

THE COST OF VIOLENCE/STRESS AT WORK AND THE
BENEFITS OF A VIOLENCE/STRESS-FREE WORKING
ENVIRONMENT

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EXECUTIVE SUMMARY

- This report explores the issues of stress and violence at work with the aim of establishing the costs these problems may present to the individual, the organisation and society
- A number of socio-economic factors are identified which together appear to exacerbate the problems. Economic globalisation has led to processes such as downsizing and restructuring with increasing pressures on people at work as a result. Demographic changes within the workforce, e.g. increasing female participation and increased diversity also heighten the vulnerability of particular groups
- Workplace stress is explained in line with a transactional model of stress emphasising the dynamic properties of the concept as well as the role of subjective processes such as appraisal and coping. This stress model is applied to various forms of workplace violence to explain the outcomes of violence as well as the relationship between stress and violence (with stress as an antecedent of violence)
- By means of examples from a wide selection of studies into stress and violence it is demonstrated that these problems represent a very real threat to a large numbers of workers world wide. The most reliable of these studies suggest that approximately 30% of the workforce in developed countries, and possibly even a higher proportion in newly industrialised and developing countries, suffer from work related stress, a figure which appears to be on the increase.
- Violence represents a problem in a growing number of workplaces even though the number exposed directly to physical assault remains relatively low. Employees in service industries, e.g. retailing and health care are most at risk of physical assaults whilst taxi-drivers and police officers are the most vulnerable groups with respect to homicide.
- With the growing number of women entering the workforce domestic abuse becomes an occupational problem as the abuse spills over into the workplace. This is especially a problem in developing countries.
- Whilst violent attacks and even murders have received considerable attention in the US, a far greater number of people generally report being

exposed to violence of a psychological nature or bullying. Across the world a significant proportion of the workforce also report being exposed to sexual harassment

- As with stress, exposure to any form of violence at work has negative implications for individuals, organisations and society as a whole. For the individual these problems are seen in impairment to physical and mental health, in some cases with long-term traumatic effects (PTSD). Furthermore, the effects appear to extend to witnesses or bystanders, where a 'climate of fear' produces similar reactions. The experience also tends to manifest itself behaviourally with negative impact on job-satisfaction and commitment
- For the organisation stress and violence leads to an increase in sickness absenteeism, increased turnover rates and reduced productivity. As far as violence is concerned the effects extend to bystanders. For bullying and harassment grievance and litigation may also be the outcome.
- For society, stress and violence leads to increased pressure on social services and welfare, particularly in those cases where the victims become unemployable and would have to retire on the grounds of ill-health.
- The report highlights problems of a theoretical and methodological nature in putting a cost on these problems, emphasising that considerable reservations need to be taken with respect to the figures given
- No particular price has been assigned for the cost to the individual as too many uncertain factors would impinge upon any estimation. However, the cost to individuals would include loss of income in connection with sickness absenteeism, exit from work or retirement as well as from eventual medication and medical consultations. Additional costs would be related to the effects on private and social life, some very intangible ones, e.g. the price of suffering and personal loss
- The costs to the organisations are primarily related to sickness absenteeism, reduced productivity, replacement costs and additional retirement costs. There may be further costs due to damage in production or equipment as well as costs in connection with grievance and litigation, e.g. investigation and mediation costs. A potential public loss of goodwill towards the organisation may be another more intangible cost.

- The costs to society are related to medical costs and possible hospitalisation, benefits and welfare costs in connection with premature retirement as well as potential loss of productive workers. On the basis of figures from a number of countries we estimate that in total stress and violence at work may account for 1-3.5% of GDP
- Whilst intervention programmes against stress and violence at work were found to be of mixed quality, a small but growing number demonstrate the benefits of a violence free workplace. In sum these examples demonstrate that it is possible to counteract the problems of stress and violence and there may be significant cost savings for the individual, organisation, and society in doing so.

1 - INTRODUCTION

Stress is increasingly becoming accepted as a workplace phenomenon negatively affecting a growing number of people across the world (Cox, et al., 2000). As the economy becomes global and competition increases in the battle for market shares and survival, pressure mounts on workers. With high levels of crime and aggression in society, violence finds its way into the workplace in the form of robbery and assaults, particularly on front-line staff and service providers. As pressures mount aggression may also build up within the workplace, making worker on worker violence more likely. However, recent research in Europe, the US and Australia indicates that it is the emotional and psychological abuse referred to as 'bullying' and 'mobbing', rather than the physical violence which represents the greatest threat to most workers. However, due to the increasing diversity of workforces, a number of studies also document the frequent presence of harassment on the basis of race or gender (e.g. Chappell & Di Martino, 2000). Many women, particularly in the developing world have also experienced that the workplace represents no safe haven from domestic abusers.

This report will explore the problems of stress and various forms of violence at the beginning of the new millennium and the relationship between them. Our main focus will be on the cost of stress/violence. To establish the cost we need a clear indication of the possible effects of stress and violence. In order to put organisations into action such an exploration needs to be comprehensive in the sense that it includes not only the costs to the individual but also the potential costs to the organisations. Moreover, in order to gain the attention of policy providers, the costs to society should also be emphasised.

In spite of numerous pitfalls in the research on stress and violence at work, (particularly of a conceptual and methodological nature), and utilising the often far from perfect data we will then attempt to put a price on the problems. To support this attempt, we will introduce some simple models of cost-calculation.

As the primary aim of this report is to bring about change, we will also discuss interventions. Progress on intervention with regard to stress and various forms of violence will be evaluated and where relevant, good examples of successful interventions will be presented.

However, before we start discussing the problems of workplace stress and violence, we will briefly highlight some factors and trends which are likely to affect the presence and scale of violence at work.

A changing world of work

Listed below are some factors and trends which may affect the presence and scale of stress and violence.

- ◆ The economic world is moving towards a single, global market place. However, this economic globalisation has increased commercial competition with growing pressures on everyone at work as a result. In order to survive in this competitive environment, organisations are restructuring and downsizing with the aim of cutting costs (Cooper & Jackson, 1997). Tendering for contracts, which also now often include public services has become increasingly common, bringing with it more economic risk-taking in order to reduce cost (Quinlan, 1999).
- ◆ Organisational downsizing and restructuring has resulted in greater pressure on those remaining employees with an increase in workload and work pace. Such work-intensification has resulted in employees in some countries, for example the US and UK, also working longing hours (Bosch, 1999).
- ◆ In order to increase flexibility a growing number of people are being offered work on a temporary or part-time basis and sub-contracting or outsourcing has become common in many countries. Perceptions of job-insecurity are also increasing in the industrialised world. Even though such perceptions at times may be at odds with reality, they reflect a trend effecting a number of people (OECD, 1999).

- ◆ In many countries it is the service sector which is increasing most rapidly, with growing demands and pressure from clients and customers effecting a large proportion of the working population.
- ◆ The revolution with computing and telecommunications is gradually transforming work-processes. A greater number of workers are being employed in tele-working with their private home being their workplace. With a wider definition of 'workplace' there is also a need for new measures to be introduced by organisations, for example to ensure that basic health and safety regulations are applied at home.
- ◆ The organisation of work is changing with more people working in self-directed or autonomous teams, team-working etc (Cox et al, 2000)
- ◆ For industrialising or newly industrialised countries the changes are enormous as they restructure from labour-intensive industries to high-tech industries and where cultural changes also often go hand in hand with the economic change (Lu et al, 1999).

In parallel with this development, a number of demographic changes have been taking place.

- ◆ In many countries women make up a growing proportion of the workforce. However, a very substantial amount of female workers are employed in precarious jobs, often with little job-security, low pay and unfavourable working conditions and remuneration. This process is not limited to the industrialised world. In addition, for many female workers in developing and industrialising countries the work-experience is a harsh one, with mistreatment and sexual harassment a commonplace reality often nurtured by cultural and religious beliefs. Whilst a growing number of women are taking on managerial jobs, they are still faced with problem connected to exclusionary or undermining behaviour from men who may consider them a threat (Veale & Gold, 1998).
- ◆ In most industrialised countries the population is ageing with growing pressures on social services as a result. Increasingly hospitals and nursing homes are inhabited by the oldest and most needy of the elderly, heightening the pressures on staff (Boyd, 1995).

- ◆ In many countries the workforce is diversifying. This diversity may refer to gender, race, physical ability as well as sexual orientation. Where such development is not managed properly it may give rise to tension and conflict among groups of employees (Neuman & Baron, 1998).

2 - PROBLEM DESCRIPTION

Stress is a complex phenomenon, which is reflected in the large number of definitions in circulation (Di Martino, 1992). However, in recent years definitions have tended to converge around a definition that explains stress as an interactive psychological process or a psychological state between the individual and the situation (Di Martino, 1992; Cox, 1993). According to this model stress is seen as the perceived imbalance between internal and external demands facing the individual and the perceived ability to cope with the situation. Essential to this process is the individual's subjective interpretation or appraisal of the situations and the potential threat it may entail and to what extent the threat is perceived to be within the individual's control. Faced with an external threat, be it from the physical or the psychosocial environment, the organism will try to respond by employing its coping resources, developed for example from previous experience. This process will be influenced by the nature and the extent of the demands, the characteristics of the person, the social support available to the individual and the constraints under which the coping process is taking place (Cox et al, 2000). Whilst access to social support is being emphasised as a positive force in the coping process, the presence of other individuals may also impact negatively on the situation by adding pressure, due to being a source of distraction or irritation (Sutherland & Cooper, 2000).

The dynamics of the stress process are emphasised in the model described above. The utilisation of coping resources, whether successful or not, will impact on the situation and, therefore, influence any symptoms of stress and the influence from the perception of internal and external demands. Similarly, there exists a dynamic relationship between stress and health, whereby any

impairment to health and wellbeing as a result of stress will influence the individual's ability to deal with future stress. Moreover, stress can manifest itself in anxiety and irritability which in turn may influence social relationship at work. One should also bear in mind that the stress experience may not necessarily have any psychological or physiological impact when it is within the individual's ability to regain equilibrium or homeostasis by adjusting to the situation. However, such experiences may still be taxing and represent an impairment of the individual's wellbeing (Cox et al, 2000).

Stress is often understood in its negative expression as synonymous with distress. This is also how the concept of stress will be used in this report. However, it is worth bearing in mind that adapting to a new situation, even when the situation at first may be considered a threat, cannot entirely be seen as a negative process as overcoming the threat may be considered beneficial to personal growth and learning (Di Martino, 1992).

As far as stress symptoms are concerned, a useful distinction can be made between short-term behavioural outcomes/maladaptive coping strategies, e.g. taking a sleeping pill, lighting up a cigarette, skipping breakfast, having an extra drink, and the more long-term consequences such as physical and mental ill health.

The focus of this report is on stress within a work context. However, we acknowledge that factors outside work, e.g. personal relationships and family circumstances, will influence and interact with stressful situations and vice versa. For example, a negative development in a person's domestic life, may make them more vulnerable to pressure in the workplace. In turn intolerable workloads over a long time period are likely to affect an individual's functioning at home, thereby possibly influencing their relationships with their spouse and children.

Several taxonomies of stressors have been introduced (e.g. Cooper & Marshall, 1976; Cox, 1978,). Cox et al. (2000) identify ten types of stressors or stressful characteristics of work, which again are divided into two groups:

'content of work' and 'context to work'. The first group, 'content of work' refers to the following classes of stressors, work-environment and work equipment; task design, workload/work-pace and work schedule. The second group is made up of stressors such as organisational culture and function; role in organisations, career development, decision latitude and control, home work interface, and interpersonal relationships at work. Interpersonal relationships encompass negative interactions with others in the workplace. This stressor, therefore, includes those behaviours relevant to the present report; namely, violence, harassment, and bullying. At the same time, any of the above stressors can function as antecedents of violence, harassment and bullying, as well as influencing the stress-coping process.

Extent of stress

Below we have listed some evidence of the impact of stress at work:

- ◆ A survey of the European Union's member states found that 28% of employees reported stress-related illness or health problems. This accounts for 41 million EU workers (European Foundation for Working and Living Conditions, 1996)
- ◆ A recent survey by the Australian Confederation of Trades Unions concluded that stress was now the single most important occupational health and safety issue (ACTU, 2000)
- ◆ In a UK survey, 500,000 employees were found to be suffering from work-related stress, suggesting a 30% rise from 1990 (HSE Survey of Work-related ill health reported by Smith (2000)). The Bristol Stress and Health at Work Study (Smith, 2000), which used a random community sample (N=7,069), showed that 15-20% were very or extremely stressed and 40-45% moderately stressed. 23% had experienced an illness caused or made worse by work. Two other British surveys (Labour Force Survey, 1995) based on self-report, both using large-scale representative population-samples found that 31% and 26.5% of respondents respectively were suffering from work-related stress or related illness.

- ◆ Two US studies of workplace stress have been reported by the National Institute of Occupational Safety and Health (NIOSH): A survey by Families and Work Institute found that 26% of workers reported they are 'often' or 'very often' burned out or stressed by their work. Similarly, a study by Yale University reported that 29% of employees perceived themselves to be 'quite a bit' or 'extremely stressed at work'.

Very few studies have surveyed large population groups in newly industrialised countries or in the developing world. Whilst numerical evidence is often not available, the growing number of studies undertaken in recent years demonstrate a heightening awareness of a problem, for example in India (e.g. Chandraiah et al, 1996) and in Mexico (Douglas et al, 1997). However, there is still considerable evidence of occupational stress as a significant social problem. For example:

- ◆ A large random sample of Taiwanese workers concluded that the Taiwanese suffered worse physical health than British industrial workers (Lu et al, 1994). This finding was confirmed in a recent study of Taiwanese managers which not only perceived stress to a larger degree than the general workforce, they were also more stressed than comparative samples from Hong Kong, the UK and Germany (Lu et al. 1999)
- ◆ In a study of Brazilian white-collar-workers it was found that Brazilian workers had higher levels of stress and were faced with more sources of stress than a normative comparison group from the UK (Moraes et al., 1993)

The above examples show that stress has become a considerable occupational concern and is probably on the increase.

Workplace violence

One source of stress, which recently has received considerable attention is workplace violence or violent acts. Such workplace incidents of violence have been met with growing interest in the media as well as within the management

literature. Not surprisingly, it is those incidents of violence with a fatal outcome, which have received the greatest attention. However, even though there are reported to be approximately 1,000 such homicides a year in the US alone, these episodes only account for a fraction of all incidents of violence or 1 out of 650 incidents altogether. Moreover, in the US a high profile has been given to those incidents where a person has been murdered by a fellow worker. This is despite the fact that these events account for only 4% of homicides at work, with the large majority a result of armed robberies (Toscano & Weber (1995) cited in Braverman, 1999). Nonetheless, workplace murders as a result of so-called disgruntled workers appear to be a problem particularly relevant to the US and is likely to be linked to the availability of firearms (Boyd, 1995).

It is important to make a distinction between different types of violence as each type will require a different approach with regard to its control and management (Leather et al., 1999). In this respect, a widely used classification scheme is the one introduced by the California Occupational Safety and Health Administration (1995). This classification divides violent acts into three types: 1) Violent acts occurring primarily from robberies with the aim of obtaining cash/valuable goods and which involve incidents where the offender has no legitimate right to be at the premises; 2) Violent acts from individuals who have a legitimate right to be on the premises as a recipient or provider of the service offered, e.g. patients, customers and students; 3) Violent incidents between co-workers, including violence directed against someone in a superior as well as in a subordinate position.

Before introducing a definition of violence, it is suggested that attention should be paid to the following issues: 1) The scope of the definition, in other words, what is to be included under the term 'violence'; 2) How to define 'workplace'; 3) What incidents may be characterised as being work-related (Bulatao & VandenBos, 1996). A useful definition of violence may be:

'crimes of violence that occur in the workplace or while the victim is at work or on duty' (Jenkins, 1996).

Such a broad definition will apply to people operating within the workplace in its widest sense e.g. taxi and bus-drivers as well as people working from home and will be in line with the view of a growing number of commentators in the field (Chappell & Di Martino, 2000; Leather et al., 1999). With the growing number of self-employed people or people working from home, such a broad definition would have a wider appeal. Whilst violence at work mainly will refer to acts taking place in the course of employment, we will also include example of violence where domestic abuse spill over into the workplace, e.g. violence from a previous or current partner taking place within the confines of the workplace. Since the purpose of this report is to explore potential cost of the overall problem of violence at work such incidents will carry a price and, can, therefore, not be overlooked. However, despite its obvious advantages, the above definition is limited to 'crimes of violence'. In order to incorporate acts of sexual and racial harassment as well as the more recently established phenomena, bullying/mobbing and emotional abuse, a definition recently agreed by the European Commission appears to be useful. Here violence is defined as:

'incidents where persons are abused, threatened or assaulted in circumstances related to their work, involving an explicit or implicit challenge to their safety, well-being or health' (Wynne et al., 1997).

In addition to having a wide scope, this definition will encompass all the above mentioned phenomena related to workplace violence. Whilst we acknowledge that they are inter-related, we will still argue that there are advantages in describing them separately.

We have already suggested that violence may be an important source of stress in many cases. However, as highlighted above, the dynamics of the stress experience suggest that stress may also function as an antecedent of violence. In this respect violence can be related to a number of social or situational stimuli such as perceptions of unfair treatment, increased

workforce diversity, organisational change, downsizing, a growing use of workplace surveillance, etc (Neuman & Baron, 1998).

Violent incidents have been linked with the culmination of stressful interactions and powerlessness. In other words, individuals who may perceive themselves to have no control over the situation may use violence as an outlet of their frustration and anger (Bulatao & VandenBos, 1996). However, due to the cross-sectional nature of most studies, cause and effect remain unclear. However, it is possible that exposure to violence, in turn, creates feelings of lack of control, dissatisfaction with the job and so forth.

Extent of physical violence and assault

When discussing the extent of violence at work, it is important to bear in mind the varying quality of data often reported in this area, not least with regard to sample identification and data-gathering procedures (e.g. Castillo, 1995). The problems identified with lack of reporting are also well known, particularly where reporting an incident may have a potential repercussion on the individual or when an incident could be interpreted as resulting from failure to approach the situation in a professional manner (Cox & Leather, 1994). One should also note that data from different surveys are seldom directly comparable.

- ◆ A representative study of members of the Norwegian Trade Union for Social Work found that 20.9% of respondents had experienced physical violence and threats at their current workplace. A far higher number were aware of others' experiences of violence. Violence is, therefore, perceived to be pervasive in the work environment (Skarpaas & Hetle, 1996).
- ◆ Based on face-to face interviews with 21,500 workers across the sixteen European Union member states, 4% of employees within the EU countries are exposed to physical violence from individuals not belonging to the organisation whilst 2% are subjected to violence from fellow employees. Public administration and retailing report the highest number of violent acts (European Foundation, 2000). Men and women are subjected to physical

violence in similar numbers. These figures are identical to a similar study undertaken in 1996 (European Foundation, 1997).

- ◆ In a review of workplace related violence, Standing and Nicolini (1997) describe a recent survey by the UK British Retail Consortium, which found that 9,000 workers experienced physical violence whilst 47,000 had been subjected to threats of violence during 1995/6. Compared with the 1994/5 survey, there was a 5% increase in the number of physical violent incidents (Standing & Nicolini, 1997). Whilst it is impossible to say whether rates of violence are rising overall, industry or occupation-wide comparisons may provide more information. Standing and Nicolini (1997) concluded that the high risk sectors remain the same, whilst in some cases rates have not risen, possibly due to the introduction of prevention policies or as a result of changing working conditions. The British Crime Survey (1996) found that the groups most at risk were workers within health and welfare, teaching, retailing, Department of Social Security staff, transport, milkmen and taxi-drivers (Standing & Nicolini, 1997).
- ◆ According to the US Department of Justice (1994) 1 million employees are assaulted at work each year in the US alone, of which nearly 160,000 sustained physical injury. For the period 1980-1992, a NIOSH survey reported 9,937 workplace homicides, nearly 800 a year, with an average yearly workplace homicide rate of 0.7 per 100,000 workers. Taxi-drivers, followed by sheriffs/bailiffs and police/detectives were most at risk (Jenkins, 1996). Based on a national representative sample, the American National Crime Victimization Survey (NCVS), showed that in an average year within the survey period (1987-1992) close to 1 million workers reported being the target of violent acts at work (ILO, 1998). For 1992 the estimated number was 668,000 which accounts for under 1% of all workers in the US. 16 % of these incidents resulted in an injury to the target. Whilst the occupational group most at risk with regard to homicide at work was taxi-drivers, non fatal assaults were most common in the service industries and retailing according to The Survey of Occupational Injuries (Bulatao & VandenBos, 1996). Among assaulted workers in

service industries, the majority worked in the health care sector, in nursing homes (27%), social service (13%) and hospitals (11%).

- ◆ A Canadian longitudinal study (1982-1992) based on workers' compensation claims of time loss as a consequence of exposure to violent acts found a sharp increase in claims. Of these, health care workers accounted for by far the highest number followed by cashiers/clerks, and police officers. However, the increase in claimants can in its entirety be explained by a doubling of claims from the health care sector alone (Boyd, 1995).

With regard to violence in newly industrialised countries and the developing world, there is little 'hard' evidence from epidemiological studies. Instead one is left to piece together a picture on the basis of anecdotal evidence. Typical factors which are likely to influence the rate of violence in the workplace are: poverty, unemployment, a high prevalence of rape, drugs and prostitution. For example 25% of respondents to a survey in Venezuela reported that they had reduced their working hours, particularly at night, because of fear of crime (Buvinic, 2000, Ohsako, 1998).

- ◆ The problem of domestic abuse affects women across the world. According to the World Bank between a quarter and a third of women in countries surveyed were found to be physically abused by their family, a figure which increases when emotional abuse in the home is taken into account (Heise et al, 1994).
- ◆ In Bangladesh women murdered by their husbands account for 50% of all murders (IWTC, 1992), whilst in Papua New Guinea 73% of women murdered between 1979 and 1982 were murdered by their husbands (Heise et al, 1994).
- ◆ Female Filipino migrant workers frequently report high levels of physical assault at work (Chappell & Di Martino, 2000)

Whilst men were more at risk than women of becoming victims of homicide and physical assault, as well as being assaulted by a stranger, women were

more likely to be attacked by someone known to themselves (Bulatao & VandenBos, 1996). This last point may be explained with reference to women's vulnerable position in the labour market, concentrated in low-paid and low-status work, as well as in occupations with high rates of client violence (Bulatao & VandenBos, 1996).

◆ Since 1990, the International Crime Survey, which collects data on violence and crime across 50 countries world wide (based on approximately 130,000 interviews) have included data on victimisation at work (Chappell & Di Martino, 2000). Whilst the quality of some of the data is questionable, the findings are still of interest. The results show that whilst victimisation is greatest in industrialised countries, non-sexual and sexual assaults are most prevalent in Latin-America. Women were generally found to be at higher risk of violent acts than men, though no difference emerged in Western European countries. Ten percent of violent incidents involving women took place in the workplace, whilst the comparable figure for men was 16%. Young workers were found to be particularly vulnerable to incidents of sexual assaults (Chappell & Di Martino, 2000).

These examples show that physical violence, whether leading to an injury or not, is a significant problem across the world. There is also some evidence that physical assaults in the workplace may be on the rise, with female workers particularly vulnerable. (See examples from previous page). This, in part, reflects the fact the occupational sectors most at risk are retailing and other service industries together with health care and social services, all industries with a high proportion of female workers.

Bullying/mobbing/emotional abuse

Research into the phenomenon of bullying within the workplace has grown rapidly in recent years. However, the large number of 'labels' in use has so far made it difficult to get an overview of the problem and its prevalence. For example, whilst 'bullying' is the term most frequently used in the UK and Australia, this behaviour is referred to as 'mobbing' in Scandinavia and

German speaking countries. Furthermore, in the US a similar phenomenon has been labelled 'workplace harassment' (Bassman, 1992) or 'mistreatment' (Price Spratlen, 1995) and, most recently, 'emotional abuse' (Keashly, 1998). Research into the issue of workplace bullying started in Scandinavia in the 1980's. As part of a growing interest in work-related research in general, an early recognition of the importance of work-related stress had emerged. It is, therefore, not surprising that the first evidence of the problem of bullying, or 'mobbing' as it is referred to in Scandinavia and German speaking countries, emerged in Sweden and subsequently in Norway and Finland. Whilst some writers make a distinction between 'mobbing' and 'bullying' (e.g. Davenport et al, 1999), with 'mobbing' referring to those incidents of harassment where a group of people gang up on a single individual, for the purpose of this report we will use the labels synonymously.

A widely used definition of bullying is:

'Bullying emerges when one or several individuals persistently over a period of time perceive themselves to be on the receiving end of negative actions from one or several persons, in a situation where the one at the receiving end has difficulties in defending him/herself against these actions.' (Einarsen et al, 1994, p.20)

Typical behaviours which may fall under the category of bullying are 'withholding information which may affect someone's work', 'attempts to find fault with someone's work', 'public humiliation', 'gossiping' and social exclusion or isolation. Whilst it may be unpleasant to be at the receiving end of someone's negative acts, even if it is a one-off event, such behaviour normally will fall outside the scope of the definition (Rayner, et al., 2001). The exception here may be negative acts of a nature and a severity which permanently instil fear in the recipient. It is worth noting that the definition relates to process development and victimisation, which is considered important for the effect it may have on the target and the surroundings and, therefore, for the costs it may cause or bring about.

The relationship between bullying and stress is frequently highlighted, with models of stress introduced to make sense of the problem (Einarsen, 1996). In this respect bullying is considered a variant or subset of severe social stress (Niedl, 1995). In line with such an approach, the antecedents of bullying have frequently been sought amongst traditional stressors such as role-conflict, lack of control, and work overload.

Extent of bullying

A considerable number of studies into workplace bullying (or similar issues) have been undertaken of which some are reported below.

- ◆ A representative study of the Swedish population (N=2,400) concluded that 3.5% of respondents fitted into the definition of bullying (Leymann, 1992) Neither age nor gender influenced prevalence rates, but people working in schools, universities and other educational settings were found to be most at risk.
- ◆ Using the same methodology, an Austrian study of employees at two different settings, a research institute and a hospital, found that 7.8% and 26% respectively reported to having been bullied within the last six months (Niedl, 1995).
- ◆ A Norwegian study of more than 7,000 employees found that 8.6% of respondents reported to have been bullied within the last six months (Einarsen & Skogstad, 1996). Older employees and people in private sector organisations were more at risk of being bullied. Bullying was also found to be more prevalent in male-dominated organisations.
- ◆ A recent British study of 5,388 employees from the private, public as well as the voluntary sectors found that one in ten employees reported having been bullied with the last six months, and 24.7% within the last five years. 46.5% had witnessed bullying taking place within the same time period (Hoel & Cooper, 2000a). Employees within the prison service, post and telecommunication, as well as schools reported the highest levels of bullying.
- ◆ A national survey of bullying in Ireland reported that 23% of respondents had been subjected to bullying within the last 12 months (O'Moore, 2000)

- ◆ In the Third European Survey on Working Conditions (2000), based on 21,500 face to face interviews with employees in member countries of the European Union, 9% reported that they were exposed to intimidation and bullying.
- ◆ A nation-wide survey of members of the Australian Confederation of Trade Unions (ACTU, 2000) found that 42% of workplace stress was related to conflicts between management and workers.
- ◆ In a study of 270 nurses in Australia, 30% reported that they were exposed to aggression on a daily or near daily basis. The most common aggressive behaviours were verbal abuse and public humiliation (Farrell, 1999).
- ◆ In Michigan (USA), in a state-wide survey based on a random, stratified and representative sample of 930 employees, 27.2% responded that they had been 'mistreated' within the last 12 months. Exclusionary behaviours were those most frequently reported. Emotional abuse was not found to be related to gender or social class (Keashly & Jagatic, 1999).
- ◆ Whilst there is little empirical evidence at present, bullying does extend beyond the Western world. For example, an internet survey in South Africa found that 77-78% of respondents had been bullied during their working career (Steinman, 2000). The fact that an international conference on workplace bullying was arranged in Johannesburg in November 2000, suggests that the issue is considered to be a pressing one.

With one exception, the above examples are taken from studies in the industrialised world. However, there is considerable anecdotal evidence of bullying being a global problem, also affecting workers in the industrialised as well as the developing world. Whilst the scale of bullying in these examples varies significantly between countries (in part due to different operationalisations of the concept) with the rate of intimidation spanning 3.5% to 26%, we believe we are on relatively safe ground when we conclude that at least 10% can be considered as being currently subjected to bullying.

Sexual and racial harassment

As is the case for workplace bullying, sexual harassment may also be considered a workplace social stressor (Schneider et al, 2000). As a specific social phenomenon, sexual harassment refers to sexual violence within an organisational setting and this sets it apart from other types of sexual violence such as violence in the home (Stockdale, 1996). Definitions may vary, but the one adopted by the European Commission appears to be generally accepted (Kiely & Henbest, 2000). Here sexual harassment is defined as:

‘unwanted conduct of a sexual nature, or conduct based on sex, affecting the dignity of women and men at work. (Rubenstein, 1988)

This definition also acknowledges that, whilst sexual harassment at work is a problem which predominately affects women, a substantial number of men report being exposed to unwanted sexual attention at work. It is also common to divide acts of sexual violence into different categories. One of the most widely used approaches is to divide such acts into five categories: gender harassment, seductive behaviour, sexual bribery, sexual coercion and physical assault including rape (Till, 1980). Gender harassment refers to behaviours such as sexist comments and jokes. It is worth noting that recent developments in some countries, particularly the US, have led to the legislation becoming increasingly complex incorporating behaviours which may be ‘construed as proportionally more offensive to one group’ which is likely to affect any organisational intervention.

Some evidence exists suggesting that women from ethnic minorities are the most vulnerable to sexual harassment. However, whether their higher exposure to sexual harassment is due to their ethnicity or simply reflects the fact that women from ethnic minorities often occupy the most marginal and vulnerable positions in the labour market is still open to debate (Murrell, 1996).

Extent of sexual harassment

Despite the interest in both sexual and racial harassment in recent years, few rigorous empirical studies have been undertaken. Where such studies are reported they are very often based on self-selected samples (Schneider, Swan & Fitzgerald, 1997). Generally speaking, there appears to be a scarcity of empirical studies of sexual harassment which also extends to the area of racial harassment (Schneider et al, 2000).

- ◆ In a US study of 447 female private sector employees and 300 female university employees 40.9% and 15% respectively labelled their experience within the last 24 months as sexual harassment. However, a much higher number reported exposure to individual sexually harassing behaviour, many on a repetitive basis (Schneider, et al., 1997).
- ◆ There has been a sharp rise in the number of harassment cases reported to the US Equal Employment Opportunity Commission (EEOC) in recent years. For sexual harassment alone the number rose from 6,883 in 1993 to 15,618 in 1998 (EEOC Notice number 915.002, 1999).
- ◆ In a study of 'ethnic harassment' in the US (defined as verbal abuse and exclusionary conduct due to ethnicity), among four samples of Hispanic employees in diverse contexts, 40-70% reported having experienced such behaviour within the last 24 months (Schneider et al, 2000).
- ◆ 2% of workers within the European Union reported that they were subjected to sexual harassment (European Foundation, 2000). Female workers, employees in the hotel and catering industry, as well as those in precarious work were most at risk.
- ◆ Studies undertaken in the UK suggest that between 16% and 75% of women at work have experienced sexual harassment at work with even higher numbers for the student population (Kiely & Henbest, 2000).
- ◆ A large-scale German survey undertaken by the Federal Institute of Occupational Health and Safety concluded that more than nine out of ten women had experienced sexual harassment at work during their working lives (ILO, 1998).
- ◆ In a study of female employees in Bulgaria, 10% reported that they received questions of a sexual nature during their job-interviews. A total of 15% had also received unwelcome contact from either co-workers or

supervisors. As a result of denying further advances 33% had suffered negative consequences. Employees below 33 years of age were most at risk. In the 18-25 age group nearly 50% had received comments of a sexual nature (Minnesota Advocates of Human Rights, 1999).

- ◆ Women's groups in the Republic of Korea report awareness of sexual harassment of women in the workplace (Bureau of Democracy, Human Rights, and Labor, 1999).
- ◆ In countries where religious and cultural belief suggests that women should not be working, any experience of physical as well as sexual harassment is unlikely to be taken seriously (Grainger, 1997).
- ◆ In one of very few studies reporting on the scale of racial harassment, over 500 'ethnic' minority staff recruited from 53 different National Health Service Trusts across the UK took part in a focus-group and questionnaire study. It emerged that a significant proportion of participants reported to have experienced or to have witnessed racial harassment within the last 12 months. A number of women taking part in the study thought there was a link between stress and racial harassment. The report highlights that racial harassment has become more subtle in recent years, for example, fewer overtly racial jokes, but more incidents of covert harassment, for example, being excluded by other co-workers (Lemos & Crane, 2000).

From the above examples it is difficult to draw conclusions with regard to the current scale of sexual and racial harassment. However, it appears to be beyond doubt that these forms of violence represent a hazard to a considerable number of people.

Section summary

This overview of stress and violence at work has demonstrated that strong links exist between stress on the one hand, and various types of violence on the other, with violent behaviour of any kind being a common antecedent of stress. Taken together, different categories of physical assault, bullying and harassment, based on sex or race, account for a very substantial amount of what may be considered work-related stress. At times it may also be difficult

to make a clear distinction between the different phenomena if they are sorted under the broad 'violence' label.

Despite variations between individual studies and between different types of violent behaviour, the following groups appear to be most at risk and in need of particular attention:

- ◆ Female workers
- ◆ Workers in the youngest age groups
- ◆ Inexperienced employees
- ◆ Employees in precarious work
- ◆ Employees from ethnic minorities

3 - IDENTIFYING THE COST OF STRESS/VIOLENCE

As highlighted in the introduction, the intention behind this report is to focus on the cost-implications of stress and violence at work. By emphasising the potential cost to an organisation, it is hoped that organisations will see the advantage in investing time and money in the prevention of these problems. However, it appears that most of the total costs resulting from stress and violent incidents are often unlikely to be borne by the individual organisation, but instead to become 'externalised', i.e. distributed among the individuals in society (Levi & Lunde-Jensen, 1995). Hence the motivation for intervention should also be attractive to policy makers. It is commonly believed that increased insight into the real costs will have an impact on priorities and willingness to intervene, for example by making funds available for initiatives in this field (Dorman, 2000).

Organisations have too often dealt with the issue of violence by focusing on strategies requiring minimal action and commitment to simply avoid litigation and compensation claims. However, the ILO has chosen a strategy that combines demands for social justice with an economic argument, or what the

ILO refers to as taking 'the high road' with regard to organisational health and safety in its widest sense (Di Martino & Pujol, 2000).

In our assessment of the cost of stress/violence at work, we will consider the costs in their broadest sense, including economic as well as non-economic costs. For the individual subjected to violence, the fear and pain connected with the experience represents a cost as real as those incurred from loss of earnings. Any analysis of costs should, therefore, consider intangible as well as tangible costs at the level of the individual, the organisation and society.

Before we attempt to assign costs, we will explore the various effects stress and violence may have on the individual, the organisation and society. An overview of the likely effects of exposure to stress and various types of violence is provided in Table 1 at the end of this section. As stated earlier, few studies have systematically explored the effect of racial harassment. Consequently, little evidence is available unfortunately with regard to the effects of exposure to racial harassment.

The effects on the individual

Effects on mental and physical health

Numerous studies have looked at the effects of stress on the individual (e.g. Quick, Murphy, & Hurrell, 1992; Murphy & Cooper, 2000). Since the effects of stress are well known we will only provide a brief overview of previous findings. Below are listed some of the most important effects, taken from Cooper et al (1996)

- Mental illness
- Coronary heart disease
- Certain types of cancer
- A series of minor health complaints of a physical or psychological nature, e.g. psychosomatic symptoms, migraine, stomach ulcers, allergies

As with other stressors, direct exposure to physical violence is likely to manifest itself in stress-reactions and possibly an impairment of health (Budd

et al., 1996; Balloch et al., 1998). It is assumed that the greater the frequency and the graver the form of violence, the more severe the effect would be, though even less severe abuse may also have severe negative effects (Leather et al., 1998). In a similar manner there is no doubt that domestic abuse will impact on the target's health and wellbeing (e.g. Randall, 1990).

Exposure to workplace bullying has been found to be associated with anxiety, depression and aggression (Quine, 1999; Einarsen et al, 1994) as well as with high levels of stress. Typical stress symptoms such as insomnia, melancholy and apathy are common outcomes (Quine, 1999; Björkqvist et al, 1994). In addition, bullying appears to manifest itself in cognitive effects such as concentration problems, insecurity and lack of initiative (Leymann, 1992).

As far as immediate and long-term stress effects are concerned, the outcomes of sexual harassment for the individual are similar to those for bullying with impairment of health and general well-being as frequent outcomes (Schneider et al, 1997). As a consequence of sexual harassment targets are often found to suffer from depression and anxiety (Richman, et al., 1999, Koss, 1990). Effects, of course, may vary between individual targets, in line with the stress model presented previously (Stockdale, 1996).

In recent years there has been a growing emphasis on the psychological trauma-reaction which often follows an assault. In this respect it is the 'unexpected' element of the event which may give rise to the trauma and the development of Post Traumatic Stress Syndrome (PTSD) (Flannery, 1996). The cumulative effect of repeated exposure to violent acts is often emphasised, with both immediate as well as previous exposure to similar incidents, affecting the targets (Rippon, 2000). In line with this, some researchers are making a distinction between the different stages in response development with regard to when the effects begin to bite, e.g. 'immediate' effects, effects 'within the next few days' or 'long-term' effects (Brady, 1999). 'Immediate' refers to effects such as shaking, crying and confusion. Within the following few days reactions such as fear, anxiety and exhaustion as well as

anger may surface. In the long run, lack of confidence, depression and the development of PTSD are likely outcomes.

In cases of the most severe incidents of bullying, victims have frequently been diagnosed with PTSD (Leymann & Gustafsson, 1996). In a Norwegian study which compared victims of severe bullying with individuals who had been involved in traumatic disasters, a large proportion of the bullying victims were found to suffer from symptoms of PTSD at a higher level than those involved in disasters (Einarsen et al, 1999). According to the writers of that report, the extreme levels of PTSD experienced by many of the bullying victims could be explained by a breakdown of their previous assumptions about the world and about themselves (see Hoel & Cooper, 2000b). As with bullying, sexual harassment has recently been linked to PTSD (Richman 1999, Koss, 1999).

The severity of the effects of bullying cannot be expressed more sharply than in the claims that a considerable number of suicides may have their roots in workplace bullying (Leymann, 1996). No firm evidence exists for such claims, and, furthermore, people very rarely commit suicide for a single reason. However, the fact that up to 40% of targets in a large scale-Norwegian survey (Einarsen et al, 1994) stated that they had at times contemplated suicide, should emphasise the severity of the effects bullying may have on those involved.

Violent incidents in the workplace also have wider ramifications than the person/s directly involved. Recent research has shown that witnessing violence may lead to fear of future violent incidents and as such has similar negative effects as being personally assaulted or attacked (Rogers & Kelloway, 1997; Leather et al., 1998).

Behavioural and attitudinal effects

Stress research has frequently found that stress is likely to manifest itself behaviourally as well as attitudinally. Cooper et al (1996) suggest that among typical outcomes of stress are a reduction in job-satisfaction and commitment to the organisation; unsafe behaviour and increased propensity for accidents;

and what may be referred to as 'poor lifestyle habits', e.g. increased smoking and alcohol consumption, less attention to good diet etc.

Common effects of exposure to violence are poor concentration and diminishing self-confidence as well as a tendency towards personal withdrawal, often leading to social isolation (Brady, 1999). According to Brady (1999) in such situations victims of violence are also often sceptical to any help offered making treatment and recovery more difficult.

Behaviourally, an outcome of bullying is lack of concentration, possibly leading to a greater probability of making mistakes and having accidents (Hoel & Cooper, 2000b). Increased alcohol and tobacco consumption are other effects often cited by researchers. For example, a Finnish study found that male victims of 'interpersonal conflicts' reported heavy alcohol consumption, frequently passed out after drinking and reported increased consumption of tobacco and tranquillisers. Passing out in connection with heavy drinking was also reported by female victims. (Appelberg, 1996). A number of the effects on health and well-being are also likely to manifest themselves behaviourally. Other responses to exposure to violence may be social withdrawal, as mentioned, and irritability which affect work-productivity and social relationships at work as well as relationships outside work (Warshaw & Messite, 1996).

We have already established that bullying may have a ripple effect on witnesses. In that connection it is worth drawing attention to the bullying process and the likely negative effect it may have on social relationships at work as well as outside work. Being attacked repeatedly over a long period of time is likely to manifest itself in changes in the behaviour of targets. Frequently, the targets will start acting obsessively with respect to their grievance, which for the observer may become an irritant. This may gradually change the observer's previous opinion of the targets, seeing them as creators of their own misfortune (Leymann, 1996). It is also noted that the nature of the bullying process seldom allows for neutrality with respect to the conflict in the eyes of targets, which is likely to strengthen the ripple effect

(Einarsen, 1996). It is frequently impossible for observers to remain neutral, and pressure may be present from both parties to draw bystanders into the conflict.

Similar effects are found for sexual harassment which may manifest itself in 'cognitive distraction' or loss of concentration (Barling et al, 1996), interfering with judgement and making targets less co-operative (Industrial Society Survey, 1993). Interpersonal dissatisfaction or deterioration of relationships is another possible outcome of sexual harassment (Barling et al, 1996; Stockdale, 1996). According to Schneider (1982) for female victims it is particularly relationships with male colleagues that are liable to become strained.

For those individuals who may decide to leave as a result of their ordeal or who are forced out of the organisation or dismissed, they may be unable, or in some instances unwilling to find a new job (Gutek & Koss, 1993). In any case, the incident is likely to have long-term effects on pay as well as future career prospects. A number of the most severely affected targets will never return to work after lengthy spells of absenteeism. In some cases their return is prevented by their state of health. In other cases the increasing severity of their conflicts brings them into sharp opposition to their organisation, which in some cases decides to terminate their employment (Leymann, 1990). Lengthy periods of legal wrangling and litigation appear to be a growing tendency in bullying cases (Earnshaw & Cooper, 1996). In a substantial number of cases, targets of bullying who have had their contracts terminated as a result of the conflict, have ultimately found themselves unemployable (Leymann, 1992).

Not surprisingly, the results of exposure to stress and various forms of violence are likely to effect home and private life, often putting an intolerable strain on relationships (e.g. Earnshaw & Davidson, 1994; Barling et al, 1993).

In a recent investigation of sexual harassment research, Magley et al. (1999) found that the outcomes of sexually harassing acts are similar whether the targets label their experience as 'sexual harassment' or not. Yet, this has wide

implications for the cost issue as the number of those who reported exposure to harassing behaviours was far higher than those who decided to label their experience as sexual harassment. Other studies have found that the perception of a work environment as being tolerant of sexual harassment was considered a better predictor of negative mental health outcomes than actual reports of sexual harassment (Hulin et al., 1996). In other words, indirect exposure to sexual harassment referred to as 'ambient' sexual harassment should be taken into account when the effects of sexual harassment are being considered (Glomb et al., 1997).

The effects on the organisation

Cooper et al (1996) focus on the following well known and well documented outcomes frequently associated with experience of stress: greater sickness absenteeism, impaired performance and productivity; and higher turnover rates. Here we will explore to what extent similar as well as other organisational outcomes are linked to the various forms of workplace violence.

A likely outcome of exposure to violent assaults or physical attacks is an increase in spells of sickness absence (Warshaw & Messite, 1996). In some cases the spells may be long-term and, sometimes, the individuals will never be able to return to work, and subsequently retire due to their traumatic experience. However, a violent incident does not automatically lead to the recipient having to take time off work. A typical example here is the health service, where physical violence or threat of violence is widespread, but where the majority of incidents do not lead to the recipient taking time off from work (Boyd, 1995).

Severe bullying may affect absenteeism rates. This is because in the more severe cases of victimisation, the likely stress reaction may prevent the individual from working. However, most studies of bullying show a relatively weak relationship between absenteeism and bullying. A possible explanation here may be that absenteeism is seen as an unhelpful strategy in cases of bullying, making a difficult situation worse (Hoel & Cooper, 2000b). Yet, in a

Finnish study of hospital employees, Kivimäki et al. (2000) estimated that targets of bullying had on average 50% higher certified sickness absenteeism than those who were not bullied. Even when adjusted for possible impact on previous state of health, targets' absenteeism rates were still 26% higher. A lot of evidence also suggests that bullying significantly affects turnover rates (e.g. UNISON, 1997; Quine, 1999). In a study of members of UK's largest trade union, 26.4% of those who had previously been bullied said that they left their job due to bullying (UNISON, 1997).

Lower job-satisfaction and organisational commitment are other likely outcomes of physical violence which would affect organisations negatively (Barling, 1996). Taken together with the behavioural effects discussed above, violence at work could affect the productivity of the individual, whether they are personally attacked or whether they are just a witness to such events. In addition, it is not unlikely to believe that third persons, who have neither experienced nor observed others being attacked may themselves be affected. This could be a result of complications in the working relationship with targets themselves or by a general atmosphere of fear entering the workplace as a result of the assault.

There is anecdotal evidence to suggest that victims of bullying report poorer work performance compared with those were not bullied. Some empirical evidence for this has recently been found when comparing self-rated performance of people who have been bullied with those not bullied (Hoel & Cooper, 2000a). However, the link between bullying and work performance was not very strong. It has, therefore, been suggested that people who are subjected to bullying may be keen to demonstrate ability and commitment when their organisational standing as well as their self-esteem are faltering (Hoel et al., 1999).

There is relatively little evidence with regard to the potential organisational effects of sexual (and racial) harassment. However, exposure to sexual harassment is associated with an increase in absenteeism, transfers within the organisation as well as with an increased propensity to leave the

organisation (e.g. Barling et al, 1996). As far as turn-over-rates are concerned, approximately one in ten of those reporting themselves as having been sexually harassed left their organisation due to their experience (Gutek & Koss, 1993; Her Majesty's Inspectorate of Constabulary, 1993). Whilst sexual harassment is likely to affect job-satisfaction and commitment, the relationship between sexual harassment and productivity is less clear (Gutek & Koss, 1993).

Bullying also appears to have a number of more intangible effects such as reduced job-satisfaction as mentioned and reduced commitment to the organisation. In addition, it has often been suggested that bullying is likely to affect the organisation by inhibiting innovation and creativity (e.g. Bassman, 1992).

In a recent study of bullying in Great Britain (Hoel & Cooper, 2000a), respondents were divided into four groups: 'currently bullied', 'previously bullied', 'witnessed bullying only', and 'neither experienced nor witnessed bullying'. Those currently exposed to bullying were found to have the worst mental and physical health, the highest sickness absenteeism and intention to leave rates, the lowest productivity as well as the lowest organisational satisfaction and commitment. The second most affected group were those who were 'bullied in the past', followed by 'witnessed bullying only' and 'neither bullied nor witnessed bullying'. These findings indicate that bullying is likely to have long-term implications. Moreover, indirect exposure to bullying may also affect individuals negatively, for example by inducing fear in those who witness a co-worker being victimised (Hoel & Cooper, 2000b).

As organisations start to introduce policies and procedures to deal with bullying, more employees, at least in the short run, are likely to make use of the grievance procedure or other organisational complaint channels. Investigation of complaints can easily become costly undertakings, occupying the time of investigators, those directly involved as well as witnesses.

A frequent outcome of conflict resolution in connection with incidents of bullying is to transfer within the organisation either the perpetrator or target. Unfortunately it is more frequently the latter (Rayner, Hoel, & Cooper, 2001). Such transfers are a costly affair as they encompass replacement costs as well as extra training costs for two or more individuals (Dalton, 1997). In addition these transfers are unlikely to take place without disruption, in this case involving two work-groups.

Depending upon the practice and culture in individual countries, extreme experience of stress or violence may lead to litigation. Examples of such litigation include cases of exposure to violent assaults, bullying and sexual and racial harassment. In some countries, notably the US and the UK these claims can be very costly affairs. In addition to a potential compensation being awarded to the claimant, there are likely to be additional costs arising from potential damage to public relations (Knapp & Kustis, 1996).

The British Retail Consortium Survey of 1995/6 (Standing & Nicolini, 1997) found that in some situations the number of physical assault incidents may also be reflected in an increase in insurance premiums and in many cases a need for further investment in security. Whilst an increase in incident rates does not necessarily lead to an automatic increase in premiums, it may be more difficult for the organisation to reinsure (Standing & Nicolini, 1997). The survey also implicated that the introduction of new safety devices is likely to carry an additional training cost for the devices to become efficient.

It is worth noting that, despite the high costs to organisations and society resulting from violence at work, our knowledge of violence, particularly about non-fatal acts of violence is still limited (Castillo, 1995). Any attempt to put a monetary value on the cost needs to take this fact into consideration.

The effects on society

Depending upon the national system for health care, medical expenses arising from the stress experience, whatever its cause, may become a substantial cost to society. As far as physical violence is concerned, such

expenses are likely to increase in those incidents where an assault leads to injury. This injury may be physical or psychological. For a number of people the onset of PTSD resulting from being subjected to an assault, bullying or sexual harassment may be costly with long-term medical treatment or even hospitalisation as a result of a mental breakdown.

In many countries long-term absenteeism will be carried either in part or in full by society. In addition some workers suffering stress never return to work or become unemployable. For those who do take up work again, fear of the future, possibly brought on by new incidents within the workplace, may gradually wear the person down psychologically. In both cases, retirement on the grounds of ill-health may be a likely outcome. For some, being exposed to violence may lead to welfare dependency preventing individuals from re-entering the workplace. This appears to be a particular problem for victims of domestic abuse as domestic violence often perpetuates their dependency (Friedman et al, 1996).

Experience of stress and violence may represent a potential loss of productivity to targets, witnesses, as well as other people affected by the bullying incidents. This will of course also effect overall productivity levels in a given country especially when premature loss of productive workers and skills are the outcome.

The point is already made that exposure to stress and violence is likely to affects family and friends. This is particularly the case where a person has become incapacitated by such an event and is in need of both physical care and psychological care in order to deal with the pain and grief. Unfortunately, in some cases the experience may lead to a breakdown in relationships and to divorce.

When considering the effects of stress and violence on society it is worth bearing in mind that people have multiple roles as employees, as customers, as patients, as taxpayers and so forth. Hence, the impact of stress/violence can have multiple costs to society.

Table 1: Possible effects of exposure to stress and various types of violence

EFFECTS ON:	STRESS	ROBBERIES & ASSAULT	DOMESTIC VIOLENCE	BULLYING/M OBGING	SEXUAL HARASSMENT
Individuals					
Stress effects: Physiological, psychological Behavioural	✓	✓	✓	✓	✓
PTSD	✓	✓	✓	✓	✓
Poor concentration	✓	✓	✓	✓	✓
Social withdrawal/ Deterioration of relationship	✓	✓	✓	✓	✓
Irritability	✓	✓	✓	✓	✓
Insecurity	✓	✓	✓	✓	✓
Obsessive				✓	
Tobacco/ Alcohol cons.	✓	✓	✓	✓	✓
Motivation	✓	✓	✓	✓	✓
Commitment	✓	✓		✓	✓
Job dissatisfaction	✓	✓	✓	✓	✓
Fear (target)		✓	✓	✓	✓
Fear (witness)				✓	✓
Involuntary termination of contract				✓	✓
Suicide				✓	
Organisation					
Absenteeism	✓	✓	✓	✓	✓
Turnover	✓	✓		✓	✓
Performance	✓	✓		✓	✓
Presenteeism				✓	
Bad time keeping			✓		
Mistakes/ Accidents	✓	✓	✓	✓	✓
Insurance premiums		✓			
Litigation	✓	✓		✓	✓
Transfer costs				✓	✓
Training	✓	✓	✓	✓	✓
Grievance				✓	✓
Loss of skills	✓	✓		✓	✓
Effects on witnesses		✓		✓	✓
Society					
Retirement	✓	✓	✓	✓	✓
Medical care	✓	✓	✓	✓	✓

Production loss	✓	✓	✓	✓	✓
Friends & family	✓	✓	✓	✓	✓

4 - ESTIMATING THE COSTS

Some progress appears to have been made in recent years with regard to the costing of occupational stress at an organisational level (Cooper et al, 1996) and at a national level (Levi & Lunde-Jensen, 1995). Some of the lessons learnt from these exercises should also be applicable to the issue of workplace violence, particularly with the close relationship between these concepts. However, it is important to bear in mind that such exercises are fraught with difficulties. Below are listed some reasons why we need to proceed carefully and why any estimation of costs would have to be somewhat vague:

- ◆ The results can only be as good as the data on which they rely on. Unfortunately, much of the data available with regard to stress and violence are of rather poor quality and cannot be fully trusted (e.g. Castillo, 1995). Factors such as recording practices may influence the reliability of the data, with the researcher having to rely on 'educated guesses' (Cox et al., 2000)
- ◆ Any comparisons of data between sectors and nations are problematic. Moreover, any attempt to provide cost-estimates in global terms will not make sense due to significant variations in wages and benefits (e.g. Chappell & Di Martino, 2000)
- ◆ Even when good data are available, the connection between cause and effect is often unclear. This is a problem with all data of a cross-sectional nature
- ◆ Whilst the relationship between assault and injury may be relatively clear-cut it is dangerous to treat an entirely dynamic and complex concept such as stress in a reductionist manner, interpreting the relationship between stressors and negative outcomes for health, attitude and behaviour in a linear and deterministic way. The same argument applies to bullying and sexual harassment.

With all these reservations in mind we will discuss the types of costs incurred at the level of the individual, the organisation and society. The discussion will focus on some of the more important costs connected with stress and violence at work. This, therefore, will be far from an exhaustive review of all possible costs that may arise. It is also worth bearing in mind that there is considerable disagreement between (economic) researchers with regard to how particular costs should be interpreted and assessed, if this is even possible. One issue, which has caused considerable debate, is the distinction between direct and indirect costs and what costs may be included within each category. According to some writers this is important as employers will be primarily concerned with direct costs, those which routinely show up in accounting systems (Dorman, 2000). However, for the purpose of the present analysis we will leave this discussion to one side, and therefore make no distinction between direct and indirect costs.

Particular attention will be given to bullying. To date, the potential cost of bullying has received little attention. Given the growing evidence that bullying represents by far the most prevalent form of violence and harassment, an emphasis in financial terms on bullying is, therefore, justifiable.

The cost to the individual

- ◆ In a recent litigation case a Welsh teacher was paid compensation for work-related stress of over £250,000 (Guardian, 5/12/00, p4).
- ◆ In the US more than 3,000 claims for compensation for stress-related psychiatric injury are registered annually in California alone (Cartwright & Cooper, 1997).
- ◆ In the US health care costs have been spiralling over the last twenty years with individuals' health insurance rising by approximately 50% (Cartwright & Cooper, 1997).
- ◆ Broken down into costs to the individual, the total figures for accidents and work-related ill health in the UK was £5.6 billion for the year 1995/6 (Gordon & Risley, 1999).

From the above exploration of the experience of stress and various forms of violence at work, it should be obvious that there is a price to pay for the individual both in terms of financial losses and in what may be referred to as 'human costs'. The latter refers to the pain, fear and general reduction in quality of life for the individual as well as the potential grief experienced by the individual's closest family and friends. Whilst the focus will be on the economic or financial costs, or those costs which may be assigned a monetary value, consideration will also be given to 'human costs'. As far as 'economic costs' are concerned, the two most important areas to consider are the loss of wages or income and additional expenditure, primarily in the form of health care and medical treatment.

Loss of income

This refers to the difference between normal earnings one would receive and the payment received when absent from work. Compensation systems vary greatly between countries, with the loss in wages covered by the employer or the state (or a combination of the two) in any proportion from full compensation to hardly any compensation at all. Even within the same country the degree of compensation may vary between employers, e.g. the UK (Gordon & Risley, 1999).

In many cases the individual may decide to withdraw or leave the organisation altogether, sometimes before alternative employment has been found. For some people withdrawal from work becomes permanent, and any calculation of costs would have to consider total potential income during one's expected working life. It follows that the earlier one retires on the grounds of ill-health, the larger the loss to the individual will become. In some cases the change in employment may also lead to a drop in earnings (Gordon & Risley, 1999).

Additional expenditure

The most important cost within this group is payment for medical consultation, medicine and hospital treatment. However, in many countries this is either paid for in full or in part by either the employer, by means of insurance systems, by the state or the taxpayers, or by the individuals themselves.

Another area which could impose a cost (if not directly carried by the individual) is extra household 'production' costs linked to the burden passed on to family and friends in connection with caring for the individual in cases where that is necessary (Levi & Lunde-Jensen, 1995). On top of these costs, other social and economic outcomes may emerge as a result of work-related accidents and disease. Dorman (2000) describes an American study that compared the situation of people suffering from work-related musculo-skeletal disorders with a control group. This study found that the 'diseased' group was more likely to be affected than the controls in a number of areas, each of which may have economic implications. Thus, people with musculo-skeletal disorders were found to be more likely to be divorced, to have lost their home, their car or their health insurance, than individuals of the control group. There is no reason to believe that similar negative outcomes should not apply to cases of severe experience of stress or violence at work.

Human costs

Several attempts have been made to put a price on the human costs in connection with accidents and disease. Looking at compensation payments for similar cases may give us an idea of such costs as they may be incorporated in the awards paid out (Gordon & Risley, 1999). However, the actual sum will vary greatly depending upon the facts for each individual case.

Estimating the costs to the individual

The above points clearly suggest that there are too many uncertain factors to put forward any figures or estimates for costs to the individual. The dynamics of the phenomena under investigation also suggest that the costs to individuals will vary between workplaces depending upon the local culture and recognition of the problem. These costs are unlikely to be the same from one year to the next even within the same setting. Moreover, any model would have to reflect national variety with regard to individual factors.

The costs to the organisation

- ◆ The increase in health care costs in the US over the past two decades has resulted in employers' health insurance rocketing by 140% (Cartwright & Cooper, 1997)
- ◆ In Germany, the employers' bill for employee social security insurance amounted to 30.5 billion ECU in 1993 (Doukmak & Huber, 1995)
- ◆ Based on figures for 1995/96, in the UK, the total annual cost of accidents and ill-health has been estimated to represent a cost to employers in the order of £3.5-7.3 billion (Gordon & Risley, 1999).
- ◆ According to the National Institute of Occupational Safety Health (NIOSH) mental illness among the workforce leads to a loss in employment amounting to \$19 billion and a drop in productivity of \$3 billion (Sauter, et al., 1990).
- ◆ Leymann (1990) estimated the cost of bullying for the organisation to account for approximately \$30,000-100,000 per year for each individual subjected to bullying.
- ◆ A recent Finnish study of more than 5,000 hospital staff found that those who had been bullied had 26% more certified sickness absence than those who were not bullied, when figures were adjusted for base-line measures one year prior to the survey (Kivimaki et al, 2000). According to the researchers these figures are probably an underestimation as many of the targets are likely to have been bullied already at the time the base-line measures were obtained.

It is worth bearing in mind that in general, staff account for approximately 50-80% of organisational costs (Cooper et al, 1996). The following factors need to be considered when we are assessing the cost of stress and violence to the organisation:

- ◆ Sickness absence
- ◆ Premature retirement
- ◆ Replacement costs in connection with labour turnover (recruitment, training and development costs)

- ◆ Grievance and litigation/compensation costs
- ◆ Damage to equipment and production resulting from accidents and mistakes
- ◆ Reduced performance/productivity (lack of added value to product and service)
- ◆ Loss of public goodwill and reputation

Sickness absence

Employers respond to absenteeism in many ways, e.g. by finding cover for the absentee by means of voluntary or expected cover by colleagues, by overtime or by replacement. However, according to Gordon and Risley (1999), in most cases the costs involved are not likely to exceed the labour costs of the person being replaced. This takes into account that the cost of replacing the absentee will be covered by sick-pay, which will cost less than payment of full salary. The real cost of absenteeism is, therefore, primarily linked to the costs of sick-pay. Here, systems will vary between countries, with employers' contributions varying from 100% of sick-pay costs, either directly or indirectly through insurance schemes, to a share of the sick-pay with the rest covered by national social security schemes. It is worth noting that independently of the scheme in operation, there will be additional administration costs borne by the employer.

Premature retirement,

In many cases there will be a cost related to premature retirement resulting from stress and violence in the form of lump sum payments and so forth. Premature retirement will also carry an additional replacement cost.

Turnover and replacement costs

These primarily comprise recruitment costs in the form of advertising and selection as well as the cost of training and development. In addition to the direct costs arising from these activities, administration will also have to be included in the total replacement costs. Administration may include costs in connection with testing, selection (e.g. candidates' travelling expenses), the

cost of termination of contracts as well as the issuing of new contracts (Taylor, 1998). A further cost will arise from the training period when the new recruit is unlikely to work to full capacity. In general the replacement costs will increase with the experience and skills of the person being appointed. Replacing an individual may also lead to a chain reaction with implications for other employees as well (Gordon & Risley, 1999).

Grievance/compensation/litigation costs

There is a considerable cultural gap between different countries with regard to the use of litigation. Where compensation claims and litigation in connection with workplace accidents and disease are common, such costs can be considerable. However, for every case which may end up in court, there is likely to be a large number of grievances which are resolved at the level of the organisation. Grievance procedures may give rise to administrative costs in connection with the implementation of investigation and mediation procedures, where such procedures are in place, and these may in many cases be greater than any compensation package. This may particularly be the case when external services are required.

Damage to equipment and production

The connection between stress and increased propensity for accidents and mistakes has been pointed out earlier. Whilst such incidents are likely to carry a cost, their frequency and impact will be difficult to estimate.

Reduced productivity and performance

Any reduction in output as a result of stress and violence is likely to be intangible and may be difficult to assess. A possible approach would be to compare self-rated performance between non-affected individuals and those subjected to various forms of violence.

Loss of public goodwill and reputation

Whilst such costs may well be impossible to estimate, they should still be considered. With the often high media profile of individual compensation

cases, the potential damage to reputation may function as a motivator for employers to deal with the issues.

Estimating the costs to the organisation

There appear to be two main approaches for estimating costs to the organisation. The first, an inductive approach, would be to put an estimate on each individual outcome measures (e.g. sickness absence, and replacements) incurred by each category of violence and then adding up these estimates. To make any sense, such an approach would require reliable statistical data on incidents and some estimates of likely target behaviour in connection with exposure, e.g. average days absent in connection with illness, proportion leaving work, frequency of complaints etc. However, the statistical data presently available undermines the reliability of such calculations. This is particularly so, when one considers that the reporting within these fields is chronically unreliable (e.g. Castillo, 1995; Leather et al., 1999). However, even if more reliable incident rates were available there would still be the uncertainty with regard to the proportion who, at any one time, will leave work, make a complaint and, in some cases press for litigation.

A second approach involves estimating the costs of stress/violence by deduction. This method would have to start from more reliable estimates of overall costs to illness and accidents at work. These estimates are likely to be the products of either self-reports or national statistical data where such data is available, or a combination of the two.

Due to the nature of the available data on the costs of stress and violence, we will use the inductive cost estimation approach for assessing the cost of stress for the organisation, and the deductive approach for the costs of violence, harassment and bullying.

Stress

We have previously provided information on the extent of stress and various types of violence across a spectrum of countries. A number of reliable studies based on large population samples from the US, Europe and Australia

suggest that stress altogether accounts for approximately 30% of all work-related illness annually. If we apply this figure to the overall cost of work related ill-health and accidents we can make the following estimates:

- ◆ Based on the figures for social insurance companies (Doukmak & Huber, 1995) stress would account for approximately 9.2 billion ECU annually
- ◆ A similar figure for UK would be £1.1-2.2 billion a year based on estimates from the Health and Safety Executive (Gordon & Risley, 1999).
- ◆ Applying the same principle for the US NIOSH figures (Sauter, et al., 1990) previously quoted, namely \$22 billion for mental illness due to loss of employment/drop in productivity, this would then account for \$6.6 billion annually.

However, there are signs to suggest that the above estimates are too low. One must remember that these figures relate to the overall cost of stress to organisations. A recent survey by the Confederation of British Industry (CBI, 2000) estimates the total cost of absence alone in 1999 to be £10.5 billion or £438 per employee (£56 per employee per day). The survey suggested (in line with the above figures) that stress accounted for approximately 30% of sickness absenteeism. But when including other categories such as impact of long hours, lack of commitment, personal problems and poor work-place morale, all categories which may be considered 'stress-related', we can estimate that approximately 40% of all absenteeism could be attributed to stress at a cost of £ 4.2 billion a year. This cost does not take into account such expense factors as replacement costs and loss of productivity in connection with stress, suggesting a considerably higher total cost to organisations than the examples above.

Physical assaults

Several factors militate against the opportunity to provide reliable cost estimates of physical assault at work. Due to under-reporting of incidents as well as a failure to file compensation claims, the data available are likely to only register a fraction of violent attacks (Standing & Nicolini, 1997). In

addition, many workers, for example in health and social services, often consider low level physical assaults as 'part of the job', or the reporting of such incidents as undermining their professional standing and reputation. Hence, such individuals are neither likely to declare the incident nor to give the correct reason for taking time off or leaving work (Rowett, 1986).

Bullying

Similar reservations may apply to bullying. Nonetheless, we will still try to make a crude cost estimate using the deductive approach which, in principle, could be applied to other types of violence as well. The example of bullying is taken from the UK, but could be appropriate for other countries as well were similar data available.

To estimate the costs of absenteeism due to bullying we used the results of a recent nation-wide survey which found 10% of respondents to be currently bullied, whilst 25% had been bullied within the last five years (Hoel & Cooper, 2000a). Comparing sickness absenteeism data for those who were currently bullied with those who were neither bullied, nor had witnessed bullying, the 'currently bullied' group was found to have on average 7 days more off work in a year than those who were neither bullied nor had witnessed bullying taking place. Based on these figures we can estimate that a total of 18 million working days are lost annually in Great Britain due to bullying (based on a workforce of 24 million). In addition, recent research shows that those bullied in the past have higher absenteeism rates than those not bullied (Hoel & Cooper, 2000a). Using the above prevalence figures, we estimate that approximately 15% of employees were effected by bullying in 1999, suggesting that the real loss of days due to bullying is likely to be in the order of 27 million working days per year. Using the recent figures from the CBI (2000) which suggest an average cost of absenteeism to be £56 a day per employee, the total cost for absenteeism due to bullying would be £1.5 billion a year.

To calculate the replacement costs for bullying we used a figure which suggested that a quarter (25%) of those who are bullied decide to leave their

organisation as a result of their experience (UNISON, 1997). Estimates of replacement costs will vary greatly between industries and types of jobs. At the most conservative end of the spectrum, average replacement costs across geographical sectors and occupations are set at approximately £1,900 (Gordon & Risley, 1999). Based on a prevalence figure for bullying of 10% (2.4 million if total workforce=24 million) this suggests that approximately 600,000 people may leave their jobs due to bullying. However, since not all would leave their job immediately this number is likely to be reduced considerably. If we reduce the figure to a third (200,000), for example, as a conservative estimate, the total cost would be in the order of £380 million.

Now we turn to the calculation of possible costs related to reduced productivity and performance. In their recent UK nation wide survey of workplace bullying Hoel & Cooper (2000a) asked participants to assess their own current performance as a percentage of working to 100% of capacity. The results indicated that the 'currently bullied' group had a drop of 7% in productivity compared with those who were neither bullied nor had witnessed bullying taking place (85% and 92% respectively). The figure for those who were bullied in the past was 88% and for 'witnessed bullying' 90%. (In other words, those who were bullied were twice as unproductive as those who were neither bullied nor had witnessed bullying.) If we add those who were bullied in the last five years to the currently bullied, we can conclude that 25% of employees have a drop in productivity due to bullying of 4-7% which altogether may account for a 1.5-2.0% drop in productivity.

This percentage loss is based on self-report data. How this effects an actual organisation's overall production and performance levels is impossible to ascertain. Hence, it is very difficult to ascribe a price for organisations with respect to bullying-induced loss in productivity.

Whilst we know that internal investigations of complaints and grievances in connection with bullying can be costly affairs we have no reliable method on which to make any assessment. The same is the case for actual litigation costs, which still overall are likely to be small due to a relatively small (but

rapidly growing) number of cases. Similarly, in the case of bullying, we have insufficient knowledge to make any estimates with regard to possible costs to organisations due to early retirement.

If we summarise the above cost calculations we can estimate the total cost of bullying for organisations to be approximately:

Sickness absenteeism	£1.5 billion
Replacement costs	£380 million
Loss in productivity	(??? million)
<u>Total costs</u>	<u>£1.880 billion + loss in productivity</u>

The fact that we have not included costs in connection with internal complaints and grievances, retirement costs or possible costs due to bad publicity/loss of public goodwill suggests that this is a conservative estimate.

Costs of physical assault and sexual harassment

In a previous section we discussed a broad range of possible effects arising from exposure to various forms of violence (See Table 1). The effects were very similar for the different types of violence, but particularly for bullying and sexual/racial harassment, due to the more enduring nature of these experiences. There is a scarcity of appropriate data on physical violence and sexual harassment. Hence, we will utilise this similarity in outcomes for different types of violence in a deductive approach to ascertain some cost estimates for physical assault and sexual harassment.

In a large-scale European wide interview-based study of working conditions (European Union, 1996) there was an exponential increase in prevalence rates with 2% of the sample reporting exposure to sexual harassment, 4% to physical violence, and 8% to bullying. Using this information, we may tentatively suggest that sexual harassment could cost organisations a quarter of the sum of bullying whilst violence would approximate to about a half. This, of course, is a gross simplification of reality but should at least provide a general idea of the order of the cost induced by these problems.

The costs to society

- ◆ Based on figures for 1995/96, in the UK, the total annual cost of accidents and ill-health has been estimated to be from £9.9 billion to £14.1 billion of which work-related illness account for £6.2 to £7.2 billion. The total cost to society was equivalent to between 1.4% and 2.0% of Britain's GDP in 1995/96 (Gordon & Risley, 1999)
- ◆ In a study by the Nordic Council of Ministers (Levi & Lunde-Jensen, 1995), accidents and work-related ill health were found to account for 2.5% (Denmark) and 10.1% (Norway) of GDP in 1990
- ◆ The costs attributed to domestic abuse of women accounted for more than 2% of GDP in Chile and 1.6% in Nicaragua (cited in Johnson & Gardner, 2000). Lost earnings resulted from failure to reach work on time, frequent absenteeism and leave for medical reasons. A report from the Republic of Korea found that 31.4% of households had experienced incidents of domestic abuse (Bureau of Democracy, 1999).
- ◆ In the US work-related diseases, (including stress), account for a total cost of \$26 billion annually (and an additional \$145 billion for accidents)(NIOSH, 2001). US sources vary in their estimations for costs of violence alone, from a staggering \$35.4billion (The Workplace Violence Research Institute, 1995) to \$4.2billion (National Safe Workplace Institute, 1993).

The assessment of the total cost of stress and violence to society is made more difficult by the fact that we cannot estimate such costs by simply adding up all the individual costs and all the organisational costs. This is because some costs are actually transferred between groups (Levi & Lunde-Jensen, 1995; Gordon & Risley, 1999). A typical example may be social security benefit, which is a transfer of tax-payers' money to individuals. Again it is necessary to emphasise that the model will not apply to all countries as some

costs carried by society may be paid for by employers in some countries, or by individuals in others. The following factors need to be considered for the costs of violence and stress to society:

- ◆ Health care/medical treatment
- ◆ Loss of output/sickness absence
- ◆ Premature retirement

Health care/medical treatment

This would include costs of medical consultation, publicly subsidised medicine, hospitalisation and other state-financed treatment or rehabilitation.

Loss of output/sickness absenteeism

In this case the costs relate to potential production losses in connection with sickness absenteeism.

Premature retirement

In this category we will find costs related to social welfare/benefits due to retirement as well as the more intangible costs related to loss of productive workers at a premature stage.

Estimating the cost of stress/violence to society

We will make no attempts to provide any detailed cost calculations here. There are too many uncertainties and factors to consider for this to make any sense. However, we would point to previous studies by economists and their total estimates of costs incurred by accidents and ill health at work (for examples see above). However, even here the estimates vary greatly between researchers. We will, therefore go no further than to suggest that stress and violence possibly account for approximately 30% of the overall costs of ill-health and accidents (a figure reproduced by a number of studies). From the above figures we may, therefore, suggest that stress/violence may account for approximately 0.5 – 3.5% of GDP per year. This is obviously a very substantial figure.

5 - AN AGENDA FOR CHANGE – ORGANISATIONS RISING TO THE CHALLENGE

Throughout this report we have emphasised the close conceptual links existing between stress and various forms of violence at work. Therefore, many of the issues raised below regarding stress intervention, should also apply to intervention with regard to physical violence, bullying and harassment in the workplace.

Stress interventions

With the growing acceptance of occupational stress as a personal cost as well as a drain on company budgets, a number of organisations have introduced stress intervention initiatives in recent years. It has become common among researchers and practitioners alike to divide these interventions into three groups: primary, secondary and tertiary intervention (Cox & Cox, 1993). Primary intervention is concerned with stress prevention by reducing or eliminating stressors in the workplace, whilst secondary intervention refers to initiatives which aim to improve an individual's ability to deal with the stressors present. Tertiary intervention focuses on rehabilitation of those who are most effected by the stress experience. Employee Assistance Programmes and counselling fall within this category. Unfortunately, too many organisational interventions seem to be focused on secondary and tertiary activities, failing to address the presence of actual stressors in the workplace (Cox et al, 2000). Hence there is an overemphasis on programmes aimed at the individual rather than the organisation (Kompier et al, 1998). These initiatives are primarily concerned with making the individual better able to deal with the stressors they are facing, for example by relaxation exercises or by increasing their coping resources. A further common criticism is that too often such interventions involves single rather than multiple interventions (Cox et al, 2000).

The reason that organisations adopt individual focused programmes rather than organisation focused ones, may lie in the fact that individual focused

programmes are considered easier and less disruptive to implement (Cooper & Cartwright, 1997). Another reason may be that many managers privately blame the individual for their situation focusing on individual differences in coping with stress (Ivancevich & Matteson, 1986). It is also easier to attribute 'life' stressors such as bereavement, divorce and moving house as an explanation for an individual's stress levels in the workplace (Kompier et al, 1998).

The growing interest in stress intervention has resulted in a lucrative business for many organisational consultants or practitioners where stress management 'packages' or programmes have been implemented in different organisations. However, researchers warn against the frequent use of all encompassing or 'catch all' programmes as opposed to programmes which are organisation specific, tailored to the needs of the individual organisation (Kompier et al, 2000).

Nonetheless, despite numerous recommendations in books and articles aimed at the organisational practitioner, careful description and evaluation of stress interventions are largely missing (Burke & Richardsen, 2000). This lack of clear guidelines is also reflected in a scarcity of any systematic evaluations of stress intervention programmes in general, both with regard to individual stress reduction as well as cost savings for the organisation. For example Cooper et al (1996) found that empirical studies which highlighted financial gains due to stress intervention were near absent. Consequently, despite an increase in stress interventions, there is still sparse evidence of their success (Burke & Richardsen, 2000). Furthermore, what evidence there is indicates that success is frequently short-lived. This is a criticism veiled at other health promotion programmes where a large number of participants often revert to previous practices (Cooper & Cartwright, 1997). Such programme may also fail to reach the most needy individuals (Sutherland & Cooper, 1990). Hence, the more successful programmes are likely to be those that are based on an investigation of the particular circumstances and with an ongoing, long-term focus.

Research has so far failed to find a strong relationship between stressors and performance outcomes when looking at the level of the individual. However, it is suggested that an analysis on the organisational level rather than the individual level may yield more results (Daniels & Harris, 2000; Jex, 1998). This may be because any aggregate and cumulative effect could be more substantial than those identified at the individual level.

Most stress intervention programmes have not stood up to rigorous scientific scrutiny (Cox, et al., 2000). Due to the particular research design chosen, (e.g. failure to use a randomised control group) it is often impossible to establish whether any outcomes were the results of the actual intervention. However, undertaking research in environments which are changing rapidly and which are not in business to accommodate research is fraught with difficulty. Moreover, according to Kompier et al. (2000) organisational members are 'not study objects, but active organisers of their own working situation' (p.373). Any intervention within the area of stress and violence at work should acknowledge this fact. Given the need for evaluations of interventions, it is, therefore, a valid argument to suggest that some scientific rigor may be sacrificed as long as general guidelines for good practice are followed.

Acknowledging the above problems, it is suggested that a 'multiple case study approach' may represent a possible way forward where analytical as opposed to statistical generalisation is being sought (Kompier et al, 2000; Kompier & Cooper, 1999). In other words, by looking at similar problems in different contexts and from different angles, one can analyse to what extent results tend to converge. Numerous authors (e.g. Cooper et al, 1996) emphasise the importance of establishing baseline measures prior to the implementation of any intervention in order to effectively evaluate its success.

Below are two examples of successful stress interventions which address many of the criticisms raised above.

The cigarette factory (Kompier et al., 1998)

Background: A Dutch cigarette factory with 400 employees found itself in a position of decline with regard to market-shares as well as profitability. Internally the organisation was hampered by high rates of absenteeism and inefficiency. The organisation decided to address the problem, forming a steering group with employee participation, but with management responsible. In order to assess the problem, interviews as well as a questionnaire study were undertaken. This analysis revealed that workloads in general were very high, with some groups of employees particularly at risk.

Intervention: The intervention was addressed at both an organisational as well as an individual level. The organisational intervention focused on ergonomics, a reduction of noise, as well as job-redesign with the introduction of semi-autonomous teams. On the individual level, management were trained in absenteeism management, including improved record-keeping and improved rehabilitation initiatives in connection with absenteeism.

Results: After running the intervention for 10 years the company reported a 10% reduction in absence, decreased rehabilitation costs due to disability, a better social climate with employees more motivated and committed, and an improved quality of products. Overall a 7% increase in productivity was noted. According to the authors, a cost-benefit-analysis showed that the benefits outweighed the cost four year into the projects, with increasing gains thereafter.

The Pharmaceutical company (Poelmans et al., 1999)

At the time of intervention the company in question employed approximately 3,200 employees. Strong external pressure for change had forced the company to make budgetary savings by for instance putting a halt to recruitment. Combined with a change in leadership styles resulting from a change in senior management positions, this had left a large part of the workforce insecure with regard to the future. A staff survey had showed that seven in ten employees would welcome stress intervention initiatives. Medical reports of extremely high stress among part of the workforce, with some forced to leave for the same reason, motivated the organisation into action. A stress survey was undertaken which incorporated sections on work-related

stressors and psycho-somatic complaints. The survey showed that a third of employees suffered alarmingly high stress levels with psychosomatic reactions such as headaches being widespread. Groups most at risk were identified.

Intervention: On an organisational level the intervention focused on ergonomics. The individual focused interventions included a stress management course for those most at risk, training of management in identification of stress symptoms, ergonomics and people management skills.

Results: Absenteeism was found to have been reduced by less than 1%. However, even with such a modest reduction in absenteeism, the programme contributed a net gain of approximately 600,000 ECU. The authors suggest that the programme succeeded in raising the profile of occupational stress and improving utilisation of the occupational health service. Further benefits were indicated by the high number of enrolments to the stress management courses as well as the positive evaluation reports of course participants. Another outcome, which also carries a monetary gain, was the positive publicity the project enjoyed at the time.

To conclude this section on stress interventions we will highlight the following 'steps to a successful stress intervention' taken from Kompier et al. (1998).

- ◆ Stepwise and systematic approach
- ◆ Active role of employees and other 'parties'
- ◆ Recognition of employees as 'experts'
- ◆ Clear structure (task, responsibilities)
- ◆ Emphasising the responsibility of management
- ◆ Proper risk assessment
- ◆ Assessment of risks for whole company and certain departments/positions
- ◆ Well-balanced package of measures: work and employee
- ◆ Recognition of absenteeism and turnover as normal company phenomena
- ◆ Continuity: 'business as usual'

Violence interventions

As mentioned, with the close connection between stress and various forms of violence, in principle a number of the points raised above would apply to violence interventions. In addition there will be particular issues which need to be addressed for each individual form of violence.

Some of the criticisms discussed with regard to stress intervention programmes, such as lack of a systematic approach and a failure to undertake a proper evaluation also apply to violence interventions. A review of a number of textbooks and compilations of research articles on the subject found many general recommendations, but few which included a clear programme description. Even less included information on programme evaluation and hardly any had assessed potential cost-savings arising from the programme implementation. Before turning to some evidence of programme evaluation we will highlight some principles which need to be included if programmes are to succeed. The following points are drawn from guidelines issued by the US Occupational Safety and Health Administration (Reich & Dear, 1996). Whilst these guidelines are addressing violence within the health care sector, they contain a number of useful learning points.

The recommendations contain four elements: 1) management commitment and employee involvement, 2) workplace analysis; 3) hazard prevention and control and 4) health and safety training.

- ◆ Management commitment is emphasised through their willingness to contribute sufficient time and resources to the programme whilst feedback from employees is essential to secure commitment from staff. To reinforce this commitment, it should be expressed in a written and well-communicated programme where the aims and responsibilities of the programme are highlighted.
- ◆ By means of analysis of incident records and individual events, workplace hazards must be systematically explored.

- ◆ On the basis of such analysis control measures may be developed and introduced. Such measures will include changes to engineering design, as well as changes to administrative and work practices. How to deal with individuals exposed to violence needs also to be given sufficient attention by the organisation, e.g. debriefing and counselling needs. In order to succeed, all employees need to be trained, with programmes tailored particularly to the need of managers and security staff.
- ◆ To successfully evaluate the programme, proper record keeping is essential. In addition, a number of approaches which may provide management with feedback with regard to the success of the programme, e.g. staff surveys, and which ensure continuous improvement are required.

In line with the earlier mentioned shortcomings, a review of 41 studies of violence intervention found only nine studies which reported data on outcomes and evaluation (Runyan et al., 2000). All nine studies happened to refer to the health service, with interventions in the patient-carer relationship, e.g. a peer-help programme, availability of debriefing service/counselling and training to deal with assaults. No conclusive evidence with regards to outcomes of programmes was put forward. However, according to the authors, interventions which focused on organisational rather than individual risk are more likely to be successful.

We have, earlier, pointed out that interventions which utilise multiple components are more likely to succeed than single measure interventions (Cox et al., 2000). This criticism does not apply to the CPTED (Crime Prevention Through Environmental Design) technique which has frequently been used in connection with violence prevention in the retail industry (Casteel & Peek-Asa, 2000). The CPTED technique includes measures such as surveillance, access control, territoriality (location of business and general access), and activity support. In a review of 26 intervention studies using the CPTED technique undertaken over the last thirty years, all studies applying a multiple-component intervention found a reduction in robberies (Casteel & Peek-Asa, 2000). However, the potential impact of individual factors was not

evaluated. According to Casteel and Peek-Asa (2000), the fact that possible intervening factors affecting risk of robberies in most cases were not controlled for makes it difficult to draw conclusions on the outcomes of the intervention. Similarly, any comparison of studies was found to be difficult due to variation in the size of retailing stores.

As far as tertiary intervention is concerned, a number of organisations are offering counselling or other emergency services in connection with assaults or other violent incidents. One such programme is the ASAP (Assaulted Staff Action Program) which forms part of a risk management strategy for violence prevention (Flannery, 2000). Central to the success of the ASAP program is the ASAP team and their activities. Members of the team provide first-line service on an individual or group basis in the form of counselling and regular follow up activities which also, if desired, include the family of the victim. In addition to addressing potential needs for medical attention, the team try to assure the victim that the workplace is safe at the same time as the victim's work behaviour and potential symptoms of PTSD are being observed.

According to Flannery (2000), the ASAP approach has spread to a number of US state hospitals. Utilising a multiple base-line design, a study involving three hospitals found a 40% drop in assaults within 6 months of initiating the programme (Flannery, 2000). Referring to figures for turnover in connection with assault it was estimated that the team represented a net cost saving for the hospital of US\$268.000, when the cost of running the programme was deducted. In addition to a reduction in assaults and injuries, productivity was sustained and morale reported to have improved.

Another type of intervention operating at the tertiary level is the Employer Assistance Programme (EAP). Over the last three decades EAPs have grown rapidly in the US and to a lesser extent in Europe, with nearly 30 million US workers covered by such programmes in the early 1990's (Berridge & Cooper, 2000). Primarily these programmes are aimed at the level of the individual by using insight into behavioural science and methods to rehabilitate individuals within their organisations. It has always been assumed that the programmes

should benefit companies economically in the long run (Berridge & Cooper, 2000). Whilst there is considerable debate with regard to the appropriate evaluation of EAPs, their economic success is often highlighted. For example according to Feldman (1991) General Motors reported to assist approximately 100,000 employees annually, with a cost saving of approximately \$37 million.

Kompier et al's (2000) argument regarding the difficulty involved in implementing and assessing stress intervention programmes in general would apply to programmes addressing violence at work. In other words, organisations need to be encouraged to implement interventions and measure their success in terms of cost-saving in the broadest sense, even though these evaluations strictly speaking may not meet all the criteria which would ensure scientific validity of the outcomes.

Small and medium sized firms have received particular attention in a recent British report (Standing & Nicolini, 1997). The authors refer to several initiatives aimed at such firms. For example, an initiative to reduce robberies in off-licences, involved the local police and the British Retailing Consortium working together with the off-licence firm Thresher. A drop of 70% in robberies was reported after 12 months of having introduced a number of safety measures, e.g. redesign of stores, introduction of security devices (CCTV). Unfortunately this improvement not only gradually diminished, but crimes appeared to be displaced into other areas. This suggests that initiatives need to be broad and locally based, including the participation of local police, local authority and firms from a wide range of occupations in order to be successful (Standing & Nicolini, 1997).

Interventions against domestic violence at work

There is anecdotal evidence of initiatives against domestic violence at work, particularly in the US and Canada, with companies such as Polaroid, Dupont and IDS Financial Services introducing local initiatives, mainly of an educational nature (Levin, 1995). The strategies of the Polaroid Corporation have received particular attention (Friedman et al, 1996). In addition to company-wide personnel and management policies and support systems,

they also offer flexible work hours, extended leave as well as paid short-term absence spells for victims of domestic abuse. This is in line with a view shared by a number of American corporations that domestic abuse negatively impacts on the bottom-line by detrimentally affecting productivity, absenteeism levels as well as increasing the cost of health insurance claims (Friedman et al, 1996).

There are no tried and tested strategies against domestic abuse but the following points taken from Johnson and Gardner (2000) appear to be central to any intervention.

- ◆ Widespread distribution of information in the workplace aimed at employees in general and victims of domestic abuse in particular. Such information should include resources available locally (within and outside the workplace)
- ◆ Introduction of a safe workplace/zero tolerance of abuse policy
- ◆ In practical terms initiatives need to be taken to confuse and deter any abusers such as relocation of workstation and working schedule, use of silent alarms, off-directory telephone number, escort to/from car-park.

According to UNICEF 44 countries have introduced specific legislation against domestic violence, of which 12 are in Latin America, e.g. Bolivia, Colombia and Costa Rica. In order to counteract the fear of female domestic abuse victims of being met by a wall of disbelief and judgement, the first women's police station was opened in Brazil in 1985, staffed with multidisciplinary female teams to meet the needs of women (UNICEF, 2001).

Bullying and harassment interventions

Little is known so far about the success of anti-bullying intervention programmes. To the authors' knowledge, no study has so far systematically evaluated anti-bullying interventions. We are therefore, somewhat restricted in presenting factors which appear to be essential for the success of such programmes. Where such interventions are discussed they largely rely on

inference from related areas, e.g. stress and violence and from the field of school bullying (Hoel et al, 1999). However, in order to be successful, interventions against bullying and harassment at work need to address issues such as organisational culture and management style. Here we will limit ourselves to highlight some key elements in policy-making and anti-bullying policies. The following points are taken from Rayner et al. (2001).

When introducing a policy the following issues need to be considered:

- ◆ Decide whether to introduce a generalised harassment policy or a specialised anti-bullying policy
- ◆ Identify the behaviours you welcome and those which are not tolerated (the do's and don'ts)
- ◆ Secure broad representation and active involvement from all sections of the workforce
- ◆ Facilitate broad dissemination of policy and accompanying procedures to ensure knowledge and understanding

We have repeatedly pointed out that any potential success of interventions are often missed due to lack of proper evaluations. Such a criticism would also apply to the effectiveness of policies. To assess the effectiveness of bullying policies Rayner et al. (2001) suggest the following factors need to be addressed:

- ◆ Exit rates and reasons for organisational departure by means of exit interviews
- ◆ Absenteeism rates (certified and non-certified)
- ◆ Formal and informal complaints and grievances
- ◆ Staff surveys undertaken to monitor development with regard to prevalence of bullying as well as organisational climate and culture
- ◆ Monitoring the effectiveness of the policy-monitoring process itself

In South Africa an initiative has currently been taken to introduce a Code of Practice on Workplace Violence which will include bullying. This is an initiative

building on the country's sexual harassment code, which is a negotiated code between business and organised labour. The Code on Workplace Violence will be used by the Council for Mediation and Equity Arbitration as well as in courts (Steinman, 2000).

In Great Britain the Department of Transport and Industry recently announced new winners of the Department's £5 million Partnership Fund for innovative projects to 'stamp out workplace harassment'. According to the Health minister 41 projects had altogether won £1.4 million to develop projects between employers and employees (DTI, 2000). This is a good example of a public initiative in line with the ILO's approach of combining justice with 'good economic sense'.

6 - CONCLUSIONS

- ◆ This report provides sufficient evidence to suggest that stress and various types of violence represent problems of a disturbing magnitude affecting working people across the world. As far as stress is concerned, nearly one third of the working populations in most developed countries report high or extreme levels of stress. Whilst less evidence is available for newly industrialised and developing countries, what evidence there is suggest that the problem is at least as prevalent in these countries as in the developed world.

The report also suggests that the workplace is no safe haven from violence with a considerable number of people exposed to physical assault. This is especially the case for those working within the health care sector. However, across industrial sectors a large fraction of workers are exposed to psychological violence or bullying, whilst many, women in particular also have to cope with harassment of a sexual nature. In addition, with more women entering the workforce, spill over from domestic abuse is increasingly seen as a workplace problem, most notably in the developing world.

Exposure to stress and various forms of workplace violence have often a dramatic impact on those exposed, whether directly as targets of violence or abuse or as bystanders. The impact of the experience is also likely to affect organisations as individuals suffering from stress are likely to need time off work or are less productive when at work. These individuals may ultimately leave the organisation or, in some cases, leave work altogether. Such effects are likely to carry a price to individuals, organisations and the wider society. This report has explored the likely costs incurred in connection with the experience of stress and violence. Whilst only vague estimates can be given with respect to overall costs to society, we have provided examples which demonstrate the dramatic impact of these problems in cost terms for the organisation. It is hoped this will encourage organisations and public policy makers to attend to the issue of stress and violence at work and provide necessary resources and impetus for their control and mitigation.

There is also some evidence to suggest that workplace stress and violence are on the increase. The recent trends in socio-economic factors may, in part, account for this.

- ◆ To date workplace stress and violence have largely been recognised as problems of industrialised nations. However, the evidence provided suggests that these are global problems affecting people in developing as well as industrialised nations. This is not to say that the problems of stress and violence will be perceived in the same way across the world as cultural variations are likely to affect the perception of individual stressors as well as the way one copes with them. More research is needed, in particular in newly industrialised and developing countries, in order to establish with more certainty the prevalence of these problems as well as their effects.

- ◆ The report demonstrates that interventions have taken place to deal with the issues of stress and violence at work. The evaluation of these interventions are fraught with difficulties. Nevertheless, the existence of such programmes shows that they still show that organisations are making advances in preventing and alleviating stress and violence at work, though progress is often slow. Also, in some cases organisations have successfully demonstrated that interventions have led to major cost savings. This is important evidence which should stimulate organisations to implement intervention measures and monitor their effect.

There is some evidence that public bodies may play a positive role with regard to stress and violence intervention initiatives by making public funds available for organisations which are willing to proactively address these issues. It is hoped that the success of such initiatives may stimulate policy makers in many countries to address these problems in a creative manner which may instigate organisational change.

7 - References

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