Health and Safety Management in UK and Spanish SMEs: A Comparative Study

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This paper reports on a survey carried out among United Kingdom (UK) and Spanish small and medium enterprises (SMEs) to establish their approach to health and safety management and determine views on participating in voluntary management accreditation schemes. The study revealed some key differences between the responding UK and Spanish SMEs. There was (a) an enhanced level of awareness of health and safety legislation; (b) a higher prevalence of safety and quality management systems, and (c) greater involvement of senior managers in managing health and safety in UK enterprises. Interest was expressed in a voluntary management accreditation scheme for health and safety by over half the UK and Spanish sample. Furthermore, those enterprises participating in a voluntary quality management accreditation scheme were more likely to be interested in a voluntary scheme for health and safety management. © 2000 National Safety Council and Elsevier Science Ltd.

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INTRODUCTION

The Framework Directive on the “introduction of measures to encourage improvements in the safety and health of workers at work” (European Council Directive No. 89/391/EEC) now provides the legislative baseline for managing health and safety in the European Union. Its introduction in 1989 was hailed as a major advance in occupational health and safety legislation and placed the emphasis on risk assessment and risk management as the backbone of workplace health and safety management (Neal & Wright, 1992). As a result, all European Union member states were required to introduce national legislation that implements the requirements of the Directive by the end of 1992. In the United Kingdom (UK), the Management of
Health and Safety at Work Regulations (1992) was introduced. In Spain, where health and safety recently became a political and economic priority, the Prevention of Risks at Work Act (PRWA) was introduced in 1995. Both the UK and Spain have basic enabling laws establishing general principles covering health and safety at work, as well as subsidiary legislation setting out more detailed requirements. A key difference that distinguishes Spain from the UK, in terms of the legal framework for health and safety, is the prominent role played by accident insurance companies in Spain (HSE, 1991). Reportable accidents in Spain are reported to the insurance associations, not the inspection authorities. Furthermore, in Spain the legal system allows for administrative (not criminal) fines for breaches of health and safety legislation. Despite variations in national legal systems, both countries are required to meet the requirements of the Framework Directive.

European business was thus faced with the challenges of implementing this legislation, following a proliferation in the late 1980s and onwards of accredited quality management systems (e.g., the ISO 9000 series). In some cases, the introduction of quality management systems has led to improvements in health and safety performance (Redman, Snape, & Wilkinson, 1995) and it is acknowledged in the UK and Spain that the principles of quality management apply equally to health and safety management (HSE, 1997; Blázquez Martín, 1997).

However, in the case of small and medium enterprises (employing fewer than 500 employees), such emphasis on formalized management systems has been met with criticisms. In particular, UK SMEs considered BS 5750 (British Standards Institution [BSI], 1987) “costly,” “bureaucratic,” “paperwork driven,” and “sales gimmick.” Small businesses in the UK who have achieved BS 5750 described themselves as unwilling converts having been forced down the route by their customers who operate on a “no BS 5750, no contract” basis. (Redman et al., 1995). Undoubtedly this discomfort with accreditation of quality systems lies in the fact that many small and medium enterprises (SMEs) operate under simple and relatively informal management systems (Storey & Westhead, 1994), and some traditional approaches to management do not benefit an organization concerned primarily with survival in a turbulent environment (Banfield, Jennings, & Beaver, 1996).

Moreno-Luzón (1993a) reports that Valencian small firms have developed quality management systems for a number of reasons. In addition to wanting to meet the requirements of customers, they sought to improve management systems, motivate managers and employees, and improve internal communications. Furthermore, there is some evidence to suggest that where small enterprises do implement elements of management systems, the enterprise performance has been enhanced (Ahire & Golhar, 1996; Lybaert, 1998; Moreno-Luzón 1993a,b).

The potential of SMEs in European economic growth has been recognized by the European Union and a number of supportive activities developed to improve the business environment for SMEs (European Commission, 1998). Projects aimed at facilitating improvements in environmental, health and safety, and quality management in SMEs have been developed.

Within the UK, supporting small firms in managing health and safety risk continues to be a priority for the UK Health and Safety Commission (HSC, 1998) and they have undertaken several supportive actions (Borley, 1997). A survey by the British Chambers of Commerce (1995) indicated that the majority of small firms regarded health and safety as important, but adopted a “common sense” approach to it. They also considered that regulations were too complex and time consuming and were reluctant to approach the UK Health and Safety Executive for fear it might stimulate a visit. Likewise, Spanish SMEs are also encouraged to participate in health and safety activities. The Prevention of Risks at Work Act provides for mechanisms to promote improvements in health and safety management, particularly in SMEs (European Agency for Safety and Health at Work, 1998).

Given that steps have been taken to encourage SMEs in both the UK and Spain to actively manage health and safety, it is interesting to examine how SMEs in these countries currently manage health and safety. Furthermore, since SMEs in both countries have experienced the use of voluntary certification schemes for quality management, it was considered appropriate to assess interest in a scheme for health and safety management that would enable SMEs to gain recognition for achievement in health and safety management. As indicated, both countries operate within the scope of the Framework Directive, although there are differences between their legal frameworks for dealing with health and safety.
METHODOLOGY

Questionnaire Development

Data were gathered through questionnaires distributed to SMEs in the UK and Spain. Since the questionnaire distributed to Spain differed only marginally from that distributed in the UK, this facilitated a comparable study.

Initially, semi-structured interviews were carried out among 10 SMEs in order to pilot a series of questions that would later form the basis of a postal questionnaire. Following these interviews, these questions were refined and a postal questionnaire developed, which comprised a mixture of multiple choice and open-ended questions. The questionnaire was divided into three sections that covered: (a) information about the enterprise (sector, age, number of employees); (b) approaches to health and safety management (number of hours per week spent on health and safety activities, personnel involved in health and safety, awareness of legislation, safety systems, and safety information); and (c) participation in voluntary management accreditation schemes.

The questionnaire items and response scales are shown in Table 1 for the UK questionnaire. A combination of open-ended and multiple-choice questions was used. In the case of items 2, 3, and 4 the scales shown in Table 1 were selected on the basis of the responses to these open-ended questions.

Sample

Target audiences were identified in Loughborough, in the East Midlands region of the UK; and in Valencia, in Southeast Spain. In both regions, SMEs dominate the economy, and the manufacturing sector is the dominant industrial sector. The SME population amounts to approximately 4,000 in Loughborough and to approximately 20,000 in Valencia. In the UK, 225 SMEs were selected at random from a regional industrial directory. An additional 400 SMEs were selected from a database of nationwide enterprises held at Loughborough University. Enterprises listed on this database were predominantly from the manufacturing sector. In Spain, 287 SMEs were selected from a database of enterprises of the Regional Government of Valencia. Questionnaires were addressed to the manager dealing with health and safety. In both countries, non-respondents were telephoned in an attempt to increase the response rate.

Analysis

Data from the questionnaire were coded and analyzed to identify frequency distributions of variables in the two samples (Table 1). Two-way χ²-tests were performed to test for association between “country” and several health and safety nominal variables (questionnaire items 5, 7, 8, 9, 10, and 11) in order to study potential differences in health and safety issues between the two countries. Associations between variables were deemed significant at the p < 0.05 level. Mann-Whitney tests were performed for comparing Spanish and UK samples on variables from questionnaire items 4 and 6. For these items, ordinal and relative variables were computed respectively to facilitate comparison between the two samples. Mann-Whitney instead of independent sample t-tests was chosen because variables were ordinal and/or parametric assumptions were not met (Siegel & Castellan, 1988).

RESULTS

Demographics

Seventy-one responses (11.4% response rate) were received from the UK survey and thirty-nine (13.9% response rate) from the Spanish survey. Although the overall response rate is low from both surveys, it is similar to response rates reported from other postal surveys distributed to SMEs (Storey, 1994). It is considered that both groups of respondents were positively biased (i.e., those enterprises who had interests in health and safety management were more likely to respond to the survey than those that were not interested in health and safety management). The distribution of the respondents among various industrial sectors (Figure 1) reflects that of the two regions (i.e., predominantly manufacturing). Although other industrial sectors are represented among the respondents, the analysis was undertaken on a national basis on the two samples of responding SMEs, since the survey items on health and safety management were not deemed sector specific.

For both countries, more than half of the companies was established in the period from 1946 to 1985. Spanish companies had, as an average, more employees than UK companies and this
### Table 1. Questionnaire Items and Response Scales

<table>
<thead>
<tr>
<th>Item</th>
<th>Response scales</th>
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<tbody>
<tr>
<td>1. What is the nature of the business?</td>
<td>• Agriculture • Engineering • Timber, joinery, &amp; furniture • Rubber &amp; plastics • Business services • Miscellaneous manufacturing • Miscellaneous services • Chemicals • Food, drink, &amp; tobacco • Printing, publishing, &amp; paper • Construction • Hotels &amp; catering • Apparel &amp; textiles • Transport &amp; communications • Other</td>
</tr>
<tr>
<td>3. How many employees does the enterprise have?</td>
<td>10–25 26–50 51–100 101–200 201–300 &gt; 300</td>
</tr>
<tr>
<td>4. How many hours per week do you spend on health and safety matters?</td>
<td>&lt;1 1–2 3–5 6–10 11–20 &gt;21</td>
</tr>
<tr>
<td>5. Who else is involved in managing health and safety?</td>
<td>Senior management Health and safety committee External consultants</td>
</tr>
<tr>
<td>6. What health and safety legislation are you aware of?</td>
<td>• Health and Safety at Work Act • Offices, Shops, &amp; Railways Premises Act • Factories Act • Electricity at Work Regulations • Control of Substances Hazardous to Health Regulations • Management of Health &amp; Safety at Work Regulations • Display Screen Equipment Regulations • Workplace Regulations • Provision &amp; Use of Work Equipment Regulations • Manual Handling Regulations • Personal Protective Equipment Regulations • First Aid Regulations • Other</td>
</tr>
<tr>
<td>7. What safety systems does the enterprise have in place for managing health and safety?</td>
<td>• Written safety policy (WSP) • Risk assessment (RA) • Accident/incident reporting system (ARS) • Written Safe Working Procedures (WSWP) • Incentive schemes (IS) • Safety audit system (SAS) • Training programmes (TP) • Health surveillance (HS) • Permit to Work (PW) • Other (OTH)</td>
</tr>
<tr>
<td>8. How do you update yourself on health and safety issues?</td>
<td>Trade associations Health and safety journals Regulatory body Head office Other</td>
</tr>
<tr>
<td>9. Does the enterprise work to any quality standards?</td>
<td>Yes/No</td>
</tr>
<tr>
<td>10. What is the reason for working to quality standards?</td>
<td>Required by customers Competitors were participating Thought it was a good idea</td>
</tr>
<tr>
<td>11. Would you be interested in participating in a health and safety voluntary scheme as a means for achieving improvements in health and safety in the enterprise?</td>
<td>Yes/No</td>
</tr>
</tbody>
</table>
was significant. The distribution of the responding enterprises by size (number of employees) is shown in Figure 2.

**Health and Safety Management**

This section sought information on how health and safety was managed in the organization. Respondents were asked to indicate the number of hours they spent per week on health and safety matters. On average, between 3 and 5 hours per week were spent in this way. There were not any statistically significant differences between the two countries in this respect.

Respondents were also asked about the involvement of senior management, safety committee, and external consultants in managing health and safety issues. Respondents from 48.7% of the Spanish enterprises reported that their senior management was involved in managing health and safety issues whereas senior management was involved in health and safety management in 76.8% of the UK enterprises. These results showed a statistically significant association between country and senior management involvement ($p < 0.01$). There were no statistically significant differences between the two countries with respect to the involvement of safety committees and external consultants in managing health and safety issues. External consultants were involved in managing health and safety issues in 38.5% of Spanish enterprises and in 33.9% of UK enterprises.

Respondents in both countries were asked to indicate whether they were aware of a range of relevant legislation (national and European). This variable is difficult to compare across countries due to national variations in legislation. As a result, a relative variable was computed to provide an indication of the proportion of health and safety legislation that the respondent was aware of. Results showed a statistically significant association between country and awareness of legislation. UK respondents were more aware of...
legislation (awareness of on average 71.5% of the legislation) than Spanish respondents (an average of 35.1% of the legislation).

Respondents were asked to indicate which health and safety management system elements the enterprise used from a list of nine listed in item 7 of the questionnaire (Table 1). These ranged from basic elements (e.g., written safety policy statement) to elements associated with more advanced approaches to health and safety management (e.g., incentive schemes). Figure 3 shows the number (percentage of sample) of enterprises using these health and safety management system elements. UK companies employed systematically more safety systems than Spanish companies. The following differences between the two countries were significant ($p < 0.01$):

- 90% of UK enterprises had a written health and safety policy statement (WSP) compared with 64.1% of Spanish enterprises;
- 80% of UK enterprises used risk assessment (RA) as compared with only 51.3% of Spanish enterprises; and
- 88.6% of UK enterprises used an accident/incident reporting system (ARS) compared with only 46.2% of Spanish enterprises.

Although not statistically significant, the proportion of UK enterprises using a particular safety system were always higher than the proportion of Spanish enterprises.

Respondents from UK enterprises updated themselves on health and safety issues mainly through health and safety articles in professional and popular journals (62%), via the UK Health and Safety Executive (49.3%), and trade associations (39.4%). In Spain, the main sources of health and safety information were insurance companies (71.8%), health and safety press (69.2%), and trade associations (33.3%). The Valencian Gabinete de Seguridad e Higiene en el Trabajo (equivalent to the UK Health and Safety Executive) was used as a source of information by 28.2% of the companies.

### Quality Standards/Voluntary Schemes

Finally, the survey sought to establish respondents’ views on voluntary management accreditation schemes. The following statistically significant results were obtained. Working to quality standards was more common among UK enterprises than Spanish enterprises with 66.7% of UK enterprises working to quality standards, compared with 35.9% of Spanish enterprises ($p < 0.01$). The main reason given by 87% of respondents from UK enterprises for working to quality standards was “customer pressure” ($p < 0.01$). In the Spanish sample only 35.7% of respondents gave this as a reason. The main reason given by 78.6% of respondents from Spanish enterprises was “advantageous to the enterprise,” compared with 34.8% of the respondents from UK enterprises who cited this reason ($p < 0.01$).

A voluntary participation scheme was described to respondents using examples from other domains (e.g., quality and environment), and respondents were asked to indicate whether they would be interested in a voluntary participation scheme for health and safety as a means for achieving improvements in health and safety within the enterprise. Respondents from 55.1%
of UK enterprises were interested in such a scheme compared with 66.7% of Spanish respondents. A significant association was found between the two variables “interest in participating in a health and safety voluntary scheme” and “participation in a quality scheme” for the combined sample and for the UK sample, but not for the Spanish sample (Table 2).

**DISCUSSION**

The survey results indicated that respondents from both samples spent between three and five hours per week on health and safety management matters, indicating that in most cases the enterprises did not employ a full-time health and safety professional and that health and safety management was only part of the respondent’s job. While there were no statistical differences between the two samples, with respect to use of safety committees and external consultants, a significant difference found was the extensive involvement of senior managers in managing health and safety in UK enterprises compared to Spain. The importance of senior management involvement in managing health and safety has been shown to be a key factor in organizations achieving excellence in health and safety performance (HSE, 1997) and is acknowledged as a key influence in achieving a positive safety culture (Zohar, 1980; Coyle, Sleeman, & Adams, 1995). Some explanation for the differences between the two samples, with respect to senior management involvement, may be that health and safety management is more developed in the UK and has only recently become a priority in Spain.
Safety awareness among all employees in an enterprise is important in improving the enterprise’s health and safety performance. In particular, safety awareness of managers and senior managers is key, since their decisions can influence safety critical actions (ACSNI, 1993). The survey sought to measure safety awareness by asking whether respondents were aware of a range of relevant health and safety regulations. Results indicated that the level of awareness was approximately twice as great among the UK sample. This was a surprise given that the survey coincided with approval of new health and safety legislation and associated publicity campaigns. Although respondents may not have been fully conversant with the details of the legislation, an awareness was expected. Again, this may be the result of a more developed health and safety culture in the UK. Even among small enterprises, previous studies (British Chambers of Commerce, 1995) indicate a high level of awareness of health and safety law.

The use of health and safety management systems was more extensive in the UK sample than the Spanish sample, which might be expected given the earlier comments regarding the development of health and safety management. From a UK perspective, it is interesting to note that in excess of 80% of responding enterprises had in place: (a) a written safety policy (WSP); (b) risk assessment (RA); and (c) accident reporting (ARS). (See Figure 3). As Tait and Walker (1998) point out, a simple but adequate health and safety management system can be based upon the introduction and effective use of a health and safety policy and risk assessment. The accident reporting systems offers a vehicle for monitoring performance of such a system.

Several sources of health and safety information are available in both the UK and Spain. In the UK, the main information sources used by respondents were the UK Health and Safety Executive, the safety press, and trade associations. In Spain, the latter two sources were used, but the majority of Spanish respondents used insurance companies. The Spanish Social Security Act permits insurance companies to raise or lower premiums based on the enterprise’s compliance with legislation and the effectiveness of its risk reduction practices (European Agency for Safety and Health, 1998). The regulatory body (Valencian Gabinete de Seguridad e Higiene en el Trabajo) was used by only 29% of Spanish respondents compared with nearly half of the UK respondents. As previously mentioned, offering advice and assistance to small enterprises is a key priority for the UK Health and Safety Executive. Previous research (British Chambers of Commerce, 1995) has highlighted the reluctance of small enterprises to approach the Health and Safety Executive because of fear that it might stimulate a visit. The results obtained here would seem to indicate a more positive view. Although the sample size in this study is small and might not be representative of the total SME population in the UK, perhaps these results are an indication that things are changing for the better.

The higher prevalence of UK SMEs working to quality standards is largely a result of the external pressure created by the “no BS 5750, no contract” culture highlighted earlier (Redman et al., 1995). While less Spanish SMEs worked to quality standards, where they did, the overriding motivation had been because they “thought it was a good idea.” Earlier findings of Moreno-Luzón (1993a) found that Valencian small firms saw participation in quality management systems as an opportunity to make a number of business improvements.

The significant association between “interest in participating in a health and safety voluntary scheme” and “participation in a quality scheme” suggests that those enterprises participating in a quality scheme are more likely to be interested in a health and safety scheme. Despite some of the difficulties that may have been encountered with quality standards, some SMEs may have an enhanced appreciation of the benefits of a total quality approach to operational management issues. In the Spanish sample the association is weaker as both enterprises with and without quality standards are interested in the health and safety scheme. Since the implementation of health and safety management has become a key issue for Spanish enterprises, they may be willing to consider a range of options (e.g., schemes that might facilitate learning and compliance).

CONCLUSION

From this study the following points can be made. SMEs in the UK and Spain spend very little time on health safety per week. Key differences between the UK and Spanish samples are that there is an enhanced level of awareness of health and safety legislation, a higher prevalence of safety and quality management systems, and a
greater involvement of senior managers in managing health and safety in UK enterprises. All of these factors are acknowledged as important in improving health and safety performance (HSE, 1997). Over half the UK and Spanish sample expressed interest in a voluntary scheme for health and safety. However, in this study, the sample sizes are small and are biased toward the manufacturing sector, therefore, further work is required to test the concept further among a wider audience and to identify possible options for such a scheme.

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