not until 2003 was the number of inspections increased again because then the result of new employments was seen.

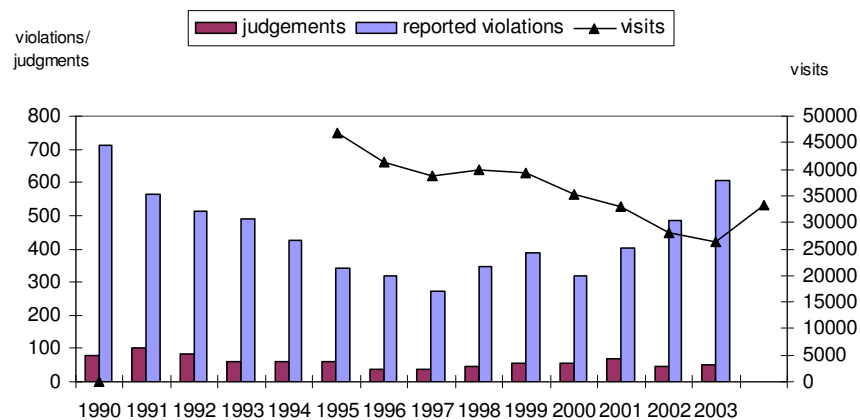


Fig 7. Reported work environmental violations and judgments. Source: Arbetarskydd 6/2004 and Arbetsmiljöverket

Also according to the journal (7/2004) companies reported more injuries/diseases, accidents and/or near-accidents in 2003. In 1994 there were 2846 reports made compared to

5371 in 2003. The highest increase is found in the sectors of education and transport. In transportation the increase was 72 % compared to previous year and in education 75%. One reason for this increase could be better information from the inspectorate about current regulations. It could also be an effect of earlier prosecutions and the following fines. Another reason according to *Arbetarskydd* is the tougher climate in society with robbery, threats, and violence affecting those working with people like bus and taxi drivers, train personnel, school personnel etc.

All together we see an increase in the average length of as well as the total number of people on sick leave. We also see a decrease in injuries caused by physical/chemical hazards but at the same time an increase in diseases due to psychosocial/organisational causes. We also see an increase in violations to the work environmental regulation at work places. These developments could be expected if the attitudes towards work environment and labour conditions at work places are harsher today which also RFV concludes in their report.

This development can be illustrated by a case history. BB is an engineer who was working at a chemical plant manufacturing highly explosive materials. During the years he has seen lot of changes in form of changing ownership, downsizing, out-sourcing, and new management. His overall opinion is that safety always was in the first place, at least when the old production manager still was on duty. 'It is not certain that you get a new production line if the old one explodes' was his philosophy. The [physical] safety was increasingly better during the years according to the engineer. However, the old safety handbook was replaced by the modern quality systems which did not deal with the safety issues in the same way. Still there were no fatal accidents. Despite checklists and instructions it happened once that a machine exploded, fortunately no injuries occurred. According to the engineer the newer and younger managers did not have the same interest and knowledge about the safety issues either. BB also noticed that today less people were producing the same as before. BB's understanding of safety is fire, explosions, solvents and hazardous chemicals. Reminded on the increased workload he mentioned himself, he reports that some old colleagues say that they sometimes feel that bad that they don't go to work. According to BB the stress also could influence the workers to take short cuts. The job has become worse and at the same time the employees older. Even the work at the safety committee had changed during the years, becoming more 'hollowed' according to BB. This case illustrates the increasing pressure on the work force following changes in corporate management.

What are the signs of changing conditions in organisations?

Kaminski (2001) mentions a hierarchy of four levels in hazards control: 1) use of personal protective equipment; 2) administrative actions such as training or job rotation; 3) minimizing the exposure to the hazard; and 4) eliminating the hazard. Kaminski argues that when companies react on external pressure, and when stakeholders view is highlighted, there is a risk of focusing on lower levels of hazards control because they are less expensive. His study also shows that “[t]he organizational practices played a significant role in predicting injury rates but explained less of the variance in productivity” (ibid. 134). The European Agency report (2002a) lifts forward the complexity of multiple changing factors which threatens established structures in the organisation as the companies no longer can concentrate on optimisation of safety issues in a stable environment. The agency also reports on an increased “segmentation in the workforce based on differences in conditions of employment” (2002b). Companies experiment with their work organisation the agency reports (2001). These ‘new’ ways of organisation have not always come out with positive results for the work force in that the psychosocial demands on the workers are higher, it brings the work to the home situation, and less control for the worker on their working situation.

This situation is confirmed by the investigation made by Riksförsäkringsverket (RFV, 2003b). In their investigation RFV found that a majority, 65%, of those on sick leave and who claimed that before the sick leave they were working more than 40 hours a week, also reported that the cause for their sickness was work-related. A rising problem according to labour unions is that many workers do not get compensation for working overtime (NT, 20/2003). This does not mean that they work less, only that they do not get any compensation for their extra work and that the overtime work is not seen in statistics. Still people suffer from high workload and they are forced to bringing their work back home.

BA reports on a prevailing safety attitude that emanates from the top corporate management since 4-5 years. The risk manager has held his post since 1994 and has seen quite a lot of technical as well as organisational changes, “a new CEO every year more or less”. But according to BA safety is not a problem; nowadays there is never any discussion about proposed safety issues. Another example of the importance of safety matters is that safety meetings are never rescheduled. There was a slight change when the current corporate

manager entered his duties. Before then the interest in safety issues was not the same. The attitudes to safety could also partly be traced back to the risk manager himself. Being persistent, paying respect to the colleagues, never losing sight of the objectives and working proactively are the reasons for the success. If he would finish his job of some reason, “they will have problems”. If BA also thought of psychosocial safety issues is not clear.

I had the opportunity to sit next to an officer at an unemployment benefit fund when she was on ‘phone-duty’ in a situation similar to a call-centre. During that time the phone rang more or less constantly, not leaving much room for interviewing her about her working conditions, instead I experienced that she had to face very varied situations, both unpleasant and almost threatening calls, sad and hopeless ‘victims of the system’, to humorous ones. The manager (AE) later on in the interview said that in their office they had the possibility, to some extent, to influence the length of ‘phone-duty’ depending on their competence on dealing with people calling. The other time they worked with other administrative parts of the errands. At his office they had ‘reversed’ the work tasks in that they had re-introduced paper handling which were seen by ‘colleagues’/similar offices in the same sector as really an reversal. He himself considered it as one of the best thing he had done. They had today all material digitally scanned and stored in the computer, but still several officers preferred working with the paper-files. As they argued, they could feel the difficulty of the errand just by lifting up the file. They also saw how much work was still on their desk by looking at the pile. Working with the computer with several different open windows they did not get the same concrete feelings of their tasks.

Burke refers to several researchers on the effects of downsizing and the observations are that communication deteriorates; organisational trust fall coupled with an increase in fear; increased rigidity and resistance to change; and the work environment is characterized by heightened uncertainty and turbulence. Burke concludes that “These negative reactions, combined with the fact that survivors must do more with less, make the aftermath of layoffs difficult to deal with” (ibid. 6). Deal & Kennedy (1999, 62) also argue that the consequences of downsizing “while long-term corporate performance and productivity are likely the immediate consequences of a long accumulation of short-term management thinking, employee disaffection is likely its most permanent legacy”.

A report made for the European Agency for Safety and Health at Work (Cox, Griffiths & Rial-González, 2000, 61) on work related stress, defines psychosocial hazards as “those aspects of work design and the organisation and management of work, and their social and environmental contexts, which have the potential for causing psychological, social or physical harm”. The authors argue that not only the psychosocial work environment but also the physical environment causes stress. “The psychological effects of physical hazards reflect not only their direct action on the brain and their unpleasantness but also the worker’s awareness, suspicion or fear that they are being exposed to harm” (ibid. 62). The large scale socio-economic and technological changes also affect workplaces. The impacts of those changes/forces are often called “the changing world of work” which means among other things new ways of work organisation, downsizing, and outsourcing with a following need for change in employment patterns and higher demands for workers’ flexibility and skills. The authors also refer to studies showing that “even changes which may be thought to *enhance* the work environment can produce the opposite effect ... work demands had increased and well-being decreased when compared to baseline data” (ibid. 80, italics in original).

Enriching and/or enlarging the jobs and the work environment are supposed to be beneficial for the well-being of the employees. This involves learning new skills and/or take up more responsibility. According to Rasmussen (2000, 869) the workplace has been dramatically influenced by the new technology with diversification as a consequence. “When elementary work routines are mechanized and automated, the work domain of the individual becomes wider, and the task moves to a higher cognitive level”. According to Horbury & Wright (2001) there are potential risks associated with multiskilling. This includes stress and loss of competence in key tasks. Also there is a need for the individual to know the limits of his/her competence within they can operate. Increases in the organisational effectiveness should not be on the expense of the individual’s health due to overloading and working beyond one’s limits. Multiskilling is often a reaction to slimming organisations and reduction in personnel and not a conscious strategy.

Interviews with work environment officers at SWEA gave me an impression that the SWEA feared that the rapid change in technology, competition with low cost countries and hence leaner production and slimmed organisations introduce dangers in the work environment. New machinery may eliminate some well known risks but can at the same time introduce new hazards still not known. An example illustrating this is modern forest

machinery. Today an employee can sit in the cockpit and work for several hours using a joystick. S/he does not observe the tensions in shoulders and the back of the head. After a time this tension will cause him/her musculoskeletal disorders. Working manually the body tells you when you need to rest, but not so with modern equipment. The workload has shifted from physical to less varied, mental and cognitive workload, still leaving tensions on the back and on shoulders.

Reason (1997) shows the obvious relation between production and protection. Every organisation has to produce something, either goods or service with a certain profit in order to survive but still with a certain amount of safety. The obligations and means of the organisation on the protection side are most often not as transparent as for those on the production side. Protection and production have to balance each other. “Since production creates the resources that make protection possible, its needs will generally have priority throughout most of an organization’s lifetime” (ibid. 4). Reason continues that most managers normally possess production rather than protective skills. The information in the organisation related to production is more direct while the information related to safety is characterised by absence of accidents or near-misses.

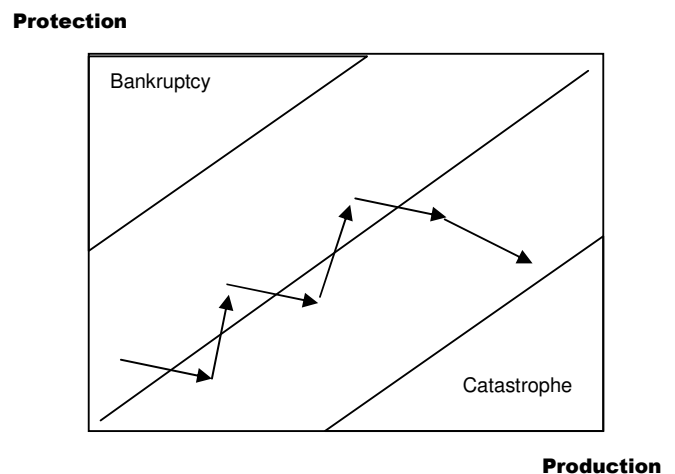


Fig 8. The balance between production and protection. Adapted from Reason

According to Reason (1997) there is a zone, a safety space, wherein the organisation has to navigate. In two extremes the organisation fails to keep the balance between production and protection. Protective measures far exceeding the posed dangers will eventually lead to bankruptcy, since protection consumes production resources. At the other extreme, protection is not sufficient to ensure safe production. Sooner or later the organisation will face a catastrophic accident (indicated by the arrows in figure 8). Unfortunately only after accidents or near-misses protection (re-)gains its attention.

According to Auer and Casez (2002) the overall labour and employment situation in most OECD countries has not drastically changed but “that while stable jobs still account for a

large share of employment in the economies of industrialized countries, the perceived feeling of job insecurity remains high” (2002, v). The authors continue by quoting a report from ILO concluding that "On the contrary, a large core of the workforce is still in stable and secure jobs, even though instability and insecurity have increased in other segments of the labour market" (ibid, 2). Auer and Casez (2002) also argue that there is an apparent paradox between data on job tenure, the overall sense by labour market observers and the focus of media attention that the job insecurity has increased. Their explanation could be that either the indicator of job stability is inadequate measure or that the vulnerability of the workers has increased. Also the increasing involuntary job losses, generalized and reported in media, have a greater effect on worker anxiety and the interpretation of the labour market than data on job stability. As the authors argue “Mass dismissals, amply reported by the media, high unemployment and the rise of part-time and temporary jobs have augmented the feeling that the new jobs are very different from the old and that longer-term full-time employment relationships belong to the past”(ibid, 2). The changes seen in statistics is mainly in the margin and not sufficient to create a trend. According to Auer and Casez the employment and employees has not yet been as free and movable like capital and goods on the market and that the evidence “suggest that in most of the industrialized countries labour markets are more stable than is usually assumed” (ibid. 54).

Even if the changes do not represent a major trend, they still have an impact. Procoli (2004) has collected several contributions showing the impacts of precarious work not only on the material conditions, as salary, but also on personal identity. Depending on local structures, local history, invested time and identity by the workers in their work, the consequences, when factories are closed down or sold to foreign investors with different objectives, will of course be different. This is especially so in the former socialist countries in Eastern Europe but not limited to those countries. Deal & Kennedy (1999) report the same impacts on workers “where earlier generations of workers around the world found meaning and value in their working lives, today workers - at both junior and senior levels are forced to look elsewhere. People will still work to earn a living, of course. The self actualization that once came from work will be missing, however” (ibid. 62).

Discussion

According to the findings in this study the evidences are scattered. There are two types of evidence: the Swedish statistics and international literature. It seems that more people are

getting stressed and injured due to tougher working conditions. The overall picture from statistics and the RFV's studies show this. According to RFV it is due to the worsened working situation. Also according to RFV and others studying the phenomenon no simple other cause can explain the increase since the late 1990's. Statistics also show an increase in sickness related to organisational factors which could be explained by cuts and subsequent higher work load. Other factors like changing compensation levels and conditions or a higher proportion of old employees can influence the results but only to a minor degree according to one report (SOU 2002:62).

Many authors similarly report on the changed situation for organisations on the global market. It seems to be a general opinion that the transformation seen in society and the market conditions has caused the change in working conditions. However some authors do not agree due to lack of clear evidence. Some also put forward the idea that reports in media create a perception of the instable situation which in turn creates stress and frustration by the workers. Changes in society do occur but there is a risk that globalisation is blamed without proper investigation. Most of the reviewed literature takes it for a common truth that the globalisation creates this and that, and as a reader you can easily get carried away.

National culture and the organisational environment of different kind, influence the culture within the organisation. The results from interviews, statistics and most literature do not show or mention culture explicitly. However, different organisational manifestations from the same sources indicate that the internal culture has changed together with e.g. increased need for productivity or a change in management. BB speaks about the new management lacking the same interest or knowledge about the production and safety; BA speaks about less personnel working with internal work environment and safety due to downsizing. Similarly FL speaks about the changed conditions within the organisations.

Is globalisation influencing the organisational culture and is organisational culture influencing the employee's health? Alvesson (2002) argues strongly that it is not possible to create casual links between organisational culture and outcomes. This is mainly due to the openness of the concept of organisational culture as well as difficulties with the evaluation of the output. This does not mean, however, that organisational culture does not influence other things in the organisation like attitudes towards safety. Only that it is difficult to show a causal link while culture and other factors are reversibly influencing each other. Also, culture

is multifaceted. If you make an input on a particular cultural element you can't explicitly say what the output will be and in what time horizon.

The statistics show a dramatic relative increase in psychosocial diseases but sometimes this is 'masked' behind higher actual figures in musculoskeletal injuries. Still, the overall picture shown by the statistics is an increase in psychosocial diseases. Something causes this increase. There is still a reason to pay an interest in the influence from phenomena like globalisation and organisational culture on the work environment and its effect on the employee's well-being. Here it is also interesting to lift forward both the role of media in creating insecurity according to Auer & Cazes and the arguments from Deal & Kennedy and Procoli showing the identity shaping factors of the employment which are jeopardized when situations change causing possible psychosocial problems.

As put forward by some authors like Rasmussen and Kaminski, many managers focus more on the development of productivity, on economical result and shareholders value than on the development of work environment. The concept of culture deals with attitudes, values and norms. Actions from management have important symbolic values in order to maintain and change the behaviour towards safety of both employees and leaders. If the employees see incongruence between sayings and actions from top management, any existing 'good culture' will rapidly be destroyed. Some of the interviewees related to the attitudes of management on safety issues and they had noticed differences when top management had changed. The employees will also rapidly notice the attitudes from top management towards the internal work environment. What is the attitude towards the balance between employee's well-being and productivity? Is management oriented to short-terms or long-terms? An approach on developing a specific culture requires a long-term perspective, persistent and consistent work supported by management as was indicated by BA.

In this study I have shown that there are signs that workplaces are going through a radical change, statistics show that many employees experience injuries and diseases which could be explained by organisational factors. I have also shown that other reports and literature confirm the picture of worsening working conditions and the effects on the employees' well-being due to these conditions. The interviews show a somewhat mixed picture; partly they confirm the harsher conditions but also that management are well aware of and do not neglect safety issues. I have also shown that other researchers confirm the major changes in companies due

to the global market economy, however these findings are disputed. These changes and signs covariate and take place simultaneously, but still it is difficult to say that there exists a casual link. Yes, there are indications of a new organisational culture related to globalisation and that this, at least to some extent, can explain stress in the workplace and increase in sickness and poor health.

References

- Alvesson, M. (2002). *Understanding organizational culture*. London: Sage
- Arbetsmiljön 2003. Sveriges officiella statistik statistiska meddelanden. AM 68 SM 0401
statistics also available at <http://www.av.se>
- Auer, P. & Casez, S. ed. (2002). *Employment stability in an age of flexibility: Evidence from industrialized countries*. Geneva: International Labour Office
- Bauman, Z. (2000). *Globalisering*. Lund: Studentlitteratur
- Castells, M. (2000). *The rise of the network society*. Oxford: Blackwell Publishers Ltd.
- Burke, R.J. (2002). Organizational transitions. In C. L. Cooper & R. J. Burke ed. (2002). *The new world of work: challenges and opportunities*. Oxford: Blackwell
- Cox, T., Griffiths, A & Rial-González, E. (2000) *Research on work-related stress*. Report for the European Agency for Safety and Health at Work. Luxembourg: Office for Official Publications of the European Communities.
- Deal, T. & Kennedy, A. (1999). *The new corporate culture. Revitalizing the workplace after the downsizing, mergers and reengineering*. London: TEXERE Publishing Ltd.
- Dunn, B. (2004). *Global restructuring and power of labour*. Hampshire: Palgrave Macmillan
- Edelman, B. (2001). *Arbetslivsforskningen - quo vadis?* Stockholm: Arbetslivsinstitutet.
- European Agency for Safety and Health at Work (2001). *Research on changing world of work*. Luxembourg: Office for Official Publications of the European Communities.
- European Agency for Safety and Health at Work. (2002a). *New trends in accident prevention due to the changing world of work*. Luxembourg: Office for Official Publications of the European Communities.
- European Agency for Safety and Health at Work. (2002b). *New forms of contractual relationship and the implications for occupational safety and health*. Luxembourg: Office for Official Publications of the European Communities.
- Flanagan, R. J. & Gould, W. B. ed. (2003). *International labor standards*. Stanford, CA: Stanford University Press.
- Hofstede, G. (1997). *Cultures and organizations. Software of the mind*. New York: McGraw-Hill.
- Horbury, C. & Wright, M. (2001). *Development of a multiskilling life cycle model*. Contract research report 328/2001. Norwich: Her Majesty's Stationary Office.

- ILO¹. (2003). *Safety in numbers*. Geneva: ILO Publications
- Kaminski, M. (2001). Unintended consequences: Organizational practices and their impact on workplace safety and productivity. *Journal of Occupational Health Psychology*. 6. No2. 127-138.
- Klein, N. (2002). *No Logo*. Stockholm: Ordfront.
- Magnusson, L. (2003). Globaliseringen styr arbetslivets och välfärdens utveckling. *Framtider*. 2, 23-27. Stockholm: Institutet för framtidsstudier.
- Martin, H-P. & Schumann, H. (1997). *Globaliseringsfällan*. Eslöv: Brutus Östlings Bokförlag Symposium.
- Maslach, C. & Leiter, M.P. (2000). *Sanningen om utbrändhet*. Falun: Natur och Kultur
- Miegel, F. & Johansson, T. (2002). *Kultursociologi*. Lund: Studentlitteratur
- NIOSH (2002). *The changing organization of work and the safety and health of working people. Knowledge gaps and research directions*. NIOSH Publication No. 2002-116. Cincinnati, OH: NIOSH - publication dissemination
- Procoli, A. ed. (2004). *Workers and narratives of survival in Europe. The management of precariousness at the end of the twentieth century*. New York: State University of New York Press.
- Rasmussen, J. (1988). Human factors and power plants. *Conference record for 1988 IEEE 4th conference on 1988*, 43-48. IEEE
- Rasmussen, J. (2000). Human factors in a dynamic information society: where are we heading? *Ergonomics*. 43, 869-879. Taylor & Francis Ltd.
- Rasmussen, J. & Svedung, I. (2000). *Proactive risk management in a dynamic society*. Karlstad: Räddningsverket
- Reason, J. (1997). *Managing the risks of organizational accidents*. Aldershot, UK: Ashgate
- Reberg, K. G. (2003). Riksbankschefen varnar för politik som motverkar tillväxt. *Riksdag och departement*. 31, 27.
- RFV (2002). *Långtidssjukskrivningar för psykisk sjukdom och utbrändhet RFV analyserar 2002:4*. Stockholm: Riksförsäkringsverket kundtjänst.
- RFV (2003a). *Psykosocial arbetsmiljö & långvarig sjukskrivning. RFV analyserar 2003:3*. Stockholm: Riksförsäkringsverket kundtjänst
- RFV (2003b). *Arbetsförhållanden - orsak till sjukskrivning? RFV analyserar 2003:10*. Stockholm: Riksförsäkringsverket kundtjänst

¹ ILO: International Labour Office, Geneva

- Rövik, K-A. (2000). *Moderna organisationer. Trender inom organisationstänkandet vid millennieskiftet*. Lund: Liber.
- Salo, I. & Svenson, O. (2001). *Organizational culture and safety culture*. Stockholm University: unpublished report.
- Schein, E.H.(1992). *Organizational culture and leadership*. 2nd ed. San Francisco: Josse-Bass.
- SOU 2002:62. Analys av Hälsa och Arbete. AHA-utredningen.
- Theorell, T. (2003). Psykosociala faktorer - vad är det? In T. Theorell, ed. (2003). *Psykosocial miljö och hälsa*. Lund: Studentlitteratur
- Tomlinson, J. (1999). *Globalisation and culture*. Cambridge: Polity Press.

Other sources – statistics, magazines & newspapers

- Arbetarskydd. Arbetsmiljöverket. Västerås: VLT Press.
- Arbetsmiljöstatistik. Different yearly reports on occupational accidents and work-related diseases. Solna: Arbetsmiljöverket
- Civilingenjören, Civilingenjörsförbundet, Stockholm: Sörmlands Grafiska Quebecor.
- Du & Jobbet. Stockholm: Arbetsmiljöforum/Föreningen för arbetarskydd, ett nätverk för utvecklande arbetsplatser.
- Metro. Tidnings AB Metro. Stockholm: Tidningstryckarna
- Nordisk Papperstidning - Nordic Paper Journal. Mentor Communications AB. Västerås: Westerås media Produktion.
- NT - Ny Teknik. Ekonomi&Teknik förlag AB. Västerås: VLT Press.
- RoD - Riksdag & Departement. Stockholm: Riksdagsförvaltningen