Safety climate in the service industries: the example of catering operations

By MICHAEL HOWARD BSc PhD MCIEH* and KEVIN MAGUIRE BSc BA MSc CPsychol MCIEH**

Abstract

The policy of self-regulation, which is central to occupational safety and health law in the United Kingdom, is reviewed in the context of the catering industry. The influence of service and service quality on selfregulation and safety climate is considered. Some previously unpublished findings from a larger study on the factors affecting safety behaviour in lecturer chefs are reported and examined in terms of the above.

It is suggested that the traditional autonomy and autocracy of chefs in catering organisations give them a pivotal role in self-regulation. In addition, the pursuit of service quality influences the chefs in certain ways, some of which may be negative in terms of safety management. It is argued that the pivotal role of chefs in delivering service quality can potentially adversely affect his or her role in safety management.

Finally, it is proposed that the conflict between safety and production in the service industries may be more acute than in manufacturing because of the need for worker and, more particularly, supervisor concurrence rather than mere compliance with service quality strategies.

Key words

Catering, safety climate, service industries.

Introduction

Occupational safety and health law in the

**Senior Lecturer in Environmental Health, Department of Building and Environmental Health, Nottingham Trent University, Nottingham, UK UK is heavily influenced by the policy of self-regulation. This policy comes from the view that those who produce risks from work activities should be responsible for assessing and managing those risks. Furthermore, they should do this via the same or similar mechanisms by which they manage their businesses generally.

The concept of self-regulation was introduced by the Robens Committee (Robens 1972). The experience of Robens and his Committee was, at that time, largely of manufacturing industries. The service industries were a much smaller and less well recognised part of the UK economy than they are today. This paper addresses the question of whether the policy of self-regulation is as appropriate to the service industries as it is to the manufacturing industries for which it was developed. It will also consider the potential effect of the current drive for service quality in the service industries on safety management and safety climate.

Researchers have offered various interpretations of the term 'safety climate' (see, for example, Maguire *et al.* in prep.). In this paper, the authors have chosen an interpretation of the term broadly similar to that used by Zohar (1980), that is that safety climate is a summary of perceptions that employees share about the importance of safety in their work environment. This climate will inevitably guide the safety behaviour of individual workers.

The catering industry has over recent years suffered a disproportionate level of accidents in relation to the inherent risks of the industry (Health and Safety Executive (HSE) 1997a). In the five-year period 1994/5 to 1998/9, there were 3,409 major injuries and

^{*}Lecturer in Environmental Health, School of Health and Life Sciences, King's College London, London, UK

12,777 'over three day' injuries reported by private catering organisations alone under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1985 and 1995. It is known that there is a high level of under-reporting in the catering industry (HSE 2000) and these figures are likely to represent around 23 per cent of the actual levels.

The first part of the paper concerns the policy of self-regulation, the role of the chef as a manager and the concept of service. The second part reports some previously unpublished findings from a larger study into the factors that influence the safety behaviour of lecturer chefs (Maguire & Howard 2001). These factors will be examined in the context of the issues considered in the first part.

The policy of self-regulation

A fundamental belief expressed in the report by the Robens Committee (Robens 1972) is that the primary responsibility for reducing levels of accident and ill health at work lies with those who create the risks. The Committee also expressed the view that the system which existed at the time of its report encouraged too much reliance on state regulation and too little on responsibility and voluntary self-generating effort.

From these ideas of responsibility and voluntary effort was born the concept of selfregulation. Self-regulation depends on three major elements: effective management, specialist advice and worker involvement. It is the first of these elements that will be considered here in terms of the catering industry and, more particularly, the role of the chef.

There is some conflicting opinion on the efficacy of self-regulation in safety management. Dawson *et al.* (1988) concluded that self-regulation, as a policy to promote safety, has its limits. They point out that the statement in the Robens Report that "It is generally accepted that the primary operational responsibility for ensuring safe working must rest with line management" is rather at odds with the Health and Safety at Work etc Act 1974, which itself contains nothing specific about line management accountability.

The Robens Report is more specific on the subject of line management when it talks about first line supervisors: "It is the supervisor who is on the spot and in a position to know whether safety arrangements are working in practice. His influence can be decisive. Both here and abroad, wherever we have seen outstanding safety and health arrangements, it has been clear that a key role is played by well trained supervisors who are held accountable for what happens within their sphere of control."

Nichols & Armstrong (1973) examined the role of first line supervisors and reported several examples from their research of foremen actively encouraging dangerous practices in order to preserve the rate of production. In their study of a factory workshop of 70 workers, they found that although the foremen played a key role in the safety system of the factory, they were also the people immediately responsible for the pressure on employees to keep up production. The suggestion is therefore that effective safety management and thus selfregulation itself are compromised or even opposed by the pressure for production. Nichols (1997) questions the validity of self-regulation and attributes the confidence that Robens had in it to the Committee's key assumption that apathy was the most important single cause of accidents, an assumption which Nichols finds unreasonable.

Dawson et al. (1984), in their study of safety management in various chemical plants, found a significant level of conflict between production interests and safety as perceived by supervisors and junior managers. However, they did not find the level of active discouragement of good safety behaviour that was reported by Nichols & Armstrong (1973).

The role of the chef as a first line manager

The traditional role of the chef is often highly authoritarian, resulting in a very topdown management structure in the kitchen. This means that the chef is a very potent first line supervisor and, as such, may reduce the necessity for those higher up in the management chain to intervene in kitchen activities.

The view of the chef as an authoritarian manager, however, has been pointed out by Haukedal & Larsen (1998) to be at odds with the way in which chefs, particularly head chefs, exercise their autonomy. Haukedal & Larsen found that the head chef is often acutely aware of the need to manage in a participative way rather than assume a command-control style of management. Even here, however, the head chef was really only concerned with autonomy in relation to his or her own situation; there was no apparent encouragement of self-management in staff or promotion of the appreciation of intrinsically motivating elements of subordinates' tasks.

Another point made by Haukedal & Larsen is that chefs can be described as 'knowledge workers'. Knowledge workers can be particularly difficult to assimilate into conventional management structures and systems for a number of reasons. Firstly, knowledge, unlike materials, production equipment and products, will always be the property of the employee rather than the employer. This tends to cause a shift in the balance of power in an organisation away from the employer and towards the employee. Secondly, knowledge work is particularly difficult to supervise effectively. It is not easy, particularly for those outside the kitchen, to supervise people whose expertise rather than work rate is a key part of their job. Stinchcombe (1986) noted a similar phenomenon in the construction industry where, for different reasons, skilled workers self-administer their work more than the stereotypical factory worker. The seasonal nature of the work makes it uneconomic for the industry to employ a separate administrative cadre. Finally, the autonomy which is necessary for knowledge workers to function may result in a reluctance to accept direct supervision. In fact, any threat to knowledge workers' autonomy may result in opposing behaviour which has been termed 'psychological reactance' (Brehm & Brehm 1981).

Service and service quality

Catering is a service industry. Put simply this means that although, for example, the food sold in a restaurant is a product, as is a car produced by a motor manufacturer, much of what the customer buys and values is not contained in that product. For example, people will pay for a drink in a public house in the knowledge that exactly the same product would cost far less if bought in a supermarket and consumed at home. The customer is paying for intangible elements of the service - the ambience of the establishment, music and company. A major characteristic of service industries is the point at which the service provider and the service consumer confront one another in the service arena - called "the moment of truth" by Norman (1984).

This 'moment of truth' is particularly visible in the catering industry. To take a simple example: most products delivered late in a manufacturing or retail situation would result in a reduction in customer satisfaction and, in some cases, a financial penalty. In catering operations, a meal delivered late may well result in non-payment by the customer as the whole service is adversely affected. This is because the precise timing of the delivery of the food is an important part of the product. Thus, although there are clear similarities between the perceived quality of the service product and of other products, there are key differences that arise from the complexity of the service activity and the way in which it is perceived by the customer. Shams & Hales (1989) explored the issue of goods versus services in hospitality further. They argue that the service 'product' exists along a continuum of varying degrees of goods (eg food), transformation of goods (eg cooking) and interpersonal activities (eg the behaviour of the waiter).

There has been a considerable amount of research (reviewed by Johns (1992)) into the marketing of the 'hospitality product', and particularly the quality elements of it. Jones (1983) has described the catering product itself as the "meal experience". Johns & Howard (1996) found in an investigation at 10 Swiss restaurants that, although food quality is the most important component in customers' perception of the meal experience, quality of service and the atmosphere of the restaurant are also very important.

The question that the authors wish to address in this paper is the extent to which the pursuit of service quality is compatible with good safety management. The following initial findings from field investigations begin to address this question.

The perception of safety versus service considerations: some results from a study of lecturer chefs

Ten lecturer chefs and one master baker from a leading hotel school were interviewed and asked about service, the pressure of service time and potential conflicts with safety behaviour in the kitchen. These individual interviews were part of a larger study – the method and full results of which are reported in Maguire & Howard (2001). Lecturer chefs were chosen for the study as the training environment is less complex than the commercial environment and there are fewer unknown and confounding factors operating in the workplace.

The findings reported in this paper, however, largely reflect the lecturer chefs' experiences prior to working in training organisations. They relate therefore to the industry in general rather than to the training environment.

The responses that the participants gave illustrated a number of themes:

- The pressure for service to a defined quality and 'on time'.
- The attitude of chefs and their line managers towards safety management.
- The contribution of the first two factors to an organisational safety climate.
- The ways in which the catering situation compares with the 'traditional' industrial situation.

The pressure for service

The increasing tempo of work in a kitchen, accompanied by increasing heat, noise and personal stress, were factors highlighted by the survey participants (Maguire & Howard 2001). One interviewee stated: "When service time starts in the restaurant ... the tempo can rise tenfold ... the heat ... can mean that tempers get frayed." Another participant said: "It's not just the burns and the cuts; it's a hot environment, it's a sweaty environment. Tempers get frayed, idiots do stupid things ... kitchen violence is another thing."

This pressure for service often seems to lead to an acceptance that safety standards will drop: " ... the risk factor rises ... you have to cut corners ..."; and "customers don't want to know they can't have something because the equipment isn't working ... gravity-feed slicers or some electrical equipment will be rendered dangerous and will be taped up until they can be dealt with at the weekend – it's about muddling [through] and making do."

The inevitability of outcome due to the pressure for service that is augmented by increasing customer expectations appeared pervasive in responses: "With a restaurant full of people, a brigade working flat out with reduced staff levels and increased public expectation in terms of preparation and skills, something has got to give ..."

It could be argued that the catering industry's pursuit of service quality has, in fact, led to an increase in its customers' demands, which has in turn increased the pressure for service quality.

The roles of chefs and others in safety management

The chef

The unique position of the chef as a first line manager in the organisation has significant implications for safety management.

One chef made his views on the autonomy and autocracy of the chef very clear: "A chef is the ultimate ruler of his kitchen - he has to be." The extent to which this 'rule' includes a responsibility for safety management seems to vary among chefs. Another chef obviously held himself responsible for the safety of kitchen staff (the 'brigade') and related this to personal pride in his work and common humanity rather than to the law or the policy of the organisation. It must be remembered, however, that the chefs interviewed were lecturer chefs and this attitude of responsibility towards the brigade may result from the fact that the brigade members in this case were students rather than employees. It may not apply to the industry as a whole. Other chefs reported the less positive attitudes of head chefs for whom they had worked: "X ... nice enough guy, but he'd walk round every morning [saying] 'All right, yeah?' ... shake your hand and ask if you were all right and the first thing you would say ... 'Well, to be honest my world's dropped apart' and the next thing he'd do was shake your hand [and say] 'Okay fine' and he'd walk to the next person; it was like he wasn't really listening."

This lack of concern is perhaps not uncommon in many industries but examples were also given of more specific disregard for employees' welfare. The master baker told of situations where a manager knew that a practice was dangerous but simply said: "Just get on with it." The baker explained that "they [managers] are compromised in the workplace when pressured by employers and ... have ultimately to decide on risk-taking".

Another chef described a situation where a chef made a kitchen employee complete a shift despite what he described as a "dreadful burn" from a hot oil spillage. The victim eventually had to wait with the injury for three hours before reaching an accident and emergency unit.

One interviewee, however, said that the chef should have a participative approach to safety management: "It needs to be brought down to a personal level to make them understand why rather than just say "This is what you've got to do: you do it!"; and making them understand how. ... Putting this into practice is quite difficult." Again, it should be emphasised that this is the statement of a lecturer rather than an industry chef.

Interestingly, when asked about their own role as 'safety managers', many of the chefs answered in terms of hygiene, cleaning schedules, electrical equipment maintenance and so on. Little attention was given to the less tangible aspects of safety management such as designating responsibility and setting safety priorities.

Other managers in the organisation

As far as the role of other managers working outside the kitchen is concerned, the autonomy of the chef appears to have been central to the participants' views. This is illustrated in the following response: "The food and beverage manager will have some influence with the head chef but very few of the others would - I was going to use the word 'dare' but I don't know if that's appropriate - but very few of the others would want to become involved because it is a complex environment; there are specific skills involved." This participant strongly refuted the suggestion that any (non-chef) manager could deputise for the head chef despite acceptance of the idea that the head chef could deputise for other managers, at least for short periods.

Another participant also commented on the lack of influence that other managers seem to have over kitchen activities: "Some managers feel inadequate in the area ... a lot of managers have avoided any kitchen experience, and that's not to say a manager has to have [such experience] ... but obviously it would be helpful ... [look at] the number of kitchens which have been badly designed and badly planned."

The detachment of senior managers from what goes on in the kitchen is not, it seems, due entirely to the attitude of senior managers themselves. As one participant put it when asked if chefs discourage interference from others: "I have to say it's not all management's fault. The chefs are as much to blame for obviously trying to deliberately exclude people from those areas - their domain as it were - and making sure noone's ever allowed past the hot plate." He also referred to the influence that the chef inevitably has over behaviour in the kitchen (in this case hygiene behaviour): "It's about leadership ... I've worked with some head chefs and their cleanliness is second to none ... the kitchen is spotless ... and another person is slovenly and you all follow his lead."

Safety climate

Pressure for service, just as pressure for production in manufacturing industries, is likely to be a major influence on safety climate. The autonomy and autocracy of the chef mean that the attitude of the chef to safety issues makes a major contribution to safety climate in the kitchen. The low level of influence exercised by other managers increases this effect. The participants in this study made a number of comments that are telling in this context.

The catering industry is largely nonunionised. The worker participation element of the Robens self-regulation model therefore tends to be limited as worker involvement has been promoted largely by the trade unions. One chef, who had experience of working in hospital kitchens, considered that safety issues were taken more seriously in the National Health Service through the involvement of trade union safety representatives. This is in accordance with Zohar's central finding that safety climate (ie employees' perceptions about the relative importance of safe conduct in their occupational behaviour) is strongly influenced by the extent of employee involvement, by management attitude to such involvement and by management attitude to safety generally (Zohar 1980). An example of managers tolerating the practice of overriding safety interlocks was typical of many that described an attitude prevalent in the industry.

Any discussion of management attitudes to kitchen safety must be set in the context of attitudes to kitchen staff generally. During the interviews, there was a stated perception that kitchen staff are sometimes not afforded the same consideration given to other groups of staff. One participant, by way of example, commented on the lack of intervention by senior management in a case where a head chef had intentionally burnt a member of the kitchen staff with a hot palette knife: "He burnt someone with a palette knife or branded him across the arm with a hot palette knife just for the fun of it – but it seems to be that as long as nobody else picks up on that and the food's okay, the rest of the organisation will ignore it. You know, in other words, it's the kitchen domain – let's leave them; they're a bit ... animal in [their] instincts."

It may, however, be argued that a contribution to a poor safety climate in the kitchen is a degree of complicity from the brigade itself. One chef reported witnessing a particularly bad kitchen accident in which a person received severe burns from head to toe "caused by slipping while carrying a large stock pot". The person did not return to work after the injury. In describing this incident the chef explained the attitude of the brigade in terms of: "We had to continue ... the show must go on." Parallels can be drawn with battle situations and theatrical performances (Maguire & Howard 2001).

In terms of safety climate, it is interesting to note that the attention of the food industry as a whole has been focused on food safety issues since the coming into force of the Food Safety (General Food Hygiene) Regulations 1985. Indeed, the HSE/Local Authorities Enforcement Liaison Committee (HELA) has recently expressed concern that enforcement resources have been diverted away from occupational safety and health to food safety activity (HELA 2000). If this is the case, then safety climate may have suffered as 'food safety climate' has improved.

Comparisons with manufacturing industry

The participants in the study made reference to perceived differences between safety management in the service industries, such as catering, and those in manufacturing or production line situations. As one chef put it: "In a factory, everything is screwed down and anything that cuts has a safety guard. You can't put a safety guard on a knife." The difference in terms of pressure for production between service and manufacturing industries was also commented on. One chef said: "A deadline in catering is immovable, unlike other industries."

The autonomy of the chef and the distance at which other managers are kept from kitchen activities were also contrasted with the factory situation by another participant: "The chef works very much on his own even if he's part of a team – very much an individual and is responsible an awful lot of the time for his own individual equipment, whereas I would imagine in a factory - obviously not being an expert – that managers are more responsible for the overall equipment." Although the emphasis here is on equipment, it is recognised that kitchens form a more distinctly separate part of a catering business than do other discrete sections in organisations generally.

Discussion and conclusions

The authors' interviews with lecturer chefs indicate that the concept of service quality is deeply embedded in the culture of catering kitchens, as it is in the hospitality industry generally. This pressure for service quality, especially the issue of service on time, appears to result in a threshold shift in risk tolerance (Maguire & Howard 2001).

The interviews revealed evidence of chefs as first line managers encouraging, on some occasions, unsafe behaviour to maintain service or 'production'. This is similar to the findings of Nichols & Armstrong (1973) in relation to manufacturing industries. In this case, however, there were suggestions of an apparent complicity of the kitchen brigade in this behaviour due, perhaps, to pride in the job, loyalty to the customer or simply team spirit, which required the group objective to be achieved despite the risks; a situation not unique to catering.

The supervisory role of the chef is pivotal to safety in the kitchen. The role of first line managers generally in self-regulation has been emphasised by Robens. The autonomy enjoyed by chefs, with little external influence from more senior management, makes their role in promoting a positive safety culture even more crucial.

Research by Nichols & Armstrong (1973) showed that senior managers were sometimes seen 'turning a blind eye' to unsafe behaviour which their normal management responsibilities would require them to control. The situation in the kitchen, it would appear, is a little different. Here, senior managers may occasionally 'turn a blind eye' but this occurs within a context of an already reduced management role in the kitchen due to the chef's own autonomy.

In terms of maintaining safety standards, there are lessons to be learned for safety advisers and for enforcement agencies. Firstly, the chef appears to be central to safety management and attempts to encourage positive safety behaviour must primarily be directed at this key role. Secondly, the kitchen culture and the pursuit of goals such as service quality are strong influences and must be borne in mind in any attempt to improve safety management.

The key finding of the study is, therefore, the effect that the pursuit of service quality may have on safety climate. The question arises as to how well safety considerations can compete with the demand for service quality in the perceptions of employees when service quality is uppermost in the mind of senior managers and the organisation as a whole.

It has been pointed out that good safety management is usually a key element of profitability for many types of firm (HSE

1997b), but it has been shown that service quality and safety in catering businesses are often seen to be in conflict. This is the case in many types of business, including manufacturing operations. However, whereas in manufacturing companies the factors that make good safety practice good business (ie the total costs of accidents from sick pay, equipment failure, first aid, investigation costs, prosecution and so on) are fairly evident, they may be less so in catering businesses. This is because most catering operations are of a relatively small size, many are of an ephemeral nature, and the nature of the industry itself is quite disparate. For these reasons, corporate consciousness of the true costs of accidents and ill health is slower to develop.

The phenomenon of a negative effect on safety climate resulting from pressure for service quality may be a factor within service industries as a whole. It might be that the intangible nature of some elements of service quality requires from the workforce a deeper culture of concurrence with the organisation's efforts to provide a quality service than is required from workers in traditional manufacturing industries in relation to the production of goods – where compliance with company rules is often sufficient. This culture of concurrence may be found difficult to override when it conflicts with safety considerations.

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