CONSIDERATION OF PERSONAL SAFETY IN PROJECT DEPLOYMENT

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The Health and Safety at Work etc Act 1974 legislates that all employers have a legal obligation to maintain the welfare of their workers. More recent amendments also require employers to carry out risk assessments in order to identify work-place hazards and develop appropriate measures to prevent or minimise risks to staff. Whilst the construction industry as a whole has faced the issue of workplace safety head-on, and the number of accidents in workplaces has sharply declined, the issue of personal safety (in terms of crime or intentional harm against the person) has not received the same level of attention. This could be owing to 1) a lack of standardised procedures for dealing with personal safety at work, 2) issues surrounding resources and time management, 3) an organisational ethos whereby crime against the person is not viewed as a priority issue, 4) a reluctance to deal with less foreseeable and preventable risks, and/or 5) the belief that once a problem is identified then responsibility must be taken for it. This situation can be compounded by employees being reluctant to report incidents, fearing it is a weakness on their part, that they will not be offered appropriate support, or that it is regarded as 'part of the job'. Ultimately, however, the impact of acts of 'intentional harm' against employees can have detrimental effects on their morale, health and welfare. Employers can suffer in terms of employee efficiency, image and recruitment. Thus, it is of benefit to both employers and employees that risk management strategies to promote personal safety and appropriate resourcing practices together with safety training are introduced into the workplace. This discussion paper seeks to raise the issue of personal safety at work and raises important questions about the extent to which employers value personal safety procedures and staff training, consider allocation of staff to project teams and possible barriers which may inhibit information and guidance on personal safety.

Keywords: health and safety, personal safety, project deployment, risk assessment.

INTRODUCTION

Given the multitude of hazards of working in the construction industry, maximising the health, safety and welfare of employees is of paramount concern. Thankfully, there is now a legal requirement on all organisations and employers to adhere to a policy on Health and Safety. However, while the risk of accidents in the construction industry has a clear legislative mandate, and much research exists in this area, wider safety concerns such as intimidation, violence or aggression against employees are less clearly addressed. This is despite employers having a legislative, professional and moral duty to create safe working environments.

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Historically, the emphasis on safety at work has typically focused on guidance and risk assessment for more 'traditional' workplace hazards, such as chemical spills, fires and preventing injury from machinery. This ethos is intrinsically linked to the preceding industrial age of our country. However, cultural, social and political changes over the last half-century have widened the remit and nature of health and safety at work needs and consideration of employee safety covers additional risks in the form of prevention of more intentional acts of harm. Some employers have recognised that employees' personal safety, particularly in terms of risks or threats of violence or aggression, need to be addressed and have drawn up guidelines for dealing with potential incidents. Indeed, the Health and Safety Executive (2001) encourage employers to give work-related violence the same impetus as any health and safety issue. However, the issue is fraught with ambiguity and, while the hazards inherent in the construction industry are predominantly associated with the inevitable risks of, for example, falls, tools, chemicals, machinery etc; construction workers do face risks of violence, aggression, intimidation or threatening behaviour (and can experience fear of such acts) in many situations. Consider, for example, the contractor working for an intense period of time in an unfamiliar city or the project manager working alone late at night.

This paper focuses on whether the issue of 'personal safety' in terms of intentional harm, be it intimidation, fear, aggression or violence, is overlooked in the construction industry and seeks to:

- Confirm the legal obligations required of construction organisations in terms of maximising employees' wider personal safety needs
- Explore the importance of addressing the wider risks to the personal safety of staff beyond accidental harm
- Highlight these issues in the context of a case study of a construction company
- Discuss possible barriers to effective personal safety promotion in the construction industry
- Identify some recommendations for promoting the personal safety of staff in the construction industry

EMPLOYER OBLIGATIONS

In accordance with the Health and Safety at Work etc Act 1974, all employers have a legal obligation to "ensure, so far as is reasonably practicable, the health, safety and welfare at work of all his employees." (1976: 2). This was explicated in more detail with The Management of Health and Safety at Work Regulations 1992 and 1999 which mandated that, in order to ensure that staff safety was maximised, employers should carry out risk assessments to identify the risk of hazards in the workplace. Given that the wide-ranging term 'hazard' encompasses anything that has the potential to cause harm to an employee, the employers' duty also extends to preventing or reducing the risk of non-accidental harm, be it physical or psychological, and requires employers to take appropriate measures to prevent or reduce such risks. This includes the need to protect employees from reasonably foreseeable work related violence and aggression. In addition to the potential consequences to staff of violence and aggression in the workplace, "employers face penalties under the Health and Safety at Work etc Act if they fail to meet their legal obligation" (Cardy 1995:30).

In the construction industry the protective legislation is extensive: in addition to The Health and Safety at Work etc Act 1974, and the regulations established in 1992 and 1999, industry guidelines have enhanced safer working environments; The

Occupational Safety and Health Administration's (2006) guidelines offer detailed guidance, as does the statutory regulation provided in the Construction (Design and Management) Regulations 2007, which highlights the role of effective project management in minimising risks to workers. Statistics are readily available on the risk of mortality and injury in the construction industry; according to the Health and Safety Executive (http://www.hse.gov.uk), 77 construction workers died in 2006/07. In the same year the construction industry accounted for 32% of all worker deaths in the UK. A recent Labour Force Survey (2004) found that the rate of reportable non-fatal injury in construction was 2280 per 100,000 workers (2.28%) in 2002/03.

However, official statistics provide little consideration to risk of other, less foreseeable or psychologically insidious risks to employees' health and safety; for example, the number of construction workers who have experienced violence, aggression, intimidation or fear in the course of their work, and there is little indication of specific guidance for reducing the risk of intentional harm, be it intimidation, crime, violence or aggression, against workers in the construction industry.

PERSONAL SAFETY IN THE WORKPLACE

Waters *et al.* (2004) developed a rudimentary conceptual framework for understanding the various facets of personal safety, which they claim encompasses two distinct elements: actual and perceived risk of intentional harm (as distinct from accidental harm). Although intentional harm, which may take the form of violence, aggression, intimidation etc, and may be less foreseeable and less quantifiable than accidental harm, it is still a key component of staff welfare and therefore is covered by existing legislation. Failure to address these issues can have serious consequences for staff and construction companies.

The Health and Safety Executive (2001) define violence as "any incident in which a person is abused, threatened or assaulted in circumstances relating to their work," And while violence is most often associated with physical assault or harm it is important to consider the impact of what Chappell and Di Martino (2000) refer to as non-physical violence or 'psychological violence'.

However, a literature review revealed little data on the extent to which construction workers face aggression and violence in their working environments or on specific personal safety training resources available to them. Budd (2001) states that there were approximately 1.3 million incidences of violence at work in England and Wales in 1999, comprising 634,000 physical assaults and 654,000 threats. Worryingly, she also claims that 72% of workers questioned had received no training or advice from their employer.

What is clear is that intentional harm can be very damaging and work-related violence, both verbal and physical, has serious consequences for employees and for the organisation they work for. Whilst physical violence has more obvious consequences on the individual, verbal abuse and/or intimidation can also cause harm in the form of loss of confidence, stress and/or depression. Such physical and psychological damage can have serious implications on the health, well-being and morale of staff and ultimately impact on their quality of life and work efficiency. For employers this can translate into real financial costs through sickness absence, lack of productivity and company reputation. More generally, Budd (2001) found that ten

years ago the estimated cost to society of work-related violence was at least £62 million a year in medical costs and absenteeism alone.

CASE STUDY: A PFI SCHOOLS PROJECT

The literature provides few examples of personal safety-related research in the construction industry so the following case study provides an illuminating example of how wider safety issues impact on staff welfare and how they relate to project management.

The PFI schools project was part of a wider programme to construct ten schools within a single region of the UK. The project was further divided into four sections, of which this case study was the first to commence. The project sought to build three new school buildings on the grounds of an existing comprehensive school, while the pupils continued their education within the present facilities. The overall project programme was overseen by a contracts manager, who reported to the divisional construction director. Each section of the programme had a project manager who managed the section's production teams for the one, two, three or four sub-projects involved. Each sub-project had a manager or an agent, who was responsible for the supervisory staff (foremen, engineers, trainees) and directly employed labour. Figure 1 provides a detailed structure of the PFI schools project's sub-projects and appropriate support staff. Crucially, the majority of section one staff were all new to the organisation (apart from the sub-project two site agent, shaded in Figure 1) and had been specifically recruited for the project, this including the contracts manager.
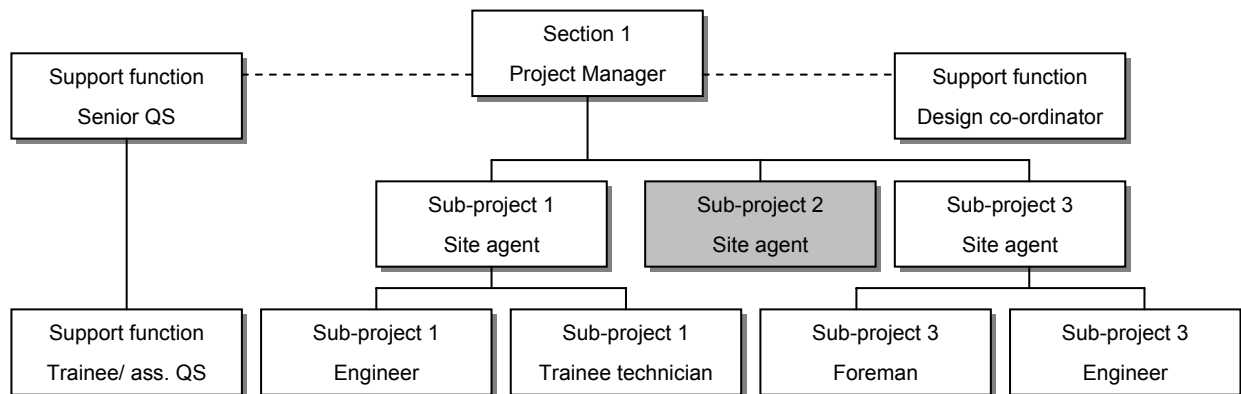

Figure 1: PFI schools case study project management structure

Research interviews highlighted the challenges of managing personnel in such a large project, but also revealed considerable local difficulties within the sub-projects. Interviews with staff involved with section 1 of the PFI Schools project sought to identify the key challenges of managing such a flagship scheme.

In response to questions on the type and nature of work on the site the section project manager explained that the area was deprived and thus the school had a very bad reputation. She quoted that it had 89/100 quality inspection rating in the area. This means that the school had significantly poor performance record. Often schools with such low ranking experience difficulties with pupil behaviour. Indeed, over the years the school had been burned down twice. Moreover, she highlighted concerns with regards to the inner city children and drug abuse on the school grounds. Illegal substances were on offer for purchase along the school fencing. Discipline was also said to be very poor in other respects. The school children had damaged the site toilets four times during the project, destroyed sections of security fencing around the site

and pulled out all electrical connections from the site office porter cabins, which interfered with information and communications technologies as well as lighting, heating and other site facilities which had a serious impact on the site staff. Reluctance to answer the site telephone was clear in fear of further negative encounters. The construction site staff worked hard to meet the demands of the overall project programme, yet feedback at project level was consistently difficult. The project manager explained:

> "It is very difficult for all of us… absolute nightmare… every time a stone goes through a window somewhere (in fact they are not stones now but bricks or large chunks of concrete) it is my fault because I have provided the missile. The fact that the school headmistress has no discipline with the children is irrelevant. And that is what you are put through all the time."

Although all personnel in the company receive general health and safety training as part of their induction (note: all but one employee on section 1 of the project were new to the organisation), this was not tailored to specific requirements of the project where staff were deployed. It is evident from the project manager's commentary that the local environment and working conditions impacted negatively on her morale and welfare; fear for personal safety was a very real issue for her and she was ill-equipped to deal with the challenges of problematic and intimidating youth behaviour, vandalism and lack of support from school staff.

DISCUSSION

The case study shows that it is not just safety risks from accidents that face construction workers and that wider personal safety concerns can be an issue. The following discussion will reflect on some of the potential barriers to personal safety promotion and discuss some of the problems that prevent organisations from considering risks of intentional harm and identify some key building blocks that organisations may incorporate into strategies to minimise risks to employees.

Possible barriers to effective personal safety practices in the construction industry

Failure to acknowledge a problem
According to Stark and Kidd (1995), one of the most significant factors contributing to a lack of co-ordinated strategies to reduce violence and aggression in the workplace is the belief that if violence is acknowledged as a problem, then it becomes necessary to accept responsibility for its prevention. Once responsibility is allocated then time and resources are needed in its prevention. However, employees may also be reluctant to report incidents, fearing it is a weakness on their part, that they will not be offered appropriate support, or that it is regarded as 'part of the job'. Clearly if organisations foster a culture where any form of intentional harm is regarded as routine then this can lead to a variety of future problems for them and their staff. Both problems need to be overcome and both employers and employees must accept the true nature and risk of intentional harm in their workplace if it is to be effectively managed. The case study indicates that although the project manager may not have been a victim of a crime she nonetheless experienced a level of fear that was detrimental to her morale. Conklin (1975) suggests that victimisation can be said to have occurred if a person is fearful of becoming a victim, so it is not necessarily only after a person becomes a victim that negative effects are experienced and the impact of this can have serious implications on wellbeing. Fear of crime or victimisation can have a severe impact on behaviour

and mental health and can lead to a number of undesirable effects, including avoidance behaviour and a distrust of others (Miethe, 1995: 14). Since these can alter an employee's ability to perform well in his or her job, the construction industry needs to acknowledge that fear of intentional harm can be equally as detrimental to staff welfare, morale and productivity as actual intentional harm and should take appropriate steps to reduce the risks and incidences of both.

A lack of standardised procedures for dealing with personal safety at work
Assessing the risk of intentional harm involves the issue of less obvious or foreseeable risks and as a result the development of appropriate practices may be less of a priority resourcing issue. This may particularly be the case if incidents aren't routinely reported, collated, analysed and acted upon. Often this results from a lack of clarity on the best ways to measure and assess less obvious risks. A lack of understanding of the real risk to employees can also result in employers failing to have adequate evidence to inform appropriate practices. Unfortunately, as Chappell and Di Martino (2000: 106) state: there "cannot be one blueprint for action," meaning that time and resources are needed to fully address the problem.

Resourcing issues
While accident prevention is heavily invested in because of strict legislation and the evident risks are reinforced by statistics, wider organisational safety resources are inevitably shaped by financial constraints. Furthermore, resourcing decisions may be far removed from 'the shop floor' and therefore incidents may not filter back through the management structure unless there are proper procedures in place to do so. Basing resourcing decisions on just recorded incidents of intentional harm may be misplaced, since they provide only an indication of the extent of such incidents; the actual prevalence of violence and aggression at work, be it assault, intimidation or threats towards employees, may be far higher than such data suggests because staff may not report incidents, something which Maguire (2002) calls the 'dark figure of crime'. Furthermore, some incidents may not fit into predetermined definitions of crimes and may slip below the reporting and recording radar, particularly when staff may not have been a victim of a tangible event but instead experience high levels of fear or anxiety over their personal safety. In addition, statistics do not provide any explanation of social and environmental causes of crime, which has implications for the effective design of safety promotion strategies. The irony is that failing to invest in personal safety management and risk prevention will ultimately cost an organisation through employees having time off work to recover emotionally or physically from an incident, recruitment costs if there is a high staff-turnover and even the extreme but increasingly common practice of employees suing their employer for failing to reduce risks which may be considered 'foreseeable'. As Chappell and Di Martino (2000: 106) state; "the correct and preferable response to the issue of violence at work is seen increasingly to be an essential part of human-resource management," and budget allocation should accommodate wider safety enhancement.

Issues surrounding project deployment
The variation in risk according to employee role, location and company are factors that confound the issue of managing personal safety risks at work. Due to the project-based nature of construction work, the allocation or deployment of staff within an organisation is a central staffing activity in the construction industry. At the core, project deployment refers to the planning and selection of staff for programme/ project portfolios, team integration, and more broadly training and development and succession planning.

The type of staffing strategy in the case study project resulted in multiple challenges; for example, the contracts manager was newly appointed and required extensive resourcing guidance from his longer serving colleagues and was forced to rely on his colleagues as to judgements on the suitability of his resourcing decisions in relation to the company practice. The case study also highlighted the range of staff required for such a construction project, the diversity of recruitment, and the challenges that this presents in providing a unified and consistent 'corporate' personal safety message to staff. Indeed, the problem of dealing with such difficult site conditions may have been intensified in section 1 of the project because all but one of the project staff were new to the organisation. Notably, this included the contracts manager in charge of the overall project programme. Perhaps it was lack of support (as a result of not knowing company policy and procedures for handling such instances) that increased the project manager's feelings of personal responsibility for coping with the negative incidents on site, but a specific section on personal safety within the general health and safety training would have sent a clear message that such issues are taken seriously whilst better equipping her to deal with incidents when they arose.

Lack of industry concern for the personal safety of staff
A recent study (Raiden *et al.,* 2006) found that among the interview accounts of 60 construction professionals and managers 'personal safety' was not mentioned once as a variable that needs to be taken into account in project deployment decision-making. A composite of 140 factors included 'project requirements' for health and safety, tackling problems effectively, situations to be solved at middle management tiers, fast removal of disruptive influences and zero tolerance for controversial correspondence. Clearly many of these contribute toward creating safe working environment, but in a reactive way. Organisational strategic priorities emphasised no blame culture, trust and partnering which deliver a safety conscious message at higher level. Disappointingly, these intentions did not translate into consistently effective management practice. While risk management in the construction industry may be focused on the prevention of accidental harm, the case study shows that intentional harm should not be ignored, on a moral and legal basis. The section project manager in the case study experienced a threat to her welfare through the intimidation and disruption of local youths. If the company was aware of such issues (and the risks of such harm were 'reasonably foreseeable') and they didn't provide adequate staff training, support or guidance then they can be held to account for failing in their duty to maximise the safety and welfare of their employees through failing to equip staff with a thorough knowledge of the risks they face and appropriate strategies to reduce them.

Recommendations for employers

Despite the rising prominence of violence at work generally there is no universal protocol that can be utilised by employees to prevent violence and aggression in the work place, not least given the variation amongst working environments. However, the Health and Safety Executive in particular are leading the way in raising awareness of the issue and equipping organisations with tools to assess risks to staff. Based on the discussion above we explore below a number of recommendations to promote the personal safety of construction workers through effective organisational procedures:

Prevention is better than cure
Despite the legislative and moral imperatives to promote personal safety at work, the reality for any organisation is that failing to address the risk of intentional harm can impinge on an organisation's reputation and profitability. Therefore it is far better for

both employers and employees that the risk of intimidation, violence or aggression is minimised and prevented from occurring in the first place. This can be achieved through effectively assessing the working environment to identify risks or precursors for such harm which will form the basis for appropriate strategies, such as the provision of training and guidance, to prevent incidents or, if necessary, diffuse them if they arise.

A sound investigation of the actual and perceived risks of intentional harm
It is good practice to develop policies and practices that are underpinned by co-operation between employers and employees. Effective safety strategies can only be developed through an accurate understanding of the risks faced by employees so a co-ordinated and holistic approach to risk assessment should be fostered. These should address actual and perceived risks. Ideally, personnel who are responsible for safety management should identify 'actual' risks by gathering appropriate incident data, identifying and assessing current safety management strategies, and establishing systems for monitoring and evaluating their success, and 'perceived' risks by interviewing employees about their experiences. The Health and Safety Executive (2001) suggest that this can be achieved through effective communication, an ethos of 'listening' to staff needs, effectively recording all incidents and evaluating and, if necessary, revising risk assessment methods and safety management strategies. Analysis of this data can aid in the development of a reflexive and adaptable framework that can be practically employed to increase personal safety at work and minimise risk.

Ensure staff involvement
Staff involvement is vital in the development of appropriate personal safety policies and procedures because they understand better than anyone the realities and risks presented to them on a daily basis. Incident statistics may present one particular picture of risk but talking to staff may present a very different one. Given that the nature of harm can encompass the issues of fear and psychological injury then risk assessments should incorporate the monitoring of these needs too. A thorough understanding of staff needs should underpin practical solutions for dealing with violence in the work place and will allow more effectively designed organisational support. The Suzy Lamplugh Trust (1994: 6) claims that "employees are more likely to be committed to measures if they help to design them and put them into practice." Since developing effective risk management mechanisms must start with a full assessment of the risks then the full support and co-operation of staff must be sought. This will ensure that situations faced by workers are identified and will ensure that any implemented solutions can be effectively assessed, forming the basis for the development of tools to improve working conditions in the future. This emphasises the need for positive and open communication between employer and employee; Paterson and Leadbetter (1999: 96) suggest that "the management of aggressive and violent behaviour must be seen within a context of individual and organisation working in partnership." Staff involvement will also reveal whether safety strategies are helping and will foster effective responses to combat problems of violence and aggression at work.

Appropriate staff training
Given that legislation requires employers to provide their staff with a clear understanding of the risks they may face in the course of their work, safety training and information on the risks are crucial. The information from formal risk assessments can be incorporated into the development of a responsive policy on

personal safety promotion, and form the basis of information, education and/or training programmes available to staff who are at risk of intentional harm. If staff are equipped with evidence-based knowledge and skills to reduce work-place intimidation, violence or aggression, or manage or diffuse incidents if they arise, then they will be better protected and morale will be increased. Staff training also sends a clear corporate message that the personal safety aspect of staff welfare is taken seriously.

CONCLUSIONS

This paper sought to draw attention to a less obvious aspect of health and safety management in the construction industry and in so doing to raise questions and prompt discussion on the issue of personal safety and intentional harm. We have established that the law demands that wider personal safety issues must be taken into consideration in the management of employee's safety and that although intentional harm is not the paramount risk facing construction workers, it is still an aspect of their welfare that needs to be addressed and effectively managed.

It is difficult to determine whether personal safety is routinely ignored across the industry and, if so, whether this is due to financial, managerial or attitudinal constraints. The PFI Schools case study illuminates that wider safety risks to construction worker staff, including less tangible risks like intimidating behaviour, are real and potentially very damaging. This was reiterated in the discussion on emotional costs to employees and financial costs to employers. However, the extent of personal safety risk and effective responses to personal safety needs in the construction industry requires further study for a number of reasons. Firstly, so that the industry as a whole can respond to risks and provided a coherent message to staff that their personal safety needs are taken seriously. Secondly that the problem of personal safety is likely to escalate further if incidents and risks are not confronted and evidence-based training and support strategies are not developed. Thirdly, health and safety legislation means that companies have a legal obligation to maximise the safety and welfare of their employees and the construction industry should not be diverted by the industry's (necessary) preoccupation with accidental harm from equipping staff with the appropriate knowledge, tools and support to deal effectively with the risks of intentional harm. Personal safety should not be overlooked in the construction industry and we have presented a number of suggestions for overcoming the potential barriers to effective personal safety management. Crucially, employers and employees have a responsibility to work together in identifying vulnerability, minimising risk, be it of accidental or intentional harm, and ensuring as safe a working environment as possible.

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