

THE ROLE, FUNCTION AND RESPONSIBILITIES OF THE SAFETY PRACTITIONER
IN THE UNITED KINGDOM

VOL. I

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Master of Philosophy

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SUMMARY

This study reports an investigation into the role, function and responsibilities of the U.K. safety practitioner, from the perspective of the role incumbent. Its objective is to increase understanding of safety practitioner role, thereby assisting in the professionalization of the occupation.

The thesis is divided into two volumes. Volume I presents an analysis and review of the occupation of safety practitioner at national and local levels, although the two levels are interactive and separation is difficult. The first part of the main text offers an analysis of safety practitioner role, using quantitative research methodology: it proved impossible to establish the role of the safety practitioner.

The research methodology was revised in order to generate qualitative data. It was then found possible to identify key common core components of SP role: as an adviser, a provider and processor of information, acting as a change agent, a problem solver and as a gatekeeper to various health and safety specialists.

Variations in safety practitioner role, content and performance were found to be due largely as a consequence of the control exercised by employers and managers over the activities of safety practitioners and occupational health and safety in the undertaking.

Volume II includes survey data and three appendices particularly important as strategies for the future professionalization of the occupation.

Key words:

Safety practitioner
role
manager
control
occupational health and safety

For
Virgie and Andrew

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' ... there is an important role for the specialist safety adviser or safety officer ... We received a lot of evidence about safety officers, much of it to the effect that they are undervalued ... '

Robens Report (1972a)

CHAPTER 1 GENERAL INTRODUCTION

1.1 Introduction

This chapter presents an introduction to the study and a summary of the background, need and reasons for the research. Included in this chapter is a working definition of the occupational group who formed the focus for this study, the 'Safety Practitioner' (SP). The scope and limitations of the research are outlined and the final section contains a description of the layout of the thesis.

The focus of this work is the role, function and responsibilities of the SP in the United Kingdom. The interpretative understanding of the SP's role, function and responsibilities has been that supplied by the SP. Thus the research used a modified 'social action' approach, after Weber (1949). The modification of Weber's framework was to take account of those factors over which the SP was found to have little direct control (as opposed to interpretation), such as legislation and, particularly in the large foreign multi-national corporations, general company policy.

However, as the research and preliminary analysis progressed, it became increasingly clear that there was a strong force emerging which had not merely an important influence on the role, functions and responsibility of the SP - but a crucial influence. (Henceforth the term 'role' will be considered to include the functions and responsibilities of the SP, unless specifically noted.) That force emanated from the employer and, more particularly, their agent, the manager. Therefore while the focus of the work remained the same, the area of research widened significantly. Those aspects of managerial influence which had a direct (and sometimes less direct) influence on the role, functions and responsibilities of the SP were investigated, recorded and reported (cf Section 1.5).

Nevertheless, the principal boundary constraining the scope of research concerned the subject of the study. Only those with a prescribed and direct functional responsibility for occupational safety and health were considered to fulfil the criterion and thereby be termed an 'SP'. Henceforth, unless specifically and otherwise stated, the term 'occupational health and safety' will be referred to as 'OHS'. A short discussion on the criterion and working definition of the term SP is provided in section 1.4.3.

The basic reason for all research projects is to provide answers to real or perceived problems or, at the very least, increase understanding (cf Good & Scates, 1972; Selltitz et al., 1965). In 1979 a perceived problem was a lack of knowledge concerning the role of the United Kingdom SP. This lack of knowledge created problems within the Department of Safety and Hygiene at the University of Aston in Birmingham (henceforth the 'Department') and for others associated with the training, development and work of SPs.

A detailed discussion of the research design and methodology is found in chapters 2 and 3, but a review of some of the salient points is considered useful. The review will assist in locating the work and procedures involved as a preliminary to the main discussion. The prime source of data was to be mailed questionnaires; although for reasons provided in chapters 2 and 3 the prime function of the data derived from mail questionnaires was reduced as the project progressed. The derived data were subjected

to descriptive statistical analysis, largely through the use of non-parametric statistics (cf Siegel, 1956).

Analyses were undertaken using a BBC 'B' Micro-Computer, which unlike the mainframe computers and the SPSS8 (later SPSS9) programmes are 'user friendly', providing tools for the social scientist, rather than obstacles to be overcome. (The report was written on an Amstrad PCW8256 and in 1987, a PCW8512.)

Sources included the academic and the non-academic, the printed word, personal correspondence and relevant abstracts from personal conversations, subject only to ethical and confidentiality considerations.

Academic and scholarly work is invariably written in expectation of receiving critical evaluation, usually from the readership of scientific journals, serials and textbooks. Articles published in the 'popular press' are usually for information, explanation and even entertainment - less subject to or designed for critical evaluation. It was considered that the advantages derived from the use of this variety of source material outweighed the disadvantages.

1.2 Background to the research

Many of those who entered the Department for education and training were either practising safety personnel or those who proposed to enter the occupation of SP after obtaining their qualifications. The variety of courses ranged from Certificate to M.Sc. levels. Research was conducted for a variety of purposes, from providing a service to government or industry, to pure research projects originated within the Department.

Within the Department, a major problem soon became apparent, especially to those who had responsibility for designing course syllabuses. There was little knowledge concerning the role of the SP, either in the U.K. or any other country. If it proved difficult to define role, function and responsibilities, then it became extremely difficult to define course content and/or course requirements on anything other than professional judgement.

The problem was exacerbated by the fact that reference to those sources from whom it would have been reasonable to have expected some clarification or assistance showed that they were equally unclear or uncertain of the role, function and responsibilities of the U.K. SP. Legislators, employers, managers, professional bodies, the Factory Inspectorate, training centres and institutions - all were performing their respective functions on the basis of imperfect knowledge and understanding.

The range of countries which possess legislative requirements for industry wide employment range from the advanced, such as the Netherlands 1984 Health and Safety Legislation, to those normally considered 'less' advanced, i.e. Philippines 1978 Occupational Safety and Health Standards. The U.K. does not possess OHS legislation which contains industry wide employment of SPs. Where there was limited U.K. legislation it would have been reasonable to assume that included in the legislation would have been details of standard training of SPs. However, the evidence is to the contrary (cf Section 7.4).

There are limited legislative requirements within certain U.K. industries for the employment of safety personnel. Typical of this legislation is that found within the Construction Regulations (General Provisions) 1961. However, although the regulations state that a person for safety be appointed, in this case on construction sites with more than 20 employees, no reference is made to the degree or quality of training for that person.

It is interesting to note that the term 'competent person' is used in the Construction Regulations, but the interpretation sections of both the Health and Safety at Work Act, 1974 (HASAWA) and other regulations, the seminal sources, provide no definition of that term. The test of *competence* is to be provided through the courts, instead of prescribing qualifications or courses as a pre- or post condition to appointment (cf Section 7.4.4).

The Health and Safety Commission (HSC) and its Executive, (The Inspectorate arm of the HSC) also were unclear on the role of the SP. In 1976 they published the findings from a very restricted sample survey (n = 26) of SPs. One of the main conclusions was

that it proved impossible to define adequately the role of the U.K. SP.

The HSE (1976) study exhibits all the features of a good (or bad) example of objective blindness. The prime stated objective of the HSE study - to establish the functions and responsibilities of the U.K. SP - was not achieved. Nevertheless, the text was full of value judgements of the 'more' and 'less successful' SPs. Recommendations were made which were not supported by the 'findings'. Unfortunately, since the work came from the HSE, it could be used as a reference work on which to base decisions affecting the occupational group of SP by those who had little or no idea of the role of the SP.

SPs are frequently employed in industry and it may have been reasonable to assume that employers, either singly or collectively (through their various associations), may have established some base qualifications or functional responsibilities applying to the occupation as a whole.

In fact, it was found that there was no general measure of agreement amongst employers even as to what constituted the core role of the U.K. SP. During an interview with me in May 1980, the OHS director of the Confederation of British Industry (CBI) declared;

'Each employer decides for themselves, taking account of the company's requirements, exactly what a safety officer's role should be - if it should be decided that one is necessary.'

Despite considerable pressure, the person interviewed declined to specify what minimum qualifications should apply to those appointed.

1.3 Limitations of the study

Early in the research, there was the problem of identifying the members of the occupational group forming the focus of the study. How could they be termed? The titles 'Safety Adviser', 'Safety Officer' and 'Safety Engineer' were amongst those considered.

It was found that the question of which title was most appropriate was extremely important. Those suggested engendered tremendous feelings amongst many potential and actual respondents. These ranged from an absolute refusal to become involved with any survey questionnaire that used the job-title 'Safety Officer', through murmurings of disapproval by some at the title of 'Safety Practitioner', to the extreme of complete indifference. These points receive further consideration during the course of the study, but a resolution that satisfied all concerned was impossible (cf Section 4.3). Therefore, the final choice, that of 'Safety Practitioner' or 'SP' was actually the one that created the least objections (cf Section 1.4).

The questions relating to the contacting of all members of the occupational group and the total numbers of SPs in the U.K. proved virtually impossible to resolve (cf Section 7.3.13). Indeed they were never resolved to my satisfaction (cf Section 3.3). The best that was achieved was a necessary compromise, the best possible solution (cf Section 3.3.2).

Two professional associations co-operated fully in the research and their membership formed the sampling frame for the research and survey questionnaire (cf Sections 2.4, 2.5, 2.6, 2.7 and 3.3). They were the Institute of Municipal Safety Officers (IMSO) and the Institution of Industrial Safety Officers (IISO) (cf Section 6.4). These two bodies 'came together' (Hooper, 1981) in 1981, a revealing term, indicative of concern over sovereignty. Their new title in unity is the Institution of Occupational Safety and Health (IOSH).

However, it has never been possible to obtain an accurate figure for the total number of those employed as 'Safety Practitioners'. This problem is not restricted to those of definition. The problem has principally arisen because as an occupational group they are isolated, poorly organised, have variable time allocated to safety and no consistent job-title (cf Chapters 4, 5 and 7). These factors presented insurmountable problems of identifying channels of communication.

A further limitation is associated with the use of a multi-disciplinary approach (compounded by those factors just

identified). Different disciplines within the social sciences have different standpoints in looking at the same problem or concept (MacKenzie, 1966). The concept of 'role' is a good example (cf Section 1.4.4).

Theories which adopt radically different perspectives have to be reduced to a common framework in order to be compared and for conclusions to be drawn. In attempting to do so a number of questions may be raised about the more general aspects of the theory. Such digressions are kept to a minimum in this work, but their existence must result in some unevenness of style of presentation.

1.4 Working definitions: Occupation, safety practitioner and role.

1.4.1 Introduction

It was necessary to wait until this stage of the introduction to provide a definition of the term 'Safety Practitioner' (SP) (Section 1.4.3). This was to allow for many of the factors underpinning such a definition to be identified and discussed; a definition which is used throughout this study. However, before defining SP, it is useful to discuss the term 'occupation' (Section 1.4.2). In doing so, many features found to be important when considering the role of the SP are identified and discussed. This reference to 'role' indicates an outline of the concept is necessary and a discussion is provided in Section 1.4.4.

1.4.2 Occupation

Meggison describes an occupation to be;

' ... the overall activity in which we engage, which is usually the principal productive activity of our life. It includes the nature of the activities being performed, their level in the organization, the importance of the results, and the skills, abilities, knowledge, education and training necessary to perform them.'

Meggison (1981)

The definition by Megginson is useful, but he fails to refer to two important elements. The first is monetary rewards, the second is social rewards.

There have been many studies which have shown that persons do not work solely for monetary gain (e.g. Morse and Weiss, 1955; Herzberg, 1968; Parker, 1971) even though the salary remains important (Goldthorpe et al., 1968). The same cited authorities also placed considerable emphasis on the social rewards gained from the work environment. It is shown in this study that even so, SPs still obtain immense satisfaction from interacting with their fellow SPs (cf Ch. 5).

The importance of these factors was noted by Hall (1975), who defined an occupation as;

'... the social role performed by adult members of society that directly or indirectly yields social and financial consequences and that constitutes a major focus in the life of an adult.'

Hall (1975)

However, neither Megginson nor Hall have taken account of the common core task elements which enable those who carry them out and those who appoint them to identify the parameters of an occupation or an occupational group. In the case of an SP, as has been shown, it is this component which has proved illusive for previous researchers (cf Ch.s 5 and 7). Torrington and Chapman (1979) have rectified this omission and their definition of an occupation is;

'All jobs which have a sufficient similarity of their major tasks and requirements to enable them to be grouped together for the purpose of a generalised job description.'

Torrington and Chapman (1979)

Through combining the principal points from the three authoritative and different definitions of an occupation, it is possible to derive a definition of an SP for the purpose of this study. An SP is;

'An individual whose work activity may be restricted to the field of OHS. They may or may not be employed within an organization. They have core similarity of tasks and role requirements, for which they require or demand specialist education and training. Their activities are not restricted within an organization. They receive for their services either a salary or a fee. In addition, their work activity offers them a considerable degree of social interaction despite the fact that they are frequently isolated, in occupational terms, within an organization.'

The above definition forms a reference point for much of the discussion throughout this study. Of particular relevance at this stage of the discussion is the reference to the 'core similarity of tasks and role requirements'. It is a theme that is further elaborated throughout the study. The following section provides the final working definition is this important trilogy, the concept of role.

It is not possible to offer an in-depth analysis of the concept of role, the literature is far too extensive. However, it is essential to list the major elements within the concept of role which have particular relevance to this study.

Stephenson in Tajfel and Fraser (1978) offers a useful review of authoritative perspectives of role in the chapter *Organizational roles and individual performance*. Drawing from Stephenson's review, for the purpose of this discussion the essential elements of role are;

1. 'Role' is the required behaviour of someone in a given position (Linton, 1945)
2. 'Role performance' refers to the actual behaviour of the incumbent (Linton, 1945)

3. Role embraces far more than the prescribed duties and reciprocal rights attached to positions (Goffman, 1969)
4. Role refers to the commonly shared expectations about what is appropriate conduct for those in given positions. It cannot be rigorously defined and the manner of its performance even less so, since persons can select and emphasise certain aspects, (Hargreaves, 1972)

According to Secord and Backman (1974) and Stephenson (1978), problems can arise;

- (i) when expectations are not clearly defined or the individual does not have a clear idea of what is required,
- (ii) when an individual lacks the skills required for performance of role,
- (iii) the anticipated behaviour of the role incumbent is not fulfilled (in the eyes of others) (Mead, 1934),
- (iv) the anticipated behaviour of others to the role incumbent is not fulfilled (in the eyes of the role incumbent) (Mead, 1934)

Anticipating future discussion, the inferential evidence provided in this study confirms that all the items identified in (i) to (iv) above, in combination of various kinds, can apply to IOSH respondents. However, they are not necessarily within the SPs control or responsibility (cf Ch.s 4, 5, 6 and 7).

1.5 A key point of reference

There were two factors which controlled the layout of the study. The first was the emphasis of the research and report on the SP respondent's individual and collective self-perception of role, function and responsibilities, with comparisons and references to other source material and reports. The second was an increasing emphasis on the key importance of the employer and manager's influence on the role, performance of function and responsibilities of the SP, at both local and national levels.

The research established what SPs stated they were doing, and included reference to authoritative sources and data from original studies conducted for this work. The report identifies certain core key disciplines and common activities found in SP role, function and responsibilities (cf Ch.'s 7 and 8). However, it is not the purpose of the study to suggest what SPs should be doing, *except by reference to the SP respondents' own assessment*, therefore very little (if any) criticism of SP activity is offered.

In contrast, while the role of the employer and manager is also identified by reference to authoritative sources and data from original studies conducted for this work, discussion on the role of managers and employers includes considerable critical evaluation. This is because the manager and employer has ultimate responsibility for OHS in the workplace and more significantly, *selects and appoints SPs, then defines and controls the role of the SP in the workplace* (through exercising the final decision on which advice to accept or reject) and influences decision taking on the occupation of SP nationally, DESPITE (as is shown in this study) many employers and managers having little knowledge or understanding of OHS (cf Chapters 4, 5 and 6).

This factor is of key importance and requires further explanation - it not only influenced the direction of the research, but also the layout and content of the report.

A lack of knowledge and understanding of OHS causes no problems to employers and managers because they were found to be usually totally unaware of the full depth of their inadequacy in this area - or the possible consequences of this deficiency. In short, it is not only that managers and employers have little knowledge or understanding of OHS that matters, *it is the implications for the SP and the future of the occupation* from the finding that managers and employers are largely *unaware* of their deficiency that are crucially important.

The problems arising from this finding extend to those who conduct research, provide discussion documents, legislate and propound a philosophy of OHS based upon what was found to be an understandable but now shown to be a largely mistaken premise - the premise that

employers and managers have an understanding of OHS. If it is taken as a given that employers and managers possess sufficient knowledge and understanding of OHS for them to select, appoint and in many cases (at least in outline) define the role of the SP, as well as constrain the activities of the SP, through employers and management holding ultimate responsibility for OHS in the workplace, then any discussion on the role of the SP will be inadequate (cf Section 6.3).

IOSH respondents were found to be unanimous in their view that it is perfectly right and proper that employers and managers who hold the ultimate responsibility for the success - or failure - of the enterprise should hold ultimate responsibility for every activity, including OHS, within the organization. However, many respondents were concerned that managers and employers were largely unaware of their inadequate knowledge or understanding of OHS, but still insisted on holding ultimate responsibility for something about which they knew little. As one IOSH respondent succinctly stated, 'Managers are ignorant of their ignorance, it's that that makes our job so bloody difficult and their job so damn easy' (cf Hale, 1987; Booth, 1981; HSE, 1976b).

These factors demanded further research. The changing tone and thrust of the report as it progressed reflects the growing realisation of the key importance of the factor that employers and management, who were largely unaware of their lack of knowledge and understanding of OHS, nevertheless exercise a key influence on the selection, appointment, role and performance of the OHS specialist most commonly found in the workplace, the SP - and through employers' professional associations, on the future of the occupation (House of Lords Report, 1983; CBI, 1980; Robens, 1972a, 1972b)).

The study is presented in two volumes. Volume One includes the main text, prefaced by the summary and index and concluded by the bibliography. Volume Two presents the Appendices.

Following this chapter, Chapter 2 presents a discussion on the research methodologies used in the study. Chapter 3 continues the description of the research methodologies used in this study, and explains why the research changed direction and the project became a *trend* longitudinal study, using 'different respondents (from the same population) studied at different moments in time' (Bailey, 1978), over the period 1979-1987 (cf Bogdan and Taylor, 1975).

Chapters 4 and 5 describe the role of the SP in the workplace and elsewhere at the local level. Chapter 4 draws upon the data derived from the IOSH survey questionnaire; Chapter 5 uses information derived from the extensive informal and formal research conducted for this study as well as other source material for comparison, analysis and discussion. Included in chapter 5 is the discussion on five participant observation studies conducted for this work.

Chapter 6 discusses the occupation and role of the SP largely from a national perspective. It includes a review of the history and development of the occupation, suggesting that Social Security legislation, not only Factory and OHS legislation, played an important part in the development process. The chapter includes a case study which effectively illustrates the points made earlier and provides inferential support for the findings presented in Chapters 4 and 5.

Chapter 7 considers strategies for the future of the occupation. Every attempt is made to separate in the discussion activities and processes at the national from the local level. However, as explained in Section 7.2, the activity at national level has an influence on the activities of the SP at local level and vice versa, any divisions are largely artificial.

The major section in Chapter 7 uses a framework provided by Atherley and Hale's (1975) seminal work, *Prerequisites for a profession in occupational safety and hygiene*. The discussion in Section 7.3 cites extensively from their paper and develops strategies for the future of the occupation of SP using the findings from research conducted for this study. Included in the chapter are recommendations for further research into aspects of SP role and occupation, identified from the findings of this study, seldom or never previously considered in earlier research (cf Section 7.5).

Chapter 8 presents the main findings of the study and includes recommendations concerning OHS, the occupation and the role of the SP and that of the manager. It is suggested that if the recommendations are carried out, the SP would be recognised as an essential gatekeeper to the members of the team working to improve the standards of OHS in the U.K.

Volume two contains ten appendices, of which three present strategies important for the future for the occupation. These are presented as topics for debate and discussion, and are considered important for the SP, the professional associations and OHS.

Appendix A and C are copies of the two major questionnaires conducted for this study - the Institution of Occupational Safety and Health (IOSH) and Aston/Works Management survey questionnaires (cf Ch.'s 2 and 3). Appendices B and D offer a complete frequency count of the response data (cf Ch.'s 4 and 5).

The development of the IOSH examination system and syllabus is described in Appendix E, followed by a copy of the National Examinations Board in Occupational Safety and Health (NEBOSH) syllabus, on which is based the examination for candidates for IOSH membership.

Appendix F is a detailed description of two new roles for the IOSH member and other suitable SPs. These are suggestions for a Chartered Member of IOSH who would have very limited inspection (without enforcement) functions and the formation and staffing of Group Safety Practices, together with proposals for funding, with a special concern for small businesses - a source of many of the reported accidents and frequently lacking easy access to specialist OHS advice and support.

If the proposals in Appendix F were adopted, there should be a significant improvement in standards of OHS in small businesses and elsewhere. A further benefit from adoption of the proposals would be assistance to the various government and local government Inspectorates for them to be able to concentrate on the prime aspects of their valuable role, which no other group could ever carry out or replace - high level specialist advice, interpretation and enforcement.

Appendix G identifies an important component of professional associations - a professional affairs committee - and is considered as an essential prerequisite for professionalization of the occupation of SP. The detailed discussion describes how a professional affairs committee could be established and operate in IOSH. The role of this committee would be to reinforce high standards of ethics, including taking action where necessary.

Appendix H identifies new areas of business for NEBOSH and IOSH. The detailed discussion has not been overtaken by the formation and operation of the Open College (cf Booth and Sherwood, 1987). An important component of the proposals is the formation of a research department within IOSH or NEBOSH, a subject that receives further discussion in Ch.'s 6, 7 and 8.

Appendix I displays a report on the views of the IMSO membership to the (then) proposed 'coming together' with IOSH (cf Ch. 2). Appendix I acts as a bridge to Appendix J, which is concerned with participatory action research.

There were several participatory action research projects conducted during this study, a process which is recommended as a strategy for the future in the professionalization of the SP.

Indeed, the final Appendix offers a practical example demonstrating how research can assist in achieving two inter-related objectives: an improvement in standards of OHS and the professionalization of the occupation of SP.

* * * * *

'In all the varied activities of science ... it is research that lies at the nerve-centre. Without research - the continuous disciplined advance from the known to the unknown - these other activities would either lose their meaning or become stale, sterile and eventually corrupted.'

Ravetz (1973)

CHAPTER 2 RESEARCH METHODOLOGY : THE MAIN SURVEY QUESTIONNAIRES

2.1 Introduction

This chapter is the first of a two part description of the research methodology used in this study. This chapter deals with the formal, structured methodology originally intended to be the only research method; Chapter 3 discusses the wide range of informal, less structured methodology eventually used.

There were three major mailed survey questionnaires utilised. Two of the surveys were distributed to safety practitioners (SPs); members of the Institute of Municipal Safety Officers (IMSO) and the Institution of Occupational Safety and Health (IOSH) (cf Sections 2.4, 2.5, 2.6 and 2.7). The remaining survey was distributed to members of management, with the cooperation of the staff of the magazine *Works Management* (cf Section 2.8; Wyles, 1982).

The discussion commences with a description of the IOSH pre-pilot and pilot surveys. This is followed by a description of the design of the IOSH survey questionnaire. It concludes with a discussion of the background and design of the Aston/Works Management survey questionnaire design.

2.2 The pre-pilot survey

After completing the initial literature search and consulting various authorities in OHS, a pre-pilot survey questionnaire was constructed. The purpose of the pre-pilot survey questionnaire was to identify the most appropriate questions and their design. Of particular interest was the level of acceptability by the SP respondents.

The sampling method was a form of purposive sampling. The sampling frame was composed of SPs known to members of staff in the Department and located in the Birmingham area. This personal contact achieved maximum cooperation and a 100% response. The survey questionnaires were followed up with a series of one-hour scheduled interviews. During these interviews points were clarified and any design problems identified.

The survey questionnaire presented 30 questions to 20 respondents. 14 were employed in the industrial category 'engineering and allied trades', 4 in 'chemical and allied products' and the remainder in general manufacturing. No copy of the pre-pilot (or pilot) survey questionnaire now exists (cf Ch. 3). Following initial analysis, each respondent was contacted by telephone and a follow-up interview scheduled. The one hour interview was in two parts.

The pre-pilot questionnaire was first discussed, question by question. Respondents were asked what they thought the question asked (after it was read out to them) and this answer was checked against their response on the questionnaire. Discrepancies showed that some questions were obviously ambiguous, since responses on the occasions differed. If respondents thought that the question was unsatisfactory (for any reason) this was also noted. After completing the review of the questions, the exercise was repeated in far greater depth. During the second stage each respondent was

provided with a photocopy of their completed questionnaire to act as a reference point and framework for the discussion.

Respondents were visited in their offices or place of employment to obtain further information. The type and style of office accommodation was noted, details were obtained of support staff - both indicators of status and the respondent's position in the organization. It was found SPs employed in the 'modern' high-tech industries (i.e., chemical and allied products) generally occupied well-lit spacious offices; SPs employed by smaller companies in the traditional industries (i.e., foundries), employing approximately 500 or less workers, frequently occupied smaller, less comfortable accommodation.

There was considerable reaction to the job-title originally chosen for the survey; 'Survey of Safety Advisers, function and responsibilities'. 18 of 20 respondents strongly objected to the use of the term 'Safety Adviser'. Each suggested a different job-title - usually their own. The two who did not object were described as 'Safety Adviser' in their own undertaking. The reference to job-title was changed to 'Safety Practitioner' (SP) - a title which received general acceptance and has been used throughout the study (cf Section 1.4 and 6.2.3).

This group of respondents could not be considered to be representative of the occupational group as a whole. Earlier studies had indicated that few SPs had formal and OHS qualifications (Shipp et al., 1965a; Insaf, 1973d; Harper, 1980). Three of the pre-pilot held MScs, eight first degrees in various subjects - all had been students on various courses in the Department. They were therefore articulate and extremely useful for obtaining quality feedback and critical evaluation of the survey instrument. However, these apparent advantages led to problems later (cf Ch.s 4 and 5; especially Section 4.6.8 and 5.7).

2.3 The pilot survey

When the analysis of the pre-pilot survey information survey was sufficiently advanced, a pilot survey questionnaire with a covering letter and SAE was designed and sent out.

Initial sample size was 100 with 50 of the proposed respondents to be drawn from the files held by staff members. The remainder were to be selected, using a simple random sample from names and addresses of listed companies in the publication 'Kompass'. Kompass was chosen for convenience and as one way of reaching non-affiliated SPs.

Selection of names and addresses was done by dividing the number of pages in the appropriate section of Kompass by 50. This meant that a company with more than 500 employees was selected from every fourth page. This size by number was chosen by reference to the literature, wherein undertakings with 500 employees and above were 'recommended' to employ SPs (e.g., Arscott and Armstrong, 1976; NIJICC, 1955).

The questionnaire contained 36 questions, 30 of which were coded and the remainder open ended. In addition, at the bottom of each page, space was provided headed 'Comments invited'. No copies of the pilot questionnaire exist (cf Ch. 3). The response rate was 47%, of which 44% was usable. Despite the use of Kompass, three were returned blank, two were returned by the Post Office marked 'not known', one returned blank but with a letter stating the business was being wound up.

However, only 2% of the usable responses came from the Kompass sample. It was evident that a major problem in utilising such a source was an inability to establish whether the company employed an SP. This response rate indicated that an extensive distribution of mailed survey questionnaires through Kompass would not prove practical or viable.

This attempt to reach unaffiliated SP proved abortive, and no further attempts were made to contact these members of the occupational group through mailed questionnaires.

The free response section of the pilot questionnaire proved most useful. Comments received led to significant changes being made in question design. One question that received very heavy criticism was the request for details of the SP respondents tasks and duties actually carried out over a weekly average. The majority of the respondents declared that it was impossible to quantify and supply this kind of information. This ran counter to the opinion of those involved in the pre-pilot. The conclusion was that only those who were very interested in their role (or in research) would be sufficiently motivated to respond to questions that demanded more than a simple 'yes/no' or similar type of answer (cf Chaabane, 1985). Reluctantly the question was dropped from consideration.

2.4 The IMSO Survey Questionnaire

A report of the research had to be prepared for the Department mid-1980. This report was published in the *Safety Surveyor* (August 1980), following which the PRO of IMSO contacted the department. The IMSO Executive wished to learn the reaction of their membership to a proposed merger with 'another professional association' and thought the (IOSH) SP research project could provide the necessary information (cf Appendix I). They offered to distribute and pay for the IMSO component.

Using the already tested pilot survey questionnaire as a basis, the IMSO main survey questionnaire was printed and distributed by IMSO in the middle of January, 1981. Question alterations were directly related to the merger and to suit local government and IMSO respondent requirements. For example, strictly speaking, 'industrial category' did not apply (cf QA1 IOSH survey questionnaire) and other changes were made to suit local government terminology (cf Table 2 [31]).

Sampling of the IMSO membership was conducted by IMSO staff through the reported use of random sampling, with each member of the claimed 600 plus IMSO members having an equal chance of selection. If properly conducted it would have ensured valid, reliable sampling (cf Section 3.3). 250 questionnaires were distributed direct from the IMSO office. Each questionnaire was

accompanied by a letter from the IMSO Executive, inviting the cooperation of the member.

The response rate was 56.8% (n = 141). No follow-up letters were used, partly because once the questionnaires were distributed, no further record was kept of those involved and in any case, approximately 30% were returned anonymously. The distribution of IMSO respondents by 'type' of employer has been recorded (cf Table 2 (1)).

TABLE 2 (1) IMSO RESPONDENTS BY INDUSTRIAL LOCATION

Industrial location	Number	Percentage
District councils	40	28.4
Borough councils	31	22.1
Metropolitan	22	15.6
County councils	19	13.5
Public utilities	11	7.8
Higher education	6	4.2
Health services	3	2.1
Transport communications	3	2.1
Armed forces	2	1.4
Miscellaneous	4	2.8
Totals	141	100

Prior to the IMSO response being subsumed within the combined IOSH survey data, the 'industrial locations' displayed in Table 2.1 were recast. The first four shown were recast into one - local government. Public utilities, to follow the then Department of Industry Classification, became 'electricity gas and water'. Aside from transport and communications, the remainder were placed in a miscellaneous category (cf Appendices B 1 and I; Table 2 (3)).

The sampling frame for the IOSH survey was the IOSH membership. The survey questionnaire is shown in Appendix A and its design is discussed in Section 2.7. Membership of IOSH in April 1981 was claimed by the IOSH Headquarters to be 3,500. 4,000 copies of the questionnaire and pre-paid return addressed envelopes were prepared. Accompanying each questionnaire was an appropriately worded introductory letter, acting as its front page. Distribution of questionnaires was through inclusion with copies of the IOSH magazine, then 'Protection'.

The response rate was 21.1% (737), of which 730 were usable. Follow-up letters could not be sent owing to the confidentiality of the distribution and completed questionnaires. Table 2 (2) displays the response rate.

TABLE 2(2) RESPONSE RATE OF RETURNED IOSH SURVEY QUESTIONNAIRES (From April 1981)

Week after despatch	Number	Cumulative percent
1	193	5.5
2	414	17.3
3	71	19.4
4	39	20.5
5	20	21.1
Totals	737	21.1

Discussions with members of the IMSO and IOSH Executives had indicated that they felt a merger or coming together was almost inevitable. Access to this privileged information led to the design of the same questionnaire, subject only to those minor differences already noted (which did not alter the response data), to be distributed to members of both professional SP associations.

The initial response to the IMSO survey was 132. Analysis of responses concerning the IMSO sample views on the concept of a merger was undertaken. Using this response (n = 132) as the core, a confidential report was prepared and distributed to members of the IMSO Executive. The report is presented in Appendix I. Salient points from the report include the finding that 68.9% of IMSO respondents approved the idea of a merger. 62.2% proposed in a write-in response that the merger should be with IOSH, with the next highest percentage, 4.4%, suggesting that the merger should be with the Environmental Health Officer's Association.

Over the period of preparation, distribution and analysis of the IMSO survey questionnaire, IISO changed its name to IOSH. In 1980 IISO held their Annual General Meeting (AGM), during which the change of name was agreed, with effect from January 1981 (Holt, 1984). During the discussion at the AGM, it was stated by members of IISO Executive that there were two principal reasons for the need to change its name. The first was to prepare the way for the merger - it was felt that a new name would create less resistance amongst the membership of IISO and IMSO to the merger. Second, it was suggested that the proposed name (Institution of Occupational Safety and Health) would represent a far wider term of reference and provide a wider catchment area for potential members.

In 1981 it was announced by the Executives of IOSH and IMSO that the organizations would merge by the end of that year. This provided further justification for combining the survey data.

However, this proposal created a problem which had to be resolved. It had been found that 17 of the IMSO respondents had claimed joint membership of both IMSO and IOSH. Of these 11 had provided their names and addresses. They were contacted by telephone. It was found that none of the 11 had completed the IOSH survey questionnaire despatched in April 1981. The six respondents who could not be contacted only represented 0.7% of the combined response. It was decided that even if all 6 had completed both survey questionnaires, the result would not have been significantly affected.

The combining of the IMSO and IOSH data led to a large influx of local government respondents into the sample. Eventually the responses to the IMSO survey totalled 141 and the 112 of those who were employed in local government were added to the 111 from the IOSH response (cf Appendix I; Table 2 [1]). This combination meant that local government responses were 25.6% of the IOSH total. For comparison, the Waterhouse et al. (1984) IOSH survey recorded 16.3% of their sample were employed in local government.

The problems arising from the apparent imbalance in the sample (871) possibly would have been serious if the response was representative of SPs - since it was restricted to members of IOSH this was not the case. The question then was, to what extent was the response representative of IOSH members?

It is later shown that the circumstances surrounding the IMSO and IOSH surveys render the answer to that question somewhat confused. The final decision, following careful consideration of the facts, was to proceed with the combining of the two surveys. Henceforth the combined IMSO and IOSH surveys, unless specifically identified, are termed the IOSH Survey Questionnaire.

2.7 IOSH Survey questionnaire design

2.7.1 Introduction

This section considers the design and particularly the intent of the IOSH questionnaire. This is followed by a frequency count of the response data, to provide a framework for the ensuing discussion.

The purpose of the IOSH questionnaire was to obtain information about the role, function and responsibilities of the SP, *from the perspective of the SP*. This emphasis is important, for it was soon discovered during the analysis of the IOSH survey questionnaire data that the respondents who formed the test groups for the pre-pilot and pilot surveys were *not* representative of the occupational group.

This is quite common with many survey questionnaires, where the unknown only becomes 'known' as a consequence of a survey and analysis. All that can be done is for the social scientist to take every precaution to ensure the design and distribution of the survey questionnaires is as rigorous as possible. This was done in the case of the three main survey questionnaires for this study.

2.7.2 The design of the questionnaire

The questions in the IOSH survey questionnaire were divided into three sections;

- A. Organizational details
- B. Personal details
- C. Responsibilities, accountabilities and activities

Section A presented 18 questions, identifying such items as 'number of employees' and 'main industrial category'. Section B contained 17 questions, including those concerned with 'age', education, etc. Section C comprised 11 basic questions, the majority subdivided, to discover the activities and degree of involvement of the respondent in the SP role. Included throughout the questionnaire were questions which collectively were designed to uncover respondents' perspective of the future of the role of SP and of the occupational group.

However, the headings were not merely indications of content. Using sections gave the respondent the impression of a short survey. For example, a glance at the last section showed the final question to be number 11. In fact, the final section comprised 56 questions and the total number in the questionnaire was actually 124.

In addition, the subject headings were designed to 'precondition' potential respondents into associating each section with a particular subject area and to provide a cognitive map (Triandis, 1972). In fact, the divisions were largely artificial and there were many links between the subject areas.

A feature of the IOSH questionnaire was the inclusion of apparently almost nonsensically open-ended questions and spaces allowing respondents to offer comments concerning the questionnaire and its contents. Both proved of value, with the free comments suggesting many areas worthy of investigation. Just as important, respondents felt 'involved' and encouraged to continue.

An example of a question which was open-ended was B 30 'other qualifications' (all cited question numbers refer to those recorded in Appendix B). This question was included because the pilot surveys had shown that SPs with few or no qualifications were *extremely* sensitive about this fact, while being very proud of their 'vast experience as a safety officer, which is far more important than mere paper qualifications' (SP correspondent, actual comment). The question allowed those who actually possessed no formal qualifications to record some form of self-perceived qualification.

It was hypothesised that there would be a great variety of responses to B 30. In fact there were over 200 different 'qualifications' entered in response to the question. They ranged from a male respondent who recorded that he was a State Registered Nurse, to another respondent who recorded in this category a music diploma.

A further example of the value of including this type of question was in the case of B 45. The question asked respondents to record their membership of 'other' SP 'professional' associations. The definition was left to each respondent.

Many respondents entered 'RoSPA', an organization that does not demand qualifications from SPs or provide or possess an SP membership grade structure. On checking with respondents why they considered RoSPA to be a professional SP association, the SPs stated that they considered membership of RoSPA Health and Safety Groups to be equivalent to IOSH Branch Membership (cf Ch. 6).

This demonstrated how the intention of the question (any question) may be clear to the compiler, but have a totally different meaning to respondents. It was impossible to quantify numbers or contact respondents who misread or misinterpreted any of the questions.

In a significant number of cases it was not possible to predict the demand and need for immediate clarification and information for respondents who had misinterpreted the questions. In many cases these misunderstandings were uncovered during follow-up telephone calls made to clarify a respondent's free response comments during the checking of returned questionnaires. A chance remark or reaction by the respondent led to recognition by the researcher that a significant misunderstanding had occurred or a possibly important area of research overlooked.

Of course, it would have been possible and far easier to follow the usual pattern of research studies, quantify certain areas of doubt and simply offer them as areas deserving further research. However, this tradition was considered to be unsatisfactory for several reasons.

The immediacy and tremendous value lay in the opportunity to follow them up within the original sample. If this had not been done, probably the consequences would be similar to the more usual rather bland social science research and reporting (Shipman, 1972).

First, much of the relevance would be lost. Second, subsequent research would be likely to provide conflicting evidence, not due to differences in technique, values and methodology, but primarily the consequence of sampling differences. Third, an important purpose of this study was to assist the occupational group to increase understanding and knowledge about *itself*. For these reasons the research moved into new areas, using various methodologies; unfortunately inevitably this made the reporting of the research considerably more difficult.

As this supplementary research progressed, the emphasis and importance of the IOSH survey questionnaire shifted quite considerably. Originally the IOSH survey questionnaire was designed to be the prime, possibly the only source of derived data for this study. It soon became apparent that although the importance and relevance of the data from the IOSH survey questionnaire did not lessen, other sources of data became increasingly more important.

There is no contradiction in that statement. A difference between this and many other studies was that once the data from the prime survey had been collected and initial analysis completed, that was used as the framework within which to launch an essential search for answers to important questions.

In other studies the reasons for failing to follow-up are many and, in some cases, perfectly valid. They include a lack of resources, or on some occasions, a lack or lessening of interest in the research - once it is completed, the desire may be to write-up, obtain the qualification and move on. This was *not* the case with this study. Indeed, the follow-up research continued until late September 1987, the date when final corrections were made to the work prior to submission. Furthermore, one of the major follow-up research projects could have been a study and survey in its own right, the Aston/Works Management (A/WM) survey questionnaire (cf Section 2.8).

2.7.3 Main characteristics of the IOSH survey response

Discussion in this section identifies the main characteristics of the IOSH respondent. There were 871 usable responses to the IOSH survey. Respondents were grouped into 17 industrial categories, including 'miscellaneous' (see Table 2 (3) and Appendix B1).

The CBI and many other authorities often claim that employment of SPs must be associated with the demands or requirements of individual employers (Robens, 1972b; TUC, 1980; CBI, 1980). Therefore the industrial location of the IOSH respondent not only identifies the industry in which they work, it also indicates those industries where employers consider there is a 'need' for SPs (cf Section 5.2). The industrial categories were chosen by reference to the Department of Trade and Industry classification of industry.

TABLE 2 (3) EMPLOYMENT OF RESPONDENTS BY INDUSTRIAL CATEGORY

Industrial Category	Frequency	Percent
Agriculture	-	-
Chemical and Oil Products	101	11.6
Construction	102	11.7
Distributive Trades	4	0.5
Electricity, Gas & Water	76	8.7
Engineering, Allied Trades	114	13.1
Food, Drink & Tobacco	38	4.4
Insurance, Banking & Financial Services	13	1.5
Local Government	223	25.6
Metal Manufacturing	18	2.1
Mining & Quarrying	15	1.7
Printing	21	2.4
Textiles, Leather & Clothing	6	0.7
Transport & Communications	31	3.6
Miscellaneous	98	11.3
Missing	11	1.3

The overall pattern of local government respondents may have been unrepresentative of the membership of IOSH. It was not possible to establish from HQ records the location of members by industry for either IOSH or IMSO. This was because IOSH HQ in 1981 held only the application for membership, on which was entered the normal minimum details, including the place and type (by job title) of employment. Each application form and any subsequent correspondence, were kept in folders stored in filing cabinets. IOSH now maintains computerised records.

A further factor considered to be of importance in the recognition of 'need' for SPs is the number of employees in an organization. Table 2 (4) shows the frequency count of IOSH respondents by number of employees. The grouping was chosen by reference to the Census of Production (1976) 'Distribution of Manufacturing Enterprises by Employment Size'. An enterprise means one or more establishments under common ownership or control.

TABLE 2 (4) NUMBER OF EMPLOYEES IN RESPONDENTS' EMPLOYING ORGANIZATION

Number of employees	Number of respondents	Percentage
Under 500	103	11.8
500 - 999	137	15.7
1000 - 1,999	104	11.9
2,000 - 4,999	127	14.7
5,000 - 9,999	117	13.4
10,000 or over	271	31.1
Missing	12	1.4

Various sources suggest that the greater the number of employees, the greater is the need for an SP, with 500 frequently identified as the number above which the appointment of an SP should be seriously considered (TUC, 1980; Arscott & Armstrong, 1976; Robens, 1972b). The figures shown in Table 2 (4) refer to the total number of employees in respondents' employing organization, and *not* the number of employees for which the SP assumes Occupational Health and Safety (OHS) responsibility.

In addition, the total number of employees in an organization has no relationship with degree of danger or hazard (in the chemical and oil industries, quite the contrary). Table 2 (4) establishes size of company, by number of employees, against employment of SP. By reference to the Census of Production figures, it is found that 31.1% of IOSH respondents were employed in 0.16 of UK enterprises with under 500 employees. Therefore, since 98.4% of UK enterprises in 1976 employed under 500 employees, this finding offers further confirmation that there are many enterprises who may not have access to qualified safety support (cf 5.4.3; Bangs, 1985; Wyles, 1982; Census of Production, 1976).

Another factor influencing the manner in which an SP role is defined is the number of employees for which they have direct responsibility (cf Table 2 [5]). The greater the number, the more pressure there is on the SP (cf Harper, 1980).

TABLE 2 (5) NUMBER OF EMPLOYEES IN RESPONDENTS' AREA OF OHS RESPONSIBILITY

Number of Employees	Number	Percentage
Under 200	71	8.2
200 - 499	152	17.5
500 - 999	192	22.0
1,000 - 1,999	167	19.2
2,000 - 4,999	110	12.6
5,000 - 9,999	85	9.8
10,000 or over	83	9.5
Missing	11	1.3

Another factor which influences an SP's performance is the level (and number) of formal and OHS training (and qualifications).

Many of the studies concerned with the SP role have emphasised what they claim to be the 'low' standard of educational qualifications of members of the occupational group, although none were found which compared SPs educational qualifications with those of other occupational groups (cf Insaf, 1973; HSE, 1976a; Harper, 1980; Waring, 1980).

Section 5.5.2 includes a comparison of SP educational qualifications with those of management.

Table 2 (6) shows the number of formal and OHS qualifications recorded by respondents to the IOSH survey. An extensive breakdown is provided in Appendix B, Tables B 22 - B 30. (Further discussion on respondent's qualifications is provided in Sections 4.3.2, 5.5.2, 5.5.3, 7.3.7, 7.3.9).

TABLE 2 (6) RESPONDENTS' FORMAL EDUCATIONAL QUALIFICATIONS

Formal qualifications	Frequency	Percentages
GCE 'O' levels	485	55.7
GCE 'A' levels	235	27
City & Guilds	214	24.6
ONC/OND	192	22.0
HNC/HND	179	20.6
'Other' diplomas & certificates (respondent specified)	191	21.9
Degrees	118	13.5
Higher Degrees	23	2.6
'Other' qualifications (respondent specified)	130	14.9

Responses showed that respondents were overwhelmingly male (cf Table 2 [7]). In comparison, 68% of employees in the SIC of 'professional and scientific services' were female at the commencement of this study (DEG, Feb. 1980).

TABLE 2 (7) RECORDED SEX OF RESPONDENTS

Sex	Number	Percentage
Male	855	98.2
Female	9	1.0
Missing	7	0.8

The age of IOSH respondents (cf Table 2 [8]) has particular importance when considering the way in which SPs see their future career development, the future of the occupational group and their view of the relevance in obtaining further qualifications. Many studies have offered adverse comment on the 'high age of the members in the occupational group (of SPs)', invariably without making any comparisons with other occupational groups (cf Insaf, 1973; Harper, 1980).

TABLE 2 (8) GROUPED AGE OF IOSH RESPONDENTS

Grouped age	Number	Percentage
Under 25	6	0.7
25 - 30	51	5.9
31 - 40	220	25.3
41 - 50	285	32.7
51 - 60	258	29.6
61 or over	47	5.4
Missing	4	0.4

The only outstanding features are number of years in full time employment (Table 2 [9]), number of years with present employer (Table 2 [10]) and number of years the respondent has spent as an SP (Table 2 [11]). Recognition of these factors will make it possible to establish a profile of the IOSH member as a framework for further discussion.

TABLE 2 (9) RESPONDENTS' NUMBER OF YEARS OF FULL TIME WORK EXPERIENCE

Number of years	Number	Percent
One - Five	40	4.5
Six - Ten	68	7.7
Eleven - Fifteen	59	6.7
Sixteen - Twenty	100	11.4
Out of range	591	69.4
Missing	13	1.5

TABLE 2 (10) RESPONDENTS' NUMBER OF YEARS WITH PRESENT EMPLOYER

Number of years	Number	Percent
One	50	5.7
Two	86	9.9
Three	81	9.3
Four	56	6.4
Five	64	7.3
Six	65	7.5
Seven	49	5.6
Eight	34	3.9
Nine	20	2.3
Ten	32	3.7
Eleven - Fifteen	95	11.0
Sixteen - Twenty	74	8.5
Out of range	591	16.6
Missing	20	2.3

TABLE 2 (11) RESPONDENTS' NUMBER OF YEARS IN PRESENT POST

Number of years	Number	Percent
One	80	9.2
Two	118	13.5
Three	150	17.2
Four	88	10.1
Five	101	11.6
Six	85	9.8
Seven	72	8.3
Eight - Ten	71	8.1
Eleven - Twenty	77	8.6
Out of range	9	1.0
Missing	20	2.3

2.7.4

Conclusion: profile of the IOSH member

From data described in this section, it is possible to establish the profile of the 'average' IOSH member. This shows that the average IOSH member in 1981 was male, 45.6 years old, with few (if any) formal educational qualifications, has been at work for 27.3 years, with 7.7 years experience as an SP, 7.2 years with his present employer but 4 years in his present post. What appears to be a contradiction between 'years experience as an SP', 'years with present employer' and 'years in present post' was found (during the informal research period) to be due to promotion or change of job description and title during respondents tenure (further research is required).

2.8

The Aston/Works Management survey questionnaire

2.8.1

Introduction

Background information on the Aston/Works Management (A/WM) Survey questionnaire is provided in this section. A reconstructed copy of the questionnaire is provided in Appendix C and the response data in Appendix D. The description is included in this section because it formed a significant component of the survey. Further references are made to the A/WM survey throughout the study.

2.8.2

The reasons for the survey

In connection with the role of the SP there were two areas which demanded investigation. The first was the need to establish the number, or possible number, of those who were members of the occupational group. The second was to establish management's 'attitude' towards and knowledge of OHS, since this in turn would influence the role of the SP. These reasons provided the impetus for the Aston/Works Management Survey.

During the initial stages of the research for this study, several attempts were made to contact those who were not affiliated to any professional body. These attempts met with little success.

The other SP research cited in this study generally avoided entering these areas of investigation. A substantial discussion on research projects into the SP, together with a typology, is presented in Section 5.3.

There was one survey of SPs which had limited success in obtaining data from non-affiliated SPs, although that was not the prime purpose of the research. That was the Insaf Survey (1973). The Insaf Survey was restricted to readers of the Industrial Safety magazine (a *readership-based* survey (cf Section 5.3). 33% of the Insaf survey respondents were not members of IOSH/IISO, but the Insaf published discussion did not list other association membership. Therefore the respondents may have been members of some other professional SP association.

The total number of SPs in the U.K. remained an unknown. Any opportunity to obtain information of SPs' number would prove useful and an advance on the current situation.

A further area of importance for the SP was the role and 'attitude' of management in OHS (using 'attitude' in the common usage of the term). The role of management in OHS and in relation to the selection, appointment and role of SPs is largely dependent on the attitude of management and employers. However, the attitude of management towards OHS always has been the subject of some discussion, speculation and controversy (cf Sections 1.5, 5.4, 5.9 and 6.3).

The official presumption and one expressed by management and their associations is that generally management are 'concerned' about OHS. Unfortunately the limited evidence suggests that this 'concern' is often expressed by management who are poorly trained in OHS and therefore had little real knowledge of the subject (Robens, 1972a : 1972b; HSE, 1976b; Bridden, 1981). It was evident that speculation could be reduced, if not removed, by a research study designed to investigate the 'attitude' of management towards OHS.

In fact, there has been little *empirical* research which has been conducted into the attitude of employers or managers towards OHS. The majority of studies which have been conducted appear to take it

as a 'given' that managers are not merely concerned about OHS, but that they and the employers are capable of utilising the services of the SP or any of the various occupational groups who specialise in particular areas of OHS. They may criticise the lack of OHS knowledge of management, or comment on the difficulties for SPs in operating within organizations - but all generally accept the premise that management and employers 'care' and 'know' about OHS (cf Atherley 1987, 1975; Dawson et al., 1984; Beaumont et al., 1982; Kletz, 1979; HSE, 1976, 1976b, 1980).

On the other hand, there has been a substantial amount of comment into the attitude of managers and employers towards OHS, supported once again by limited empirical research evidence. Those who dislike this argument declare it to be frequently emotive, and associate it (justly or unjustly) with a particular political perspective (invariably described in derogatory terms as extreme left wing). The work of Kinnersley (1973), Nicholson (1975), and Grayson (1981) typifies. In summary, the followers of this school consider the worker to be always exploited, the employer and manager always the exploiter, and SPs are dismissed as 'tools of management' (Grayson, 1981).

The consequence is that holders of the two extreme views fail to communicate. The first is far too simplistic, the latter is far too conflict laden. There are authorities who evaluate SPs and management without emotion or political motivation, but few were found (e.g. Shipp et al. 1965a; Booth, 1981, 1979; Hale 1987, 1985, 1983, 1976).

An opportunity to investigate true situation and obtain information about the probable number of SPs employed in the U.K. came through the good offices of Allan St. John Holt (President of IOSH in 1983/1984). He wrote a regular column for the magazine, *Works Management* and suggested to the editor that it could be useful if a survey was conducted into OHS. Following a meeting, the editor agreed to print and distribute a survey amongst their readership. Originally the survey questionnaire was to be printed and included in the magazine. Eventually it was printed and distributed separately to a 500 random sample of the readership.

Discussions with the editor commenced in May 1981, the survey was printed and distributed, together with a reply paid envelope (addressed to the Department), in December of that year. The editor declared that the sample of 500 potential respondents had been selected at random by the computer from the readership list of *Works Management*.

137 completed responses were received. Follow-up letters increased the number of usable responses, from 27.4% to a total of 41.6% (208) (cf Appendices 'C' & 'D').

2.8.3 A/WM questionnaire design

Similar to the IOSH survey questionnaire, the A/WM survey questionnaire was designed to establish 'intent' rather than to provide definitive answers. In doing so it was recognised that many more questions would be raised than answers provided.

A major problem was that the editor of *Works Management* had very fixed ideas concerning the design (and intention) of the questionnaire. It rapidly became evident that in reality, all he wished to obtain was evidence confirming that observing OHS legislation 'cost money', and was virtually unnecessary in today's world. The result was an uneasy compromise.

2.9 The IMSO, IOSH and A/WM samples

The background to each of the three surveys noted above have formed a discussion apparently describing a normal progression through standard research methodology. A research methodology which was designed to ensure the collection of valid and accurate data from a representative sample of potential respondents. In fact, it was later learnt, sometimes by accident, that the sample selection, distribution or collection was anything but representative.

The selection of the 250 sample from the membership list of IMSO was actually the process of choosing every 9th name from the list, but with the addition of names 'of those known to be interested'

(IMSO executive member, in confidence). Thus, without intent, the sample was biased and unrepresentative of the IMSO population. Nevertheless, the responses were useful as a framework for further research.

Some time after the IOSH survey questionnaire had been distributed with the April 1981 issue of *Protection*, ostensibly only to members of IOSH, a disturbing fact emerged. I learnt from an ex-employee of the printers (who remembered the IOSH survey) that the staff at the printers had been careless with their work. As a consequence, some questionnaires had been included with copies of *Protection* forwarded to non-IOSH members. The number involved was not ascertained, but it is possible that the survey response and data may have been adversely affected and unrepresentative of the IOSH population.

The Aston/Works Management sample was to have been derived through random selection, by use of a computer, from the whole subscription readership of the magazine. Some two years after the A/WM survey had been completed, during a conversation with a staff editorial member, I was informed that the sample selection had not been random. The editor of *Works Management* had been particularly interested to obtain the reaction or response from the industrial category 'engineering or allied trades'. As a consequence, selection was biased towards that category, with 45.2% of the respondents from engineering and allied trades. This meant that the recorded response data were not representative of the readership of *Works Management* magazine.

2.10 Conclusion

The not unexpected difficulties in obtaining a 'representative SP sample' had been further compounded by the factors described in Section 2.9.

The derived data from the IOSH survey were still extremely valuable and the response data sufficiently valid and accurate to satisfy many purposes. However, over the period of research it was found that there was literally a flood of more interesting, confusing and

important leads that demanded further research. It was essential to obtain accurate and valid data from other sources, which would complement, expand and substantially add to the response data from the IOSH survey. The Aston/Works Management survey data further identified the need for further research, using many different methods of research.

As a consequence, it was decided to use the derived data from the IMSO, IOSH and Aston/Works Management survey questionnaires as a framework or background to the main discussion.

A discussion that would use data and information derived from all sources and utilise a wide range of research methods. The contribution of the research and study increased due to the use of these methods, rather than solely depending on valid but inadequate data subjected to unnecessarily sophisticated modes of analysis.

* * * * *

'The conditioning produced by years of concentrated and narrow research has the effect of making it more difficult for the leaders of science to see the work of themselves and their colleagues in its broader context, both within science and in relation to the outside world.'

Ravetz (1973)

CHAPTER 3 NATURALISTIC INQUIRY - THE PRIME RESEARCH METHOD

3.1 Introduction

A suitable general description of the research methodology used overall in this study would be 'naturalistic inquiry' (Mason, 1976). When research is designed and conducted within one school of theory, one consequence is that inferences and conclusions are often inevitable, almost predetermined by reference to the body of theory used. Conflict theorists see largely conflict, with movement towards consensus considered pathological; functionalists see movements towards homeostasis, with conflict being pathological.

The prime advantage, seen for this study, of naturalistic inquiry is that it;

' ... can be summed up as a deliberate attempt to incorporate the people we are seeking to understand into the whole research process, through the ongoing inferences drawn from the data.'

Mason (1976)

It was a fact that the members of the occupational group of SPs not only formed the focus for this study, the source of information and data, but in many cases they either directly or indirectly as signposts for the avenues and course of the investigation. The extent which the researcher became involved or identified with the occupational group is difficult to measure, but the maintenance of scientific objectivity was of prime concern (cf Gans, 1970).

Finally, today's research frequently acts as the springboard for tomorrow's research. Therefore factual reporting is necessary to assist further research, so often recommended in research reports.

3.2 Conventional research and reports: The debate

Conventional research is usually considered to be positivist and quantitative (Irvine et al., 1979; Bailey, 1978). The research for this study commenced as positivist, but became more a naturalistic inquiry as the research proceeded. In short, methodologically pluralistic (cf Bell and Newby, 1977). In pursuit of this 'methodological pluralism', research methods which led to quantitative data and qualitative knowledge and understanding were used. This does not mean that there was any conflict during the research for this study between quantitative and qualitative methods. Quite the contrary (cf Section 2.7.2).

However, some social scientists argue that research is scientific if quantitative, implying that qualitative research is less scientific. Therefore, it is argued, quantitatively derived knowledge is held to be objective, qualitatively derived knowledge less objective, even ideologically bound. The works of Moser and Kalton (1979), Irvine et al. (1979), Bailey (1978), Bogdan and Taylor (1975), Oppenheim (1966) and Selltiz et al. (1965) offer extensive discussion - if not agreement - on the subject. Irvine et al. summarises the debate as follows;

'Quantitative knowledge is held to be objective, whereas qualitative data ideological; and statistical techniques are said to provide a more scientific approach to collecting and assessing data than the essentially 'subjective' nature of alternative methods. ... (However) as a social practice, it is not necessarily the

case that quantitative analysis makes social science any more 'scientific' let alone more 'objective'. The use of statistical techniques poses its own problems, in the same way as do other ways of presenting and assessing knowledge of society; it is no more theory free or value neutral than other approaches.'

Irvine et al. (1979)

The written account of social science research is generally wrapped up in the conventional language of science. Social scientists often accept convention, they are traditional and tend to resist or reject the unconventional. In written accounts or reports this is doubly apparent. Social science research reports are seldom value free or value neutral and therefore less objective than generally supposed (Irvine et al., 1979; Bell and Newby, 1977; Shipman, 1972). Furthermore, Shipman (1972) cites Watkins (1964) stating that many many reports are written in 'diadic deadpan' and added, in a detailed attack on this policy, that social scientists who 'report their work in an impersonal, stylised manner' suppress;

'... personal opinion and experience ... (and) give an impression of absolutely reliable methods, unaffected by the personality and social life of the scientist involved. Scientists stage manage the impression they give to their public.'

Shipman (1972)

It is this policy, declares Shipman (1972), that 'inevitably distorts' the vast majority of social science reports on human activity. Shipman argues that ideally research should involve the use of a variety of methods, with the reports and research findings reported and written honestly (cf Schatzman & Strauss, 1973).

However, truly 'honest' reporting is difficult within the institutionalised U.K. academic framework. Despite the sincere statements made by Shipman and by Schatzman and Strauss, it is not easy for students to report honestly - the restraints of academic convention and, in some cases, decency, dictate otherwise.

However, the difficulties in reporting honestly is not restricted to students. Bell and Newby (1977) state that there were 'considerable divergencie(s)' between 'how sociological research has actually been done' and the reports in textbooks. They declare;

'We are ... arguing for methodological pluralism ... we are *against* methodolatory (rather than method) and certainty, and *for* a constructive scepticism and ethical and logical scrupulousness.

(Original emphasis) Bell and Newby (1977)

The research and report of this study has attempted to combine methodological pluralism with a constructive scepticism and ethical and logical scrupulousness, leading to an honest report.

3.3 The three main surveys: the reality

3.3.1 Introduction

The discussion has shown the progression through the various stages of research to have been fairly conventional. The IMSO survey could have been described as a planned preliminary to the main survey as an example of a stratified sample (the IOSH survey being the other part). It was not, it was just a fortunate development from a planned exercise in an attempt to contact unaffiliated SPs.

Letters had been sent to all the major OHS publications requesting them to publish details of the research project and ask any interested persons to contact me at the Department. All of the journals, except one, either published my letter in full or made reference to my request for information. The one exception was the 'newspaper' type journal of the British Safety Council.

Only nine people responded to the publicity and request for assistance. Three were members of IOSH; two were former students of the department; one was Alan Waring, at the time PRO of IMSO; three were retired former SPs. The last three proved most helpful and provided valuable contacts, contributing greatly to many facets of this study. However, as a means of establishing contact with non-affiliated SPs, the experiment proved a total and abject failure.

Inspection of those research projects previously (and even currently) conducted into virtually any aspect of SP activity had almost invariably failed to obtain or achieve contact with

non-affiliated SPs. The research into SPs usually has been selective and directed, such as restricted surveys of very small numbers (HSE, 1976), concentrating on one particular professional association (Harper, 1980), concentrating on a particular subject (Dawson et al., 1984), or on a particular industry (Shipp et al., 1965a). Excepting those who conducted their research for a specific purpose, the general reason is due to the problems of obtaining a sample from an unknown population - the SP.

3.3.2 Sampling an unknown population: the safety practitioner

A social survey is a systematic collection of facts about people, who may live in a specific area or follow a specific occupation. Drawing a random sample from a population means that every member of the population has an equal chance of selection. The derived data may be used as though they have been drawn from the whole. The essentials are to ensure that the sample is *representative* and that it is of *sufficient size* to allow adequate analysis and generalization from the results (Selltiz et al., 1965; Oppenheim, 1966; Moser and Kalton, 1979).

Most studies do not consider it necessary to offer more than a cursory reference to the sampling method, or at most an indication of certain problems associated with the sample used for a study. Harper (1980) and Chaabane (1985) followed this course. They declared the SP was isolated and that the true numbers were an unknown. Following a very short reference to problems in ascertaining the numbers of SPs, their investigation, analysis and discussion was protected by cautions.

The literature search for this study revealed that the consensus opinion was that it *was not possible* to formulate a representative sample of SPs (cf Ch. 1). The available evidence indicated that the SP was an isolated individual in a company organization, with the companies widely distributed throughout the U.K. I had been informed that the HSE possessed a record of the numbers and location of the majority of SPs in the U.K. The HSE verbally confirmed that they possessed such a record, they further confirmed

that there was a very great number of SPs, widely scattered geographically throughout the U.K. However, they stated that their computer data were restricted and even without removing identification, the information was not available to those outside government and the HSE.

This lack of information concerning actual numbers and location of the SP created great problems in the attempts to obtain a truly representative sample. It meant that probability sampling could not be used. Non-probability sampling is when 'there is no way of estimating the probability that each element (single member of the population) has of being included in the sample, and no assurance that every element has some chance of being included' (Chein in Selltiz et al., 1965).

Consideration of the major forms of probability sampling, accidental, quota and purposive sampling, indicated that these too could not be used for the main surveys. These are standard sampling methods and a description of these methods can be found in many authoritative sources, it is not proposed to elaborate further (e.g., cf Moser and Kalton, 1979; Selltiz et al., 1965)

Several other attempts were made to get information about the population universe of SPs. Those members of the occupational group who were also members of the professional bodies or associations were fairly quickly and easily accounted for. However, it was not known to what extent they were representative of the whole population nor what percentage of the whole population they represented.

The non-affiliated SPs demanded consideration and, despite the earlier failure, the OHS journals were still considered a potential gateway to them (cf Section 2.5.1). The editors of OHS journals, whose circulation was not restricted to members of an SP professional association, were contacted. It was suggested that they may find it useful to print in their journals a survey questionnaire for their readership, followed by an article based upon an analysis of the data.

The proposal made to the editors was that since their OHS magazines or journals were claimed to represent the interests of a readership concerned with OHS, it may prove useful to all concerned to publish the same questionnaire simultaneously in several magazines (the possibility of duplicated responses was recognised). The potential respondents would not only include members of the occupational group, but also a wide range of other OHS specialists (and non-specialists).

The concept was intriguing but the reaction from OHS journal editors indicated that the idea of co-operation between the journals was not commercially viable. The concept was dangerous to pursue, in that further co-operation may have been jeopardised. However, one editor made a most revealing remark, claiming that he never read any of the 'competing' OHS journals, 'since many were badly produced and contained nothing of interest.'

Therefore attempts to ensure a sample truly representative of the whole SP population were frustrated. The sampling methods ultimately used were those which were largely forced by necessity. The stratification of the population was virtually predetermined by the close and accessible grouping of the 'affiliates', as opposed to the completely scattered and unknown number of 'non-affiliates'. The latter effectively were impossible to reach. On the other hand, two of the three professional associations, IMSO and IISO (later combining as IOSH), gave every assistance in the research and compilation of this study.

Unfortunately, accepting the invaluable assistance of IOSH (and its membership), together with the fact that the research was located in the Department at Aston, combined to effectively stop access to one group of SPs - the membership of the professional associations linked with the British Safety Council (BSC).

It was soon found that there was an antipathy between the IOSH and the BSC. This antipathy ranged from rank and file membership to executive level, ultimately culminating in a threatened legal action between the two bodies in 1983. The consequence was that the sample of SPs would have had to have been obtained without the co-operation of the BSC management board.

The result of these constraints was that the only groups of SPs from whom it was possible to obtain a reasonably sized assured sample were the membership of IMSO and IOSH. The Aston/Works Management survey had the prime purpose of obtaining the views of management towards OHS, with a secondary purpose of establishing the number of SPs employed in U.K. industry.

3.4 Research methodology

3.4.1 Introduction

This section provides details of the wide range of supplementary research methodologies used in this study. The use of these methods extended throughout the period of the study, including the period of rewriting for resubmission. Thus what was originally intended to be a 3-year qualitative based study, became a largely qualitative *trend* longitudinal study (cf Bailey, 1978), with continuous research extending over eight years.

The two main survey questionnaires described in Sections 2.4 and 2.5 were extremely useful in the early stages of the research. The data supplied valuable information but soon the initial analysis teasingly presented far more questions than answers (cf Section 3.2).

One area demanding further investigation was the attitude of managers to OHS. Consequently, another major survey questionnaire was designed and distributed - the Aston/Works Management Survey Questionnaire.

However, there still remained niggling questions of detail, the 'why' and 'how'. Many small questions in themselves but cumulative in their importance - in other research studies apparently seldom recognised, investigated or possibly ignored due to pressures or unstated constraints (cf Section 3.2).

The options were to simply identify them as areas demanding further research or complete a preliminary investigation. The latter course was chosen, since it was considered that it would better

serve the prime purpose of the research - to increase the knowledge and understanding of the role of the SP.

3.4.2 Structured interviews

All eleven structured interviews were conducted with spokespersons who represented large institutions or associations. Those interviewed represented;

- 3 OHS Training institutions
- 2 Professional OHS Associations
- 2 Industrial Training Boards
- 2 Trades Unions
- 2 Employers Associations
- 1 Manufacturing Company
- 1 OHS Pressure Group

The total in the above list exceeds 11 because in two cases the organization concerned operated in two areas.

One notable exception to the list may appear to be the Trades Union Congress (TUC). However, the TUC were contacted by telephone and stated that their views on the role of the SP were presented in the TUC publication, *Workplace Health and Safety Services*. Second, there are differences between constituent member trades unions of the TUC that are seldom publicised and less known than the consensus public face of the TUC. It was for these reasons that it was considered more useful to hold discussions with officials of two trade unions, than pursuing the possibility of an interview with an official spokesperson of the TUC. Incidentally, because the spokespersons contacted were through personal contacts, their views do not necessarily reflect or express the views of their organizations.

It was noticeable that all those interviewed, either officially or unofficially, were very free in their comments. This was especially true of those 'off the cuff' remarks which were often followed by the caveat, 'that is to be treated in confidence'. In

such cases, although these remarks provided useful leads for further research, the source, content or origin were not identified.

All of the structured interviews, bar one, took place at the interviewee's place of employment. The one exception (RoSPA) was at a convenient location. The advantage of interviewing the spokespersons at their place of employment was to assist in determining the status and credibility of the respondent.

At times the circumstances which arose during the research demanded careful application of ethics. These became not simply a philosophical term for discussion but a real issue of vital importance.

It became evident that within OHS each of the bodies was interested in the activities of the others, quite often attempting to use the researcher as a carrier of information, but was not prepared or willing to divulge the true extent of their interest to the researcher or others. Even within professional associations and institutions, there were extensive conflicts and divisions, between individuals and groups, who found difficulty in really communicating with each other. In short, many people and institutions formally talked to each other, but were less prepared to really listen or communicate (cf Section 6.2 and 6.4). These factors often operate to the detriment of the occupational group and to OHS in general.

3.4.3 Unstructured interviews

The unstructured interview seldom receives much comment in research literature, except in ethnographic research studies (Lofland, 1971). This may be because in many research projects conversation is treated as a normal part of everyday existence. In simple terms, in the course of a research project the unstructured interview may in fact be a carefully structured conversation following a chance meeting; in more complex situations the meeting may not be chance but the discussion appears non-directed.

Generally those who complete research reports appear to neglect the area of conversation forming an acknowledged part of the research. Conversations are seldom recorded, reported or considered sufficiently important to acknowledge in theses. The conversation following a chance meeting on a train, even at a bus stop can provide vitally important leads or clues for the researcher.

An example will illustrate, it was only one of quite a large number of similar incidents. During a train journey a conversation was entered into with a fellow traveller. He was a very recently retired senior factory inspector. The journey of 2½ hours provided a fund of information on the activities of SPs, from the perspective of a factory inspector. The leads which this conversation or unstructured interview (which became directed to an extent) proved most useful in later research and in formulating recommendations (cf Section 6.2.7, 8.4; Appendix F).

3.4.4 Participant observation studies

Bogdan and Taylor (1975) declare that 'the phrase *participant observation* has not enjoyed a clear definition in the social sciences'. The opinions vary between those who declare that participant observation is when one joins a group (i.e., a religious sect) and pretends to be a member of the group, *participating* or pretending to be a 'real' member - contrasted with non-participant observation studies where the observer does not participate with group activities and does not pretend to be a member (Moser and Kalton, 1979; Selitz et al., 1965).

However, at the time of the studies I was a member of IOSH, IMSO and the IIRSM (cf Section 6.4), I was viewed by the subjects as nearer a colleague, than a researcher, except in one respect (cf Section 5.8). Therefore the term 'participant observation study' is used in preference to the term 'non-participant observation'.

Five full day observation studies were conducted in the course of this study (cf Section 5.8). Unfortunately all records of these observation studies were lost and all that remained were a series of disconnected jottings, a summary of results and the first draft

(cf Section 5.8). Even though the fully detailed results were lost, the findings from the observation studies provided important and useful data, some of which led to follow up research projects, the records of which were fortunately retained.

547 respondents to the IOSH survey questionnaire volunteered further assistance (cf Ch. 4). However, because of the time factor and for personal reasons it proved impossible to conduct more than five studies. Full details of the studies are provided in Section 5.8. No claim is made that the sample drawn for the series of observation studies was representative of the whole population of SPs, or those in the industrial categories covered.

The conclusion was that participant observation studies are an extremely effective research method. If used extensively, time consuming and demanding, but extremely rewarding in richness and depth of data obtained. However, the reasons why participant or non-participant observation has been seldom used by researchers into the role of the SPs may be related to the problems described in this section, particularly the matter of time and resources demanded.

The one exception may be thought to be Beaumont et al (1982). However, it appeared that non-participant observation was but one of several research methods used by Beaumont and his team, none of which were clearly detailed in his article. An article in which it was clearly stated that the main purpose of his research was *not* to investigate the role of the SP.

3.4.5 Mailed survey questionnaire sorties

The section title identifies a particular type of mailed survey questionnaire that was no more than a sortie into an area of research, identified in various ways, demanding immediate attention. The questionnaires were usually short, no more than four or five questions, the sample small (average of around 50), and collected useful qualitative data. An example illustrates.

In January 1983 the journal *Safety Practitioner* published an article by Stowe entitled *Safety Officer's Fight for their Existence*'. His article was not in accord with the title, which was apparently more concerned to advocate the use of group safety advisers or consultants, rather than concern for the SP backed by factual evidence and discussion - the correspondence columns in the *Safety Practitioner* following publication of Stowe's article provide support for these assertions. However, the one theme that received general agreement (although with largely anecdotal evidence) was that the appointment of new or replacement of retiring SPs had been adversely affected by the recession of the period.

The situation demanded investigation. In May 1983 a small postal survey was conducted among SPs who had responded to the IOSH survey questionnaire and who declared in the write-in portion that they were prepared to become more involved in the research project (cf Section 3.4.4). A full description and analysis is provided in Section 5.5.5.

A personal letter was written and mailed to each of the 50 respondents. Included in the text were the three questions noted above. A 100% response rate was ultimately achieved.

It may be impracticable to use this research method for large samples. It took a considerable time to write personal letters, with each letter slightly different, personalized for each respondent. However, there is authoritative support that the use of handwritten letters may increase response rates (Oppenheim, 1966; Moser & Kalton, 1979).

3.4.6 Field survey

This section describes a field survey, which had to be aborted due to personal reasons. It is included because sufficient data were derived from the survey indicating that many employers were not aware of the requirements of the HASAWA 1974. It was also found that many of those who knew of the Act and its contents were not complying with its requirements.

Equally, if not more important, many employees were found to be unaware of the contents and implications of the HASAWA 1974. Finally, it was found that the HSE and HSC were largely aware of the existence of many breaches of the HASAWA, but were unwilling or unable to take action.

The need for the research arose following an inspection of the AW/WM survey data. Anticipating future discussion it was found that 5 of the 208 respondent companies did not possess written safety policies, despite them falling within the requirements of Section 2 (3) of the HASAWA 1974. Section 2 (3) declares;

'It shall be the duty of every employer to prepare and as often as may be appropriate revise a written statement of his general policy with respect to the health and safety at work of his employees and the organization and arrangements for the time being in force for carrying out that policy, and to bring the statement and any revision of it to the notice of all his employees.'

Section 2 (3) HASAWA 1974

The survey had a very simple design. The procedure was to carry a short questionnaire and walk down one side of a street and back up the other, visiting every business or factory in each street. A tick sheet was carried, upon which was the questionnaire, and the address, type of business, number of employees, responses and brief comments were recorded.

Details of the type of business and number of employees were obtained informally, they did not form part of the formal questionnaire. The formal questionnaire comprised two main and two supplementary questions. These were;

1. Does your company possess a written safety policy?
1. (a) (If 1 'yes') May I see your safety policy?
2. Does your company employ an SP?
2. (a) (If 2 'yes') Is the SP full- or part-time?

Question 1 established if the employer complied with the HASAWA 1974; Question 1 (a) checked the type of safety policy in use, and

when (or if) it was revised and updated. Question 2 and 2 (a) were concerned with the focus of this study.

The field survey commenced in January 1982, on a half day per week basis, but it was terminated in May of the same year. In that period 247 premises were surveyed. Since the survey was not completed, it is not possible to state whether or not the survey contained a representative sample of businesses and industry in the town. Further discussion on the field survey is provided in Section 6.2.6.

3.4.7 Telephone surveys

There were several surveys conducted using the telephone in the course of this study. One is discussed in detail in this section to provide an example of the technique used. The others are detailed in the discussion, as and when appropriate.

In societies fortunate enough to possess an efficient telephone network, 'mini-surveys' may be conducted via the telephone which are never recorded. The consequence is familiarity with the telephone and often leads to overlooking many telephone surveys which actually deserve identification and discussion.

If the above argument is accepted as valid, there then comes the problem of determining which are 'surveys' and which can be called a 'survey'. In the case of this study a telephone survey is any series of telephone calls, to two or more persons, which used a pre-planned memorised or written question or questions and where a conscious sample had been selected.

Using that definition for a telephone survey there were many occasions when a particular point was pursued, not through a planned series of written questionnaires, but through 'telephoning around' to find the answer to a question. Whenever this method was used in connection with the research, they receive reference in the text.

A principal advantage of telephone surveys is instant feedback. Another advantage, subject to the survey being of importance or

interest to the respondents, is a high response rate. A principal disadvantage arises from the constraints placed upon the researcher. The telephone 'questionnaire' must be kept short, unless resources are sufficient to allow otherwise. However, unlike with some forms of telephone surveys, e.g. opinion polls, where there is a likelihood of class bias (due to fewer telephones installed in homes of the lower social classes), this is virtually not applicable to SPs, since all in-post SPs are connected to the telephone network.

Inferences drawn from the telephone surveys (and other informal surveys) conducted for this study must only be considered tentative and an indication of certain trends. However, the strength of the inferences drawn from these surveys far outweighs the caveats. They have provided inferential support where previously there was none and identified points that demanded and deserved further research. Therefore, they were very useful indeed.

3.4.8 Concluding discussion: surveys

There are several factors related to many (if not all) of the surveys detailed in this chapter which deserve further discussion.

It was confirmed that of prime importance was the source or credibility of the covering letter accompanying the survey questionnaire (Moser and Kalton, 1979).

However, many respondents mentioned the need to clearly identify the benefits which they, as individuals (not as an occupational group) would gain through completing the survey questionnaire. They were extremely interested in what or how they personally would benefit from completing the survey questionnaire.

When respondents were informed that it would prove difficult to list possible benefits to the potential respondent in a letter, they remained unimpressed. They stated that it was possible to identify the benefits to the reader of a magazine article, they thought this should also be possible with a covering letter accompanying a survey.

Support for this view came in February 1982. An SP contacted the Department and asked how he could help in the research. When asked why he made the offer, he stated that following an published article on some findings from the research, he had previously thought surveys to be a waste of time. However, he took the article and used it as a basis in discussion with his local government employers and successfully won an increase in salary. He stated;

'Thanks to your article (based upon an analysis of the IMSO survey data) I got my salary increase and an improvement in grade. I have changed my opinion of surveys and academic research. How can I help?'

It was suggested that a photograph of the researcher should accompany covering letters. Some went further and suggested that a brief biography of the researcher would prove useful. However, such a course could have both positive and negative effects. Secord (1954) found that the observers' perception of people from photographs could depend on many factors, some outside the control of the subject. Secord tinted photographs and found racist based rejection of the subject by Caucasian respondents.

The use of the telephone as a method of research was welcomed by a considerable number of respondents. They declared that it allowed them to answer questions with minimum disruption to their work schedule. If they were busy they could say so and arrange for a call at a time convenient to themselves. However, Bogdan and Taylor (1975) found that the acceptance or rejection of telephone calls sometimes depended on the accent of the caller.

The conclusion must be that there are many avenues and methods of research which have not received sufficient attention. In short, there is a place for every possible technique or research method in the pursuit of data or information. Equally, a *complete* report of the progress of the research should be provided to assist any researchers who conduct further investigation.

3.5 Research-cum-action strategies: Participatory Action Research

3.5.1 Introduction

Social science research and theory is full of unknowns - the researcher and social scientist rapidly learns that virtually nothing is wholly new, merely a development of an old theory or research method. An example occurred during the research for this study. The name of a particular method of research was not recognised (nor its full value in strategies for the professionalization of the occupation of SP) until after this research project had been completed.

The research method was participatory action research (PAR) and until the researcher became involved in some PAR research for the United Nations Economic and Social Commission for Asia and the Pacific (UN/ESCAP), the connection was not made between PAR and research and other activities completed for this study.

Hall (1981) usefully provides a resume of the main features of PAR. He declared;

'Participatory (action) research is ... an integrated activity that combines social investigation, educational work, and action. ... Some of the characteristics include;

The problem originates in the community or the workplace itself.

The ultimate goal ... is fundamental structural transformation and the improvement of the lives of those involved ...

... the workplace or the community (is involved) in the control of the entire process ...

... the awareness in people of their own ability and resources (is heightened) and the mobilizing or organizing (abilities are improved).

The term researcher can refer to both the community or workplace persons involved as well as those with specialised training.'

(Outside researchers are) ... committed participants and learners in a process that leads to militancy rather than detachment.'

Hall (1981)

The distinction between participant observation studies and PAR can be seen by reference to the above. First, PAR *invariably* involves and leads to action - participant observations studies (POS) do not. Second, in PAR the workplace or community is involved *in control* of the whole process - in POS they are not.

In short, in the case of PAR the task is the successful completion of the research project and the task masters are the *respondents*. When PAR was used in this project, the task was to investigate the respondents, who usually coincided with co-sponsors, the task co-masters (IOSH and IMSO). This identified problems which are discussed in Chapters 6 and 7.

It could be stated that this study is largely an example of PAR - as opposed to the participant observation studies described in Section 5.8. It is shown that the SP subjects virtually directed the research and a major SP professional association (IOSH) was co-sponsor of the research project (through in-depth commitment and involvement).

In short the task masters were the respondents and reference to the statements by Hall above shows that many, if not all, the conditions detailed are satisfied in the course of this research project. However, part of the research followed the positivist mode and therefore while the *result* can be claimed to be an example of PAR, the application and use of a variety of research methodologies to achieve that result removes the possibility of the whole being considered as a PAR project.

There were two components which can be identified as PAR. The first occurred in 1981 (sub-divided into two), the second in September 1982. At least those are the dates when the effects and application of PAR surfaced. In fact, it can be argued that one of the strengths of PAR is that its effects may continue forever.

A problem compounded by the fact that it is extremely difficult to effectively measure the impact of a PAR programme. This is also one of its dangers: the effects of PAR can continue long after the programme has 'officially' ceased. The following examples illustrate.

3.5.2 IMSO

During the course of discussions with the IMSO Executive concerning the IMSO survey questionnaire, the Executive expressed concern over the confusion which (they considered) existed in the minds of the membership over the purpose of IMSO and the meaning of the term 'safety professional'. During the course of preliminary research into IMSO for the production of the Report (cf Appendix I) concerning the memberships' view of a proposed merger with an unidentified professional OHS organization - the IMSO membership could decide - these fears were confirmed. The problem apparently originated in the minds of the IMSO membership.

Careful consideration was given by the IMSO Executive, in consultation with myself, to devise the best procedure which would;

- (i) transform the thoughts of those who were unconvinced that professionalism was the best approach for IMSO members,
- (ii) heighten awareness in IMSO members of their ability and mobilise the membership of IMSO behind the Executive who (generally) supported the drive to professionalism,
- (iii) identify and utilise the services of committed members,
- (iv) create a mood of 'militancy' rather than passive inactivity.

Each of the above relates to Hall (1981) and his description of the components of PAR. The identified problem originated from the professional association. The problem was identified by some of the members of that professional association. The ultimate goal was to be the transformation of that professional association. The community (IMSO Executive) was in control of the whole process. The objective was to increase members awareness of their own

ability. The researchers, in the widest sense of the term, were the community, as well as those with specialist training (myself). The process would lead to militancy rather than detachment.

There were basically two courses of action followed. First, I conducted a mailed survey with the three objectives, two covert one overt. These were: (i) obtain data for the main SP survey (cf Section 2.4); (ii) ascertain the memberships views of a merger (or coming together) with IOSH (cf Appendix I); (iii) the overt components of the survey was to instil in the membership minds that a merger was inevitable, the apparent question was 'with whom?' (the IMSO Executive had decided the choice had to be IOSH) and to raise the question of professionalization among the membership.

Therefore the IMSO survey forced the membership to see the restricted choice before them but appreciate the potential of the future. Less a choice of whom to merger with, than a simple merger or no merger situation (particularly with the pressure group pro-IOSH merger publicity operated by most of the IMSO Executive).

The second course of action was the overt component which was further developed during the IMSO conference held in September 1981 at Keele. At that venue a speech entitled *The IMSO Member - Professional or Member of a Profession* was presented at the IMSO National Safety Symposium. A copy of the paper is presented in Appendix J. This paper was prepared in consultation with some members of the IMSO Executive, who identified the areas in which they had special concern.

This paper was followed by similar papers presented at a number IMSO Branch Meetings around the country. After the 'coming together' of IMSO and IOSH, this policy was discontinued.

In addition, a series of articles on the theme of professionalism or emphasising the importance of professionalism for SPs were written by me and published in various safety journals (cf Bibliography)

Similar to PAR and this is often one of its principal weaknesses, the results of the actions were not monitored beyond initial reaction from the IMSO membership.

3.5.3 The Institute of Shops, Health and Safety Acts Administration

Directly following the presentation of the IMSO conference paper, I was approached by Ted Quantrill of the Institute of Shops, Health and Safety Acts Administration (ISHAA) and invited to contribute a similar type of paper to an Annual Conference of that association. The Executive of ISHAA considered that the membership was stagnating and unaware of their contribution to society and their employers.

The preparation of the paper was accompanied by extensive discussion with various senior members of the ISHAA. It was presented to the ISHAA during their Annual Conference at Clacton in September 1982. A copy of the paper and a report of the ensuing discussion is presented in Appendix J. It is accompanied by a letter from the conference organiser confirming that the paper achieved the desired objective.

The following conferences developed the professionalism of the ISHAA, and at the Annual Conference held in Bournemouth October 1985 it was proposed to extend the area of operations (and potential membership) into home safety and OHS in local authorities. This could lead the ISHAA into direct competition for membership with the area covered by the Municipal and Public Services (MAPS) division of IOSH.

Recent information confirmed that the use and effects from PAR in the ISHAA is still continuing.

3.5.4 PAR: discussion

The two examples provided illustrate many of the problems, strengths and potential dangers with the use of PAR. Since PAR

was extensively used in the course of this study it is useful to offer some discussion.

Fernandes and Tandon (1981) compare and contrast PAR with traditional research. They declare that in traditional research the design and control is from the top to the bottom, with the subject having little say in the research design or objectives. In PAR they state the reverse is true, with the subject intensely involved in the research design and its objectives. The consequence is that 'traditional research', when it leads to action, frequently leads to action which is totally unrelated to the interests of those who are the subject of the research.

PAR, because it involves equal participation of all those involved in the research process, equalises power distribution and ensures as far as possible, that the interests of the subjects of the research are not merely protected, but advanced. Similar comments are made by all the advocates of PAR (cf Cain, 1978; Hall, 1978; Brown, 1982 are examples).

However, the use of control in PAR is far more subtle than its advocates would have us believe. The control operated in the case of the IMSO PAR came from those on the Executive, who supported or proposed the intervention, ultimately interpreted by myself. It is true that the information was claimed to have originated from the membership, i.e., the 'demand' was claimed to have existed and identified through 'feedback' from the membership. In reality a selection of what was 'appropriate' or 'desirable' as the area of research (and its objectives) was less a matter for discussion, than confirmation - subject to possibility of completion.

Indeed, reference to many PAR projects already completed, largely involving the less privileged and the less educated members of minority groups provide support for these assertions (cf Brown, 1982). The coincidence, or possibly it is more than coincidence, is that most of the PAR projects have been heavily ideologically bound, and that ideology has been almost invariably to the left politically (cf Juizer, 1978; Gaventa and Horton, 1981).

For a variety of reasons, it is *impossible* for the community to be really in control of the *whole* process, as Hall and many supporters of PAR claim. The reasons include the fact that the education process itself is a form of control (cf Althusser, 1972; Illich, 1973; Bowles and Gintis, 1976). Fernandes and Tandon declare that the strength of PAR is that 'professional' researchers are not required, once the indigenous 'community' population have been trained to do their own research. In making that statement, they not only overlook the factors noted concerning education being a force of control and form of control, they reinforce the criticisms just offered.

Possibly the greatest value of PAR in the examples of IMSO and ISHAA was that its use successfully created an environment in which constructive informed debate and discussion could be held. The weakness was that the parameters of the environment were largely defined by the research-based papers and articles which created the environment - papers in which the Executives of IMSO ISHAA had a considerable influence, above and beyond that of the membership.

The views propounded in both of the papers (IMSO and ISHAA) were clearly identified as either those which originated from the membership of each organization and/or intended to stimulate debate. The extent to which the points raised were selected from the mass of data available or the opinion of the Executive as to what was important cannot be determined at this date (1987). However, these factors decided the direction of the debate - despite every attempt to remain unbiased in the selection.

Furthermore, the extent to which I or my views influenced members thoughts, attitudes or the policy of the professional associations is difficult, if not impossible, to measure. Nevertheless, this *planned* intervention was at the invitation and with the full co-operation of the majority of the Executive of the respective associations.

The evaluation of all PAR and other research projects ultimately depends on the stance of the individual. The Executives of IMSO and ISHAA were satisfied. The reaction of the majority of the members who attended the conferences and meetings were largely favourable. Reference to the conference reports provides substantiation. However, as always with research, there remains the question of ethics.

In PAR the ideology of traditional social science researchers and those who employ them may be replaced by the ideology of the non-traditional researcher *and those who ideologically control their thoughts*. In the case of this study, the ideology of the Executive Councils and active members unquestionably will have influenced my perception, possibly controlled me *and the thoughts and actions of those whom I addressed in print and in person*. Personal correspondence and conversations indicate that that statement is not without foundation.

These factors of control relate to the way in which the research method of PAR may, in itself, create an illusion of reality in the data, information or research. In short, was what was seen in fact what was wanted to be seen, rather than what actually existed?

The understanding of what was 'best' or 'required' by the Executives of IMSO, ISHAA (or even IOSH) may have been a construction of reality by them. This is a principal weakness of *verstehen*, that is, self understanding is connected integrally to the understanding of others. However it may be a weakness of PAR, it applies to a far greater extent to the formal methods of research.

3.6

Conclusion

The data from social surveys are derived through respondents answering questions. Those questions (or the conduct of the survey) may mean that the derived data are less accurate or valid than hoped, while still remaining valuable. One way of checking

and verifying is to utilise many research methods (or triangulation), as in this study.

The stated prime object of this study was 'to investigate the role, function and responsibilities of the U.K. safety practitioner' (cf Ch. 1). In pursuing the objectives of this study, many changes were made - the original research methodology was rejected as being unsuitable as the sole research method, and as a consequence a variety of research methods and surveys were used.

Moser and Kalton declared that surveys could be seen;

'... as one way, and a supremely useful one, of exploring the field, of collecting data *around* as well as directly *on* the subject of the study, so that the problem is brought into focus and the points worth pursuing are suggested.'

(Original emphasis) Moser & Kalton (1979)

Therefore the use of many research methodologies, different types of investigation and then reporting the whole truth can actively strengthen, not weaken a study. Such methods assist the reader to better judge the actual contribution of the report to understanding and knowledge, in addition to evaluating the research methodology and research methods used in the course of the study.

* * * * *

*' ... there are at present no generally
agreed up-to-date definitions of the roles
and functions of safety practitioners'*
HSE (1983)

CHAPTER 4 THE ROLE OF THE SAFETY PRACTITIONER

4.1 Introduction

This chapter uses response data derived from the IOSH survey questionnaire in an attempt to establish the role of the *IOSH SP respondents*. The main characteristics of the IOSH survey response were provided in Section 2.7.3. Full frequency counts of the IOSH survey data are provided in Appendix B. The discussion in this chapter is restricted in range and scope to analysis of the response data considered most pertinent, relevant and available (cf Ch. 1), in describing the role of the IOSH SP respondents, including references to some factors which influence role performance.

All references in this chapter to *the* role of the SP *must* be placed in context. There was a considerable change in direction and methodology of the research so that the importance and relevance of the survey questionnaire shifted a great deal (Section 2.7.2). The IOSH survey questionnaire, originally intended as the only source of

data, eventually served (in comparative terms) merely as an important framework for the research.

The thrust of this chapter is largely to follow the original research concept. The discussion establishes those factors which have relevance to the SP role and individuals' performance of the SP role, using the data derived from respondents' answers to the set questions in the questionnaire. The content of this chapter is therefore largely quantitative and is restricted to analysing the response data from questions presented in the IOSH mailed survey questionnaire.

The discussion in Chapter 5 presents a qualitative assessment of the role of the SP and the occupational group (as opposed to the unavoidably constrained, although very useful, assessment of the SP role utilising the response data from the survey questionnaire). The richness of the discussion in Chapter 5 comes from the less structured and informal research methods used later in the research; participant observation studies and comments made by SP respondents during interviews and free discussion.

Appendices F, G and H extend the discussion on the role of the SP into the future and presents suggested changes in IOSH and NEBOSH which would assist SPs in general and IOSH SPs and their professional association in particular, to realise their full potential. It should be noted that the Appendices were compiled and written in 1986 and, although updated in 1987, present material and some proposals which may be overtaken by events.

However, before continuing, two important points must be made concerning studies into SP role, set in an overall caveat.

4.2 Is it possible to identify 'the role of the SP'?

Findings of the IOSH survey confirm those from many other studies, namely that it is *not* possible to establish the role of the SP by use of a mailed survey questionnaire, certainly not one using pre-set coded questions (cf Harper, 1980; HSE, 1976; Shipp et al., 1965a). The significant difference between this study

and many earlier studies, is that almost invariably other authorities simply stated that it was difficult, if not impossible, to determine the role of the SP. With exceptions (e.g., Shipp et al, 1965a), they seldom investigated why it was not possible to determine the SP role. This study provides data and discussion showing why it is not possible to define or describe the role of the IOSH SP. Many of the points made in the discussion can be extrapolated and applied to SPs outside the membership of professional SP associations.

Such a statement demands further explanation and several are provided throughout the remainder of this study. Sufficient to state at this stage that important fundamental changes must occur - in the occupational group, in their professional associations and in OHS legislation - before the role of the IOSH SP effectively can be defined (cf Ch.'s 7 and 8; Appendices F, G and H).

With this caveat in mind, two important points in relation to this study of the SP and the IOSH survey questionnaire are as follows;

First; analysis of the IOSH survey questionnaire data, especially by reference to the free responses in the space provided in the penultimate question, suggests that a mailed survey questionnaire is *not* the most effective way of establishing the precise nature of the role of the SP. The questions used in mailed survey questionnaires must be pre-coded or pre-determined. Furthermore, after the pilot and pre-pilot stages, it is virtually impossible to change the questions after distribution. Respondents in the pilot and pre-pilot stages are restricted in number and diverse. These factors contribute to information assembled (in the case of the SP) being unavoidably inadequate, particularly because the SP role is very *unusual* (Simon, 1959).

As a consequence, in this study, it was only after the survey data had been analysed (and later, considered in conjunction with the derived data from the Aston/Works Management survey questionnaire) was it fully realised the true extent some of the questions in the IOSH survey questionnaire were inadequate or in a few cases, possibly in error.

Second; since mailed survey questions are necessarily predetermined then the area(s) of SP role covered by the response data are actually predetermined. In effect, the 'role pattern' of the SP is one imposed upon respondents. This is unavoidable, despite taking every precaution to minimise this result (i.e., literature search, pre-pilot and pilot surveys). However, the consequence is that survey questionnaires and particularly mailed questionnaires, cannot provide response data which adequately (or accurately) identify or describe the role of the SP.

The IOSH survey questionnaire obtained data derived through responses to questions set in an already predetermined 'role pattern' and concept of SP role. Therefore the information (or data) derived from the IOSH (or any other SP) mailed survey questionnaire proves useful information, but limited in range and accuracy.

In summary, these factors explain why the role of the SP, as revealed through the initial analysis of the IOSH survey data, was very unclear. Moreover, there was sufficient evidence to suggest that in-depth analysis would be less effective than in following new lines of research. Unfortunately, for reasons discussed earlier in this study, much of the survey response data are now missing, including the punched cards. All that remains are some very early drafts and a few cross-tabulation tables, which had to be recovered from the Philippines in 1987, and the frequency count. This fact places considerable restrictions on the scope of the discussion possible in this part of the study.

Chi-squared significance test results are *only* shown when the statistical significance is at the 5% level or better.

A full frequency count of the IOSH survey data is provided in Appendix B, Volume 2. The following section commences the discussion on the role of the SP by reference to the remaining IOSH survey data.

4.3 Influencing variables on SP role

4.3.1 Introduction

This subsection is concerned with reviewing the recorded data derived from the IOSH survey questionnaire which identified influencing variables on the SP role. When the IOSH survey questionnaire was compiled, some questions were included to obtain information about those areas thought to have a direct influence on SP role and performance of function, rather than simply the SP role itself. The responses to these form the basis for discussion in this section.

However, following completion of the IOSH survey it was found that the influencing variables were even more important than at first thought. The importance and range of these influencing, even controlling variables only became apparent following initial analysis of the mailed IOSH survey data, reinforced during later discussions with SPs. Once the importance of these variables were recognised, they formed the subject of intensive research, including a supplementary literature review.

The supplementary literature review found that authorities which had investigated many of the variables identified were not generally concerned with the role of the SP. They included Fulton (1984), access and recruitment; Roberts (1975), opportunity-structure models; Hayes (1971), self-concept and occupational choice; Musgrave (1968), role socialization; Roberts (1968), occupational behaviour and attitudes; and Blau et al. (1956), labour market information.

However, no further reference is made to their work in this chapter because discussion is restricted to an analysis and description of the survey response data. Chapter 5, concerned with an understanding of the role of the SP at workplace level, blends comments by IOSH respondents with the findings from other research into the role of the SP.

4.3.2 Age and education

The frequency count of respondents formal educational qualifications is displayed in Table 2.6, Section 2.7.3 and Appendix B, Tables B 22 - 30. The age span of the respondents covered several different school leaving ages. Those who leave school at the current leaving age of 16 have considerably more opportunity to obtain GCEs or the equivalent than do those who left school in earlier years, many aged 14 and before academic qualifications could be taken.

Largely due to these reasons, it was hypothesised that the older the respondent, the less likely it would be that they would possess any GCE (or equivalent) qualifications. Tables 4 (1) and 4 (2) display the recorded data concerning age by number of GCEs achieved.

TABLE 4 (1) RESPONDENTS' AGE GROUP BY NUMBER OF 'O' LEVELS ACHIEVED

Age	Number of 'O' levels achieved					
	None	One or two	Three or Four	Five or Six	Seven or Eight	Nine or more
40 or under	82	18	37	53	46	41
41-50	125	19	36	55	26	24
Over 50	179	13	15	46	34	18
Column Totals	386	50	88	154	106	83

Missing values: 4

Visual inspection of the data in Tables 4 (1) and 4 (2) offered some support for the view that the older the respondent, the less likely they were to possess GCE 'O' or 'A' level qualifications, or their equivalent. However, by reference to the number of SP respondents who possessed absolutely no qualifications (386) it appeared that many employers were little concerned about the formal educational qualifications of their SPs (cf Ch. 5).

TABLE 4 (2) RESPONDENTS' AGE GROUP BY NUMBER OF 'A' LEVELS ACHIEVED

Age	Number of 'A' levels achieved					
	None	One	Two	Three	Four	Five or more
40 or under	179	13	22	32	14	17
41-50	223	6	20	20	12	4
Over 50	230	8	19	25	12	11
Column Totals	632	27	61	77	38	32

Missing values: 4

However, responses to Qs B 7 and 8 showed that many respondents were concerned about perceived deficiencies in their OHS training or education. 631 recorded that they would like to complete one or more courses in OHS (cf Section 5.5; Appendix B, Tables B 46 - B 54). However, in view of the low level of academic achievement of some of the respondents (40% possessed no academic qualifications) it is possible that many would find it difficult to enter (or even complete) some forms of higher education or high level specialist OHS training, such as statistics, cost benefit analysis, or Occupational Hygiene (cf Section 4.3.3 and Ch. 5).

There is support for the view that the type and extent of a person's previous occupation is particularly important in the case of an SP. Dawson et al. (1984) reviewed 'five typical (SP) career paths', suggesting that these have a bearing on the SPs access to power and influence within the organization.

Employers and employers' associations are on record as declaring that they prefer to appoint SPs from the existing workforce, or at least from candidates who have had experience of the industry in which they will be employed as SPs (Robens, 1972a; CBI, 1980). The CBI and other employer associations often state that this form of selection process ensures that the SP appointed has an understanding of the 'problems' of the industry, as well as being more effective in their role (Arscott & Armstrong, 1976; CBI, 1980). It is relevant to add that unlike many professionalised occupations, for example accountants or architects, there is very little, if any, opportunity for SPs to enter the occupation direct from any level of education (cf Section 5.5.5).

Included in the IOSH survey questionnaire were questions designed to obtain information about respondents' past, present (and possibly future) occupation. Frequency counts of the response data are displayed in Appendix B Tables B 55, B 58 - B 60 and elsewhere in this volume ('respondents number of years in the "safety profession"'; 'number of years the SP respondents held present post'; 'previous industrial location of respondents'; 'respondents' recorded occupation or profession before joining the "safety profession"').

Following the findings discussed in Section 4.3.2, which were indicative but not statistically significant, it was decided to pursue the matter of age of respondent and number of formal qualifications. A cross tabulation of number of academic qualifications by number of years employment as an SP was carried out.

The frequency count analysis had already shown that 385 (44%) of the respondents' employing organizations had first appointed an SP

since the introduction of the 1974 HASAWA (cf Appendix B, Table B 14).

Following the comments made in the opening paragraph of this section, it was considered useful to establish the number of years the respondents had spent with their current employer and which industries (if any) supported the CBI contention, appointing their SPs from existing staff. Such factors have a relationship in influencing current role performance and thereby behaviour of the role incumbent to others, not only in the work environment, but just as pertinently, to fellow members of IOSH (cf Ch.'s 5 and 6).

Further cross tabulations were carried out. First, to establish the industrial location of respondent by number of years with present employer (Table 4 (3)) and second, the industrial location of respondent by number of years held present post (Table 4 (4)). To facilitate cross tabulations the industrial location of respondents was recoded. The five largest response categories were local government (223) respondents, engineering (114), construction (102), chemical and oil products (101) and electricity, gas and water (76). Respondents in the remaining ten industrial categories totalled 244, but many had very few responses in each category, therefore the whole were recoded as 'others'.

The figures displayed in Table 4 (3) show that 78% of SPs employed in local government, 63% in construction and 53% in electricity, gas and water have been employed in their respective industries seven years or less, i.e., since the implementation of the 1974 HASAWA. However, the inference is not statistically significant ($\chi^2 = 161.0$, $df = 15$).

Nevertheless, the figures suggest that *within the industries noted*, particularly local government and construction, there is *likely* to be a connection between the implementation of the 1974 Act and the employment of an SP.

TABLE 4 (3) INDUSTRIAL LOCATION OF RESPONDENT BY NUMBER OF YEARS WITH PRESENT EMPLOYER *

Industrial location	Time with present employer				Row total
	3 years or less (>1979)	4 to 7 years (78-75)	8 to 15 years (74-66)	16 years or more (<1965)	
Local Government	92 (43)	83 (36)	36 (20)	8 (4)	219 (26)
Chemical	11 (5)	15 (6)	23 (13)	49 (22)	98 (12)
Construction	36 (17)	27 (12)	20 (11)	17 (8)	100 (12)
Engineering	28 (13)	20 (9)	31 (17)	50 (23)	129 (15)
Electricity, Gas & Water	10 (5)	30 (13)	10 (6)	25 (11)	75 (9)
Others	37 (17)	56 (24)	60 (33)	69 (32)	222 (26)
Column total	214 (25)	231 (27)	180 (21)	218 (26)	843

Missing values: 28

* = Figures in brackets are percentages

It is useful to carry this investigation a stage further, and establish the number of years that respondents have held their present post, bearing in mind the median age of respondents is 45.6 and the median number of years in full time employment 27.3. It was hypothesised that if the 1974 Act had had an impact on the number of SPs appointed, the majority of respondents would have been appointed since 1974.

Inspection of the data displayed in Table 4 (4) shows that *in every industrial category* the majority of the respondents were appointed to their present post within the period 1975 - 1981. This provides further evidence suggesting that the publicity surrounding and implementation of the 1974 HASAWA, had a significant impact on employers' and managers' attitudes to OHS and led to the appointment of many SPs. A case study in Section 6.3 details the experience of local authorities following implementation of the HASAWA 1974 and a recognised need to appoint SPs. It offers further confirmation that employers and management, because of their lack of knowledge and understanding of OHS, are likely to have problems in selecting, appointing and defining the role of SPs - unless they obtain professional advice.

TABLE 4 (4) INDUSTRIAL LOCATION OF RESPONDENT BY NUMBER OF YEARS HELD PRESENT POST*

Industrial location	2 years or less (>1979)	3 to 4 years (77-78)	5 to 6 years (75-76)	7 years or more (<1974)	Row total
Local Government	67 (34)	75 (32)	43 (23)	35 (16)	220 (26)
Chemical	17 (9)	23 (10)	21 (11)	37 (17)	98 (12)
Construction	40 (20)	16 (7)	17 (9)	28 (13)	101 (12)
Engineering	22 (11)	38 (16)	28 (15)	24 (11)	112 (13)
Electricity, Gas & Water	12 (6)	20 (9)	23 (12)	19 (8)	74 (9)
Others	38 (19)	61 (26)	53 (29)	70 (31)	222 (26)
Column total	196 (24)	233 (28)	185 (22)	213 (26)	827

Missing values: 44

* = Figures in brackets are percentages

4.3.4 Educational qualifications and work experience

It was hypothesised that the more recently appointed SPs may possess both more and a higher level of qualifications than those appointed earlier. This hypothesis was based upon the assumption that the publicity surrounding the Robens Report, combined with the fact that some contributors to the Robens Committee had stated that there was a need for well qualified or trained SPs, may have meant later recruits to the occupation of SP may be more highly qualified than those in the past (cf Booth, 1985; Harper, 1980; Waring, 1980; Robens, 1972a; 1972b).

Anticipating future discussion, of particular interest was the matter of a possible division between the membership of IOSH, perhaps based on age, number of formal educational qualifications and number of years experience as an SP (cf Ch. 5 onwards and Appendices F, G and H).

Academic qualifications were recoded so that each was given a proportional value, i.e., 'O' levels or equivalent, 1; 'A' levels, 2;

Degree, 3; Higher Degree, 4. These points values were summed and used in analysis. Table 4 (5) displays the recoded data.

The cross-tabulation in Table 4 (5) resulted in more than 20% of cells with expected values of 5 or less making a chi-squared test unreliable. The data were therefore further recoded. The new grouped years of employment as an SP became 0, 1 to 2, 3, 4 to 6, and 7 to 10. The null hypothesis was that years of experience as an SP and number of formal academic qualifications bore no relationship. The chi-square value using the recoded data was 39.46, with 8 degrees of freedom. The null hypothesis was rejected, the inference at the greater than 0.001 level of significance was that years of experience as an SP was related to formal academic qualifications.

TABLE 4 (5) CODED ACADEMIC QUALIFICATIONS BY GROUPED NUMBER OF YEARS EMPLOYMENT AS AN SP*

Academic qual's coded	Grouped years of employment as an SP *						Total No. Resp's	
	0 to 7		8 to 20		21 or more			
Nil	131	(38)	167	(49)	45	(13)	343	(40)
One	134	(54)	100	(40)	15	(6)	249	(29)
Two	5	(42)	6	(50)	1	(8)	12	(1)
Three	58	(43)	57	(43)	19	(14)	134	(16)
Four	5	(45)	6	(55)	0	-	11	(1)
Five	1	(33)	2	(66)	0	-	3	-
Six	47	(67)	20	(29)	3	(4)	70	(8)
Seven	4	(80)	1	(20)	0	-	5	(1)
Eight	1	(33)	1	(33)	1	(33)	3	-
Nine	0	-	0	-	1	-	1	-
Ten	7	(44)	6	(37)	3	(19)	16	(2)
Totals	393	(46)	366	(43)	88	(10)	847	-

* Figures in brackets are percentages

Missing: 24

Inspection of the data displayed in Table 4 (5) shows that 46% of the respondents recorded that they commenced their career as SPs post the implementation of the 1974 HASAWA. This compares with the 73% who entered their present post since the introduction of the 1974 Act. Derived from the combination of this data, 27% of the respondents changed their employer in 1974 or after, while still staying within the occupational group (cf Section 5.5.4 and Table 5 (6)),

Six points and above meant that the respondent possessed a degree, as well as 'O' and 'A' levels. Of the number of respondents who fell in that group, 62% had entered the occupational group since 1974.

This factor cannot be taken as an indication that the formal academic educational level had risen amongst the membership of the professional associations. It can only be taken that of the respondents who retained their membership of the professional associations and commenced their SP career in 1974 or later, 62% held higher academic qualifications, compared with 34% who began their SP career before 1974.

4.3.5 Previous profession by industrial location

Perception and performance of role depends to a large extent on education (Goodlad, 1984), class (Lockwood, 1966) and previous work experience of the individual (Mackenzie, 1975). For example, Shipp et al (1965a) observed that steelworks SPs with managerial experience perceived and carried out their role significantly differently than those without a managerial background. These factors were the reasons why the derived data and discussion concerning the previous profession of respondents are included in this chapter.

Table B 60 (Appendix B) displays the recorded data of respondents' occupation or profession before joining the safety 'profession'. This section provides a cross tabulation of those data by respondents' current industrial category (cf Section 5.5.4).

The original data were grouped into 17 CODOT categories for previous occupation or profession and 15 industrial categories. Many of these contained less than 10 respondents, making it difficult to conduct valid statistical tests. Therefore Table 4 (6) presents the regrouped data.

It is useful to identify the occupational grouping procedure. 'Management' included all those who had supervisory and control functions in their previous occupation; 'professional' demanded professional qualifications - usually including supervisory components; 'other industrial' covered shop floor industrial workers, and non supervisory; 'security/military' included ex-police, firemen and forces personnel; 'clerical', is as described and 'others' covered the remainder, e.g. 'lorry driver'.

TABLE 4 (6) MAIN ACTIVITY OF COMPANY BY PROFESSION OR OCCUPATION BEFORE JOINING SAFETY OCCUPATION*

Industrial Location	Respondents profession or occupation						Row	
	Management	Prof'l	Other Ind'l	Security Military	Cler'l etc.	Others	Totals	
Local Govt.	60 (26)	50 (22)	27 (22)	20 (24)	28 (53)	15 (24)	200	
Chem.	34 (15)	24 (11)	12 (10)	9 (11)	1 (2)	6 (10)	86	
Const.	29 (12)	18 (8)	19 (16)	13 (16)	7 (13)	11 (18)	97	
Eng'g.	30 (13)	37 (16)	24 (20)	7 (8)	3 (6)	13 (23)	114	
Elect. etc.	22 (9)	23 (10)	12 (10)	6 (7)	5 (9)	4 (6)	72	
Others	57 (25)	75 (33)	27 (22)	27 (33)	9 (17)	12 (19)	207	
Column Totals	232 (30)	227 (29)	121 (16)	82 (11)	53 (7)	62 (8)	777	

Missing values: 95

$\chi^2 = 51.755$, df. = 25, $p < 0.001$

* = Figures in brackets are percentages

Inspection of the displayed data in Table 4 (7) shows that, at a level of significance of 0.001, the majority (59%) of the respondents had a background of management or professional occupations. In

the category 'chemical and oil products' 67% of the respondents came from these occupations; 64% of the 'others' and 'engineering and allied products' next highest with 58%.

The above data suggest three areas deserving further research (cf Ch. 5). First, it offers further support to the hypothesis that there may be a division within the membership of IOSH. The SPs with a background of management and the professions may have a different approach to the role than those from non-supervisory positions (Fox, 1971). Second, certain industries may be disposed to employ SPs from preferred categories, for example a highly technical industry may prefer to appoint technically qualified SPs. Finally, further research is required to establish if the role behaviour and performance of the respondent SPs is affected by their industrial background.

4.3.6 Future career

Another factor which plays a significant part in the performance of role is how an individual perceives their future career. The employee at or very near the end of their working life may see no future and work can become a drudge or simply a matter of survival (cf e.g. Section 5.5.7).

It is noticeable that no authoritative studies were found that discussed this area of concern in any depth. At best, some studies referred to 'the career of SPs', but often only as an aside (cf Harper, 1980) and unworthy of extensive comment (possibly because it had not formed a specific component of their research).

There have been many studies concerned with age and the effects of ageing on job performance, i.e., deterioration in quality, quantity and efficiency due to the ageing process (e.g. Sparrow, 1984; Welford, 1958). However, no studies have been found which consider how the perceived lack of promotional or career prospects affect role performance.

The inferential evidence derived from the data provided in this study suggests that age is an important influencing factor in

respondents perspective of career prospects and thereby role performance (cf Ch. 5 and Section 7.3.17). It is an area deserving further research. Mention of research makes it essential to give some words of caution at this stage. The question of age and ageing is often a very sensitive area for older respondents. Research into the topic of age demands special care during discussion or interview. To communicate more effectively with older respondents, it would be preferable for researchers to be of a similar age - in the case of SP respondents this would mean above 50.

Six questions were included in the IOSH survey questionnaire to obtain from respondents their view on how they perceived their future career. Three were concerned with the respondents' perspective of their career prospects in OHS, three of career prospects in management.

A stimulus for the questions came from the Robens Report (1972b) and HSE (1976a), in which it was stated that the role of SP was not considered to be a career. Although the HSE (in particular) has now accepted that the occupation of SP can provide a career, at the time of the survey the question was one much debated.

A full frequency count of the response data is provided in Appendix B, Tables B 63-68. The data displayed in Tables 4 (7) to 4 (12) follow the same sequence, but collapse the four probabilities (very likely, likely, unlikely, very unlikely) to two, 'likely' and 'unlikely' by age. The tables and discussion in this section should be considered in conjunction with Table 5 (6) and the discussion in Section 5.5.4, concerned with the employment drift of SPs.

The general trend shown throughout the data displayed in Tables 4 (7) to (9) is that the greater the age of respondent, the less likely they are to see themselves becoming a manager or leaving the occupation of SP for that of manager.

Indeed, several respondents noted in the free response section that an SP is a manager and one respondent felt so strongly that they actually wrote over the question 'As an SP I am a manager'. This factor had not been recognised when the question was designed.

TABLE 4 (7) RESPONDENTS' VIEWS OF POSSIBILITY OF APPOINTMENT
TO MANAGER IN PRESENT ORGANIZATION BY AGE*

Possibility of change	Age range			Row Totals
	40 or under	41 to 50	Over 50	
Likely	139 (39)	110 (31)	106 (30)	355 (48)
Unlikely	115 (30)	134 (35)	132 (35)	381 (52)
Column totals	254 (34)	244 (33)	238 (32)	736

Missing values: 135

* = Percentages are in brackets

TABLE 4 (8) RESPONDENTS' VIEWS OF POSSIBILITY OF APPOINTMENT AS
A MANAGER IN A DIFFERENT ORGANIZATION BUT SAME
INDUSTRY BY AGE*

Possibility of change	Age range			Row Totals
	40 or under	41 to 50	Over 50	
Likely	105 (51)	69 (33)	33 (16)	207 (30)
Unlikely	147 (31)	156 (33)	173 (36)	476 (70)
Column totals	252 (37)	225 (33)	206 (30)	683

Missing values: 188

* = Percentages are in brackets

TABLE 4 (9) RESPONDENTS' VIEWS OF POSSIBILITY OF APPOINTMENT AS
A MANAGER IN A DIFFERENT INDUSTRY BY AGE*

Possibility of change	Age range			Row Totals
	40 or under	41 to 50	Over 50	
Likely	100 (58)	50 (29)	23 (13)	173 (26)
Unlikely	145 (30)	165 (25)	179 (27)	489 (74)
Column totals	245 (37)	215 (32)	202 (30)	662

Missing values: 209

* = Percentages are in brackets

However, the possibility of the respondent receiving promotion within the occupation of SP had been recognised (although no record was made regarding the safety organization or structure at the respondent's place of employment).

Tables 4 (10) to 4 (12) consider the data in response to questions asking respondents to review their possibilities of promotion in their future career while remaining within the occupation of SP.

TABLE 4 (10) RESPONDENTS' VIEWS OF POSSIBILITY OF RECEIVING PROMOTION IN SAFETY ORGANIZATION OF PRESENT ORGANIZATION BY AGE*

Possibility of change	Age range			Row Totals
	40 or under	41 to 50	Over 50	
Likely	125 (35)	141 (40)	90 (25)	356 (49)
Unlikely	125 (34)	113 (30)	133 (36)	371 (51)
Column totals	250 (34)	254 (35)	223 (31)	727

Missing values: 144

* = Percentages are in brackets

TABLE 4 (11) RESPONDENTS' VIEWS OF POSSIBILITY OF OBTAINING SP POSITION IN DIFFERENT ORGANIZATION BUT IN SAME INDUSTRY BY AGE*

Possibility of change	Age range			Row Totals
	40 or under	41 to 50	Over 50	
Likely	138 (48)	100 (39)	50 (17)	288 (42)
Unlikely	111 (27)	126 (32)	161 (40)	398 (58)
Column totals	249 (36)	226 (33)	211 (31)	686

Missing values: 185

* = Percentages are in brackets

TABLE 4 (12) RESPONDENTS' VIEWS OF CHANGING EMPLOYER WHILE REMAINING IN THE OCCUPATION OF SP BY AGE*

Possibility of change	Age range			Row Totals
	40 or under	41 to 50	Over 50	
Likely	131 (54)	76 (31)	36 (15)	243 (35)
Unlikely	123 (27)	152 (34)	176 (39)	451 (65)
Column totals	254 (37)	228 (33)	209 (30)	694

Missing values: 177

* = Percentages are in brackets

The hypothesis was that the older the respondent, the less likely they would consider changing their occupation or their employers. The inferential evidence displayed above offer confirmation of the hypothesis. In each case, the recorded data indicated that the older the respondent the less likely they were to change their employer or their role (cf Ch. 5).

4.3.7 Respondents' salaries

There has been extensive authoritative research and discussion concerned with the extent which salaries influence role performance. If there is a consensus, then it is that authorities agree that salary is very important, with culture (U.S. or European) or ideology (Marxist or functionalist) of the authority possibly influencing their approach, debate and conclusion (Eldridge, 1975; Fox, 1974; Lawler, 1971; Goldthorpe et al., 1968; Herzberg, 1966).

Opinions of the IOSH survey respondents regarding salaries are provided in Chapter 5. The median salary of the IOSH respondents was £8,369. This section considers respondents' reported industrial category by salary (Table 4 [13]) and salary by age (Table 4 [14]).

The data in Table 4 (13) can only be used inferentially. However, it is interesting to note that the 'electricity, gas and water' (63%) and the 'chemical and oil products' (59%) industrial categories provide the highest percentage figures in the highest salary group. Both industries are highly technical and as seen by reference to Table 4 (6), the majority of their SPs were appointed from the ranks of management and professional personnel. SP salaries probably reflect this source of recruitment. These inferences must be made with caution, but in the absence of any other information, they are useful indicators.

TABLE 4 (13) INDUSTRIAL LOCATION BY SALARY*

Industrial location	UP to £7000	£7001 - £8000	£8001 - £9000	Over £9000	Row Totals
Local Govt.	43 (27)	72 (36)	63 (34)	45 (15)	223 (26)
Chemical	12 (7)	16 (8)	12 (6)	58 (19)	98 (11)
Construction	27 (17)	23 (12)	20 (11)	29 (9)	99 (12)
Engineering	36 (23)	30 (15)	26 (14)	22 (7)	114 (13)
Elect. etc.	5 (3)	12 (6)	11 (6)	47 (15)	75 (9)
Others	36 (23)	45 (23)	53 (29)	107 (35)	308 (36)
Column tot's	159 (19)	195 (23)	185 (22)	308 (36)	850

Missing values = 21

* Percentages are in brackets

Another factor which influences role performance is the salary received by the individual in comparison with others in the same organization and of the same or similar ages. Many organizations recognise this by providing salary bands, with age parameters (i.e., the civil service and local government). Table 4 (14) shows age by salary reported by the IOSH respondents. Section 5.5.6 continues the discussion, placing the salaries of the IOSH respondent in perspective, by reviewing 1981 salaries - the same year as the IOSH survey - of selected professional groups.

TABLE 4 (14) AGE BY SALARY*

Age	UP to £7000	£7001 - £8000	£8001 - £9000	Over £9000	Row Totals
40 and under	55 (35)	70 (35)	65 (35)	83 (27)	273 (32)
41 to 50	46 (29)	61 (31)	64 (34)	111 (36)	282 (33)
Over 50	58 (36)	66 (33)	58 (31)	117 (38)	299 (35)
Column Total	159 (19)	197 (23)	187 (22)	311 (36)	854

Missing values: 17

* Percentages are in brackets

Table 4 (13) shows that 58% of IOSH respondents received £8000 or above. Unfortunately the data from the IOSH survey questionnaire cannot establish how SPs regarded their salaries, or how it affected their role performance. The free responses made by respondents in the questionnaire suggested that it did affect SP performance and it was therefore further investigated (cf Section 5.5.6).

4.3.8 Number of sites

The number of sites the SP has to control, inspect or holds responsibility for OHS, as well as the distance which an SP has to travel during working hours, has a very important influence on SP role performance. SPs who have a lot of territory to cover may find themselves overstretched and therefore some elements of their OHS function may be overlooked or carried out less effectively. Respondents provided their own definition of the term 'site' (cf Section 5.5.7 and Appendix A Q A13).

It was hypothesised that SPs employed in 'construction' and 'electricity, gas and water' categories would hold OHS responsibility for a large number of sites, owing to the scattered nature of the work. The remaining categories remained an unknown.

TABLE 4 (15) INDUSTRIAL CATEGORY BY NUMBER OF SITES FOR WHICH
SP HAS OHS RESPONSIBILITY*

Industrial category	Number of sites						Row
	1		2 to 5		6 or more		Total
Local Govt.	4	(2)	28	(16)	188	(39)	220 (26)
Chemical	47	(26)	30	(17)	23	(5)	100 (12)
Construction	15	(8)	7	(4)	75	(15)	97 (11)
Engineering	53	(30)	41	(23)	20	(4)	114 (15)
Elect. etc.	8	(11)	1	(1)	66	(14)	75 (9)
Others	51	(29)	71	(40)	115	(24)	237 (28)
Column Tot's.	178	(21)	178	(21)	487	(58)	843

* = Percentages are given in brackets

Missing values: 28

The data in Table 4 (15) show that SPs employed in the industrial categories electricity, gas and water (88%) and construction (75%) have OHS responsibility for six or more sites. However, the large number of local government SPs (85%) who had a large number of sites to cover was unexpected and receives further discussion in Chapter 5. Indeed, the inferential evidence suggests that the majority of SPs (79%) have OHS responsibility for several sites. Supplementary research was necessary to establish from the respondents if they felt that this factor effected their role performance (cf Section 5.5.7).

4.3.9 Extent of clerical support staff for SPs

Booth (1981) drew attention to the manner in which the effectiveness of SPs is reduced by carrying out functions which have little to do with accident prevention, even though they must be completed. The SP who has responsibility for several hundred employees, spread over many sites, finds the necessary clerical (or office) work extremely time consuming (cf Sections 5.5.7 and 5.5.8). Time spent on such work by the SP is time not spent on OHS. In addition, it is less cost effective than employing a clerk.

It was necessary to establish the number of SPs who had clerical assistance, full or part time. The number or extent of clerical support for SPs would provide evidence showing how the role was considered in organizational terms. For example, some industries may be more likely than others to provide clerical support, possibly due to an acceptance of the idea of clerical assistance (i.e., local government) or simply the recognition of the need for such assistance (i.e. the desirability of keeping records).

TABLE 4 (16) INDUSTRIAL CATEGORY BY AMOUNT OF CLERICAL ASSISTANCE*

	Amount of FT or PT clerical assistance						
Industrial category	None		one (PT or FT)		over one		Row Totals
Local Govt.	76	(29)	100	(30)	47	(18)	223 (26)
Chemical	23	(9)	38	(11)	40	(15)	101 (12)
Construction	28	(11)	38	(11)	36	(14)	102 (12)
Engineering	31	(12)	50	(15)	30	(11)	110 (13)
Elect. etc.	21	(8)	25	(7)	29	(11)	75 (9)
Others	85	(34)	82	(33)	81	(33)	248 (29)
Column Tot's	263	(31)	333	(39)	263	(31)	859

Missing values = 12

* = Percentages are given in brackets

Table 4 (16) shows that over two-thirds of the respondents reported that they had clerical assistance. It is interesting to observe that the industrial categories where the SPs had recorded that they had responsibility for many sites were also amongst those most likely to be afforded clerical assistance. The SPs employed in construction (73%), electricity, water and gas (72%) and local government (66%) are in this category.

4.3.10 Levels of management

It is well known that organizations are composed of competing interest groups. Therefore the SP is subject to pressures which

may run counter to those of OHS. Dawson et al. (1984) considered how some of these competing and sometimes conflicting pressures influenced the role performance of the SP. Dawson and her colleagues paid particular attention to the 'access (of the SP) to ... sources of power and influence', which meant the relationship of the SP with management was of prime importance (cf Section 5.8). They declared;

'A safety specialist who can establish friendly and easy relationships with line management will be immediately at an advantage.'

Dawson et al. (1984)

However, in the direct operation of role, invariably it is not the line manager to whom the SP is responsible. As Dawson et al. reported an SP declared, the SP's influence 'extends to the most important persons whose ear (they) can bend'. Indeed the HSE recommend that for effective OHS within an organization, the senior manager should take a real interest in the subject and that ideally that the SP should report directly to the most senior manager. It is therefore useful to determine how many levels of management there are between the respondent SP and the most senior manager in the employing organization. Table 4 (18) shows the levels of management by size of company (number of employees).

It may have seemed more useful to have asked the respondent the grade or job-title of the person to whom they reported. However, this would have proved pointless, since there would have been tremendous variations in the authority of these individuals, through differences between companies. Because of these factors, the question was framed as shown, concerning levels of management between the respondent and the company chief executive. A frequency count of the data is displayed in Appendix B Table B 7.

Reference to Table 4 (17) shows that 56% of respondents in undertakings with 999 or less employees recorded that they had one level of management (i.e., reported directly to the senior manager). 54% of SPs in large undertakings (over 9,999 employees) recorded that they had two or more levels of management between themselves and the senior manager. The more levels of management between respondent and senior manager could mean problems for the SP in

communication, obtaining the co-operation (or endorsement) of the senior manager and implementing OHS policies (HSE, 1981).

TABLE 4 (17) LEVELS OF MANAGEMENT BY SIZE OF COMPANY*

Levels of management	Size of company by number of employees							
	Small Under 999		Medium		Large Over 9999		Row Totals	
1	130	(56)	118	(35)	63	(24)	311	(37)
2	66	(29)	100	(30)	60	(22)	226	(27)
3	23	(10)	65	(19)	55	(21)	143	(17)
4	12	(5)	54	(16)	89	(33)	155	(19)
Column Tot's	231	(28)	374	(44)	267	(32)	835	

* = Percentages are in brackets

Missing values = 36

4.3.11 Time spent in the safety function

Preliminary research conducted for this study revealed that a large, although unknown, number of persons were employed on a part-time basis in safety functions, with the largest part of their work activity often being concerned with production (Dawson et al, 1984; Beaumont et al., 1982; CBI, 1980; BSC, 1980; Harper, 1980; Insaf, 1973). First it was necessary to find out how much of the respondents' working day was spent in the role of SP. Question B 14 asked respondents, 'What proportion of your time is spent in the safety function?'.

Table B 61, Appendix B displays the response data. 645 (74.1%) respondents recorded that they spent the whole of their working time in the role of SP. 120 (13.8%) recorded 'more than half their time' and 94 (10.8%) 'less than half-time'. Therefore, since nearly three-quarters of the respondents were full-time SPs and 87.9% spent over half their time on OHS functions, responses to questions on SP role should reflect the respondents' extensive involvement and commitment to OHS. However, there were found to be problems in making such assumptions.

The review in Section 4.3 has identified and discussed many variables which, collectively and individually, influence the respondents' perception, performance and recording of SP role. The importance of the fact that the content of the survey questionnaire actively influenced and constrained respondents' recording of the SP role cannot be over emphasised. It was recognition of this fact, largely derived from the free response comments provided at the end of the questionnaire but also through respondents telephoning the University to ask questions concerning the survey, that contributed significantly to the rejection of the IOSH survey as the main research method.

Analysis of the data derived from the mailed survey questionnaire raised so many questions - reinforced by the telephone calls - that despite the data seldom proving statistically significant, that it still was considered useful to provide extensive discussion. In addition, Section 4.3 has provided an essential background to the following section, directly concerned with the activities of the SP.

Past research into the role of the SP has frequently presented a series of fragmented snap-shots. The analysis and discussion in Section 4.3 has indicated why this has been the case. The data and discussion presented in this chapter are only applicable to those who responded to the IOSH survey questionnaire. At best, the findings discussed in this chapter indicate possible trends, they do not and must not be taken to apply to SPs generally.

Sections 4.5 and 4.6 discuss the answers to set questions - in doing so it underlines the fact that there was no possibility of obtaining a description of IOSH SP role through the use of such methods, let alone an analysis of the occupation of SP.

The analysis and discussion in this chapter should be seen as an example of formal structured research methodology failing to provide an understanding of IOSH SP role, contrasted with the likelihood that informal, less structured research methodology will be successful in not only identifying IOSH SP role, but the role of members of the occupation as a whole (cf Ch.'s 2, 3, 5, 6 and 7).

4.5.1

Introduction

Tables 4(18) to 4(28) provide the frequency count of response data concerned with seven areas of activity. These areas of activity were identified as being the areas of function and responsibility most likely to be found in the role of all SPs. Following discussions in the Department, analysis of the pre-pilot and pilot surveys and follow-up interviews, it was decided to include these to establish what level of training, involvement and what level of involvement SPs thought they should have in each of the listed areas. The objective was to establish any difference between them.

The data displayed were derived from asking a master question, (Question C2): 'What was the respondent's actual level of involvement in each of the seven coded areas listed?' The prime 'actual level of involvement' is indicated in each table by *CAPITALS*. However, anticipating future discussion, it was found that some respondents had serious problems in understanding the meaning of the questions in this section. These problems are discussed in Chapter 5.

Moreover, the response data referring to respondents' 'actual level of involvement' was only one third of a three part question. The other two master questions were 'what is the extent of formal training' (Appendix B, Tables B 85-91) and 'what extent of involvement' did the respondent think they 'should have' in each of the seven areas listed (Appendix B, Tables B 92-98)?

The result was an examination of what the SP, concerning the seven areas, did within the organization, the amount of training they had received to enable them to fulfil the role, and whether the SP respondent thought they should carry out the function. The recorded response data to the remainder of the question are selectively analysed and discussed in Section 5.6.

Many of the tables showing the 'actual level of involvement' for the whole survey response data are followed by a shortened table, displaying the recorded data from four industrial categories; local government, chemical and oil products, construction and engineering and allied trades. These categories formed the largest groups of respondents and, coincidentally, were also relatively discrete in technology (cf Woodward, 1965). Therefore they served the useful purpose of providing a comparison between industrial categories. The remaining industrial categories were not included because of the reasons detailed earlier in this study (cf Ch.'s 1 and 2).

In these shortened, industrial categorised tables, the 'actual level of involvement' is coded as follows;

Very Extensive	= 1
Extensive	= 2
Fairly Extensive	= 3
Little	= 4
Absolutely None	= 5

4.5.2 Audiometry

According to respondents in the pilot and pre-pilot surveys, audiometry is a very important area in OHS and one in which SPs were very much involved. This claimed importance was supported by the inclusion of audiometry in various OHS courses (e.g., NEBOSH). In view of these factors, it was hypothesised that a relatively high percentage of IOSH respondents would be fairly extensively concerned with various aspects of audiometry.

The raw data showed that the majority (61%) of SP respondents recorded that they had little or no involvement with audiometry (cf Section 5.6.2).

TABLE 4 (18)

EXTENT OF SP INVOLVEMENT IN AUDIOMETRY

Actual Level of Involvement	Absolute Frequency	Relative Frequency (%)
Very Extensive	64	7.3
Extensive	70	8.0
Fairly Extensive	184	21.1
<i>LITTLE</i>	<i>280</i>	<i>32.1</i>
Absolutely None	248	28.5
Missing	25	2.9

It was considered useful to investigate further and find out if there were any differences between industrial categories. Table 4 (19) shows the percentage of respondents by industrial category *restricted to four industrial groups*; local government, chemical and oil products, construction and engineering and allied trades. The reasons for this restricted approach have been detailed earlier in this study (cf Ch. 1 and 2).

TABLE 4 (19)

EXTENT OF SP INVOLVEMENT IN AUDIOMETRY BY
INDUSTRIAL CATEGORY (n= 846)

Industrial location	Level of involvement (Percentages of respondents)					Number of Respondents	
	1	2	3	4	5		
Local Govt.	12	7	18	27	35	216	(26)
Chemical	3	9	25	40	23	97	(11)
Construction	3	1	16	39	40	97	(11)
Engineering	5	12	23	31	27	111	(13)

Reference to Table 4 (20) suggests that at 20% of their response, construction SPs are least likely of the IOSH respondents displayed to have any involvement in audiometry; 40% of engineering respondents, 37% of local government and chemical respondent SPs recorded they were 'fairly involved' in audiometry testing.

4.5.3

Environmental measuring

The respondents in the pre-pilot and pilot stages of the IOSH survey questionnaire development further claimed that 'environmental measuring' was a function of the majority, if not of all SPs. Accordingly, it was included in the seven areas of investigation.

The data displayed in Table 4 (20) show that 62% of respondents recorded that they were fairly extensively, extensively or very extensively involved in environmental measuring.

TABLE 4 (20) EXTENT OF SP INVOLVEMENT IN ENVIRONMENTAL MEASURING

Actual Level of Involvement	Absolute Frequency	Relative Frequency (%)
Very Extensive	102	11.7
Extensive	147	16.9
<i>FAIRLY EXTENSIVE</i>	<i>298</i>	<i>34.2</i>
Little	189	21.7
Absolutely None	113	13.0
Missing	22	2.5

It was considered useful to inspect the responses for the four major industrial categories.

TABLE 4 (21) EXTENT OF SP INVOLVEMENT IN ENVIRONMENTAL MEASURING BY INDUSTRIAL CATEGORY (n = 841)

	Level of involvement						
Industrial location	(Percentages of respondents)					Number of Respondents	
	1	2	3	4	5		
Local Govt.	13	14	28	18	27	217	(26)
Chemical	9	29	34	17	10	99	(12)
Construction	14	8	31	30	16	97	(11)
Engineering	9	19	49	19	4	112	(13)

Inspection of the displayed data in Table 4 (21) shows a fairly even spread among the four industrial categories. The possible exception being 'engineering', with only 4% of respondents claiming absolutely no involvement in environmental measuring.

4.5.4 Job design or redesign

Davis and Taylor (1972), in their important collection of papers offer a geneology of job design or redesign. They commence in 1810 with Smith and Babbage. However, there is sufficient evidence to suggest that they are wrong, for job design and redesign has existed as a scientific exercise for many years, possibly even centuries before 1810.

In modern industrial terms, Adam Smith's 1776 seminal study, *The Wealth of Nations*, contained many references to job design; in organizational terms, the 16th century work by Machiavelli, *'The Prince'*, can be described as a treatise concerned with job design (that of Princes). In both treatises, as of today, the key reason for job design and redesign, is to create a pattern of work that increases efficiency and production.

The reason for the involvement of the SP in job design or redesign is to contribute to that improvement in efficiency and production. However, SPs are (or should be) concerned with the safety aspects of the task, giving that aspect at least equal priority to that of increased efficiency and production (Robens, 1972a). In a review of the safety practitioner's role and educational needs, completed several years after the IOSH survey questionnaire, Booth observed;

'The principal change (in SP role) which might be foreseen is that a greater proportion of safety practitioners will undertake the more advanced work now carried out only by a minority of safety practitioners. Thus safety practitioners are likely to be, or should be, involved at the design and planning stages of work activities.'

Booth (1987)

In 1981 the SPs who were involved in the pre-pilot and pilot stages of the IOSH survey questionnaire had already noted the importance of

SPs becoming increasingly concerned with job design and redesign as part of their function. Q C2 included a question on the subject, Table 4 (22) displays the responses data.

TABLE 4 (22) EXTENT OF SP INVOLVEMENT IN JOB DESIGN OR REDESIGN

Actual Level of Involvement	Absolute Frequency	Relative Frequency (%)
Very Extensive	95	10.9
Extensive	135	15.5
<i>FAIRLY EXTENSIVE</i>	<i>288</i>	<i>33.1</i>
Little	201	23.1
Absolutely None	131	15.0
Missing	21	2.4

The respondents to the 1981 IOSH survey recorded that 69% were fairly extensively, extensively or very extensively involved in job design or redesign (cf Section 5.6.4). It was considered useful to consider the four major industrial category responses separately.

TABLE 4 (23) EXTENT OF INVOLVEMENT IN JOB DESIGN OR REDESIGN BY INDUSTRIAL CATEGORY (n = 842)

	Level of involvement						
Industrial location	(Percentages of respondents)					Number of Respondents	
	1	2	3	4	5		
Local Govt.	14	13	29	19	24	219	(26)
Chemical	9	23	32	24	11	99	(12)
Construction	4	4	39	34	19	97	(12)
Engineering	11	21	43	18	8	111	(13)

Table 4 (23) shows that the respondent SPs most likely to be involved in job design or redesign were those employed in engineering (75%); next highest number of IOSH SPs involved in job design or redesign were those employed in the chemical industry (64%).

4.5.5 Interpreting epidemiological information

The inclusion of this component of SP role followed the pre-pilot and pilot surveys and discussions held with those concerned with IOSH training courses. The consensus was that IOSH members should have some involvement in this area of OHS (cf Section 4.5.1). Table 4 (24) displays the survey data.

TABLE 4 (24) EXTENT OF SP INVOLVEMENT IN INTERPRETING EPIDEMIOLOGICAL INFORMATION

Actual Level of Involvement	Absolute Frequency	Relative Frequency (%)
Very Extensive	40	4.6
Extensive	54	6.2
Fairly Extensive	150	17.2
Little	258	29.6
<i>ABSOLUTELY NONE</i>	332	38.1
Missing	21	2.4

The displayed data show that 68% of IOSH survey respondents had little or absolutely no involvement in interpreting epidemiological information. There is inferential evidence that this percentage is unlikely to have been due to the level of academic qualifications of the respondents in the IOSH survey conducted for this study.

Waterhouse et al. (1984) conducted a survey (n = 308) analysed and discussed by Dabbs (1986) (Sutton, who was involved in the survey which was part of an MSc. project, did not complete his higher degree). The survey had a response rate of 12% and Dabbs

suggested the sample might be '... over-representative of the more academically qualified members of IOSH'. Nevertheless, Dabbs found that 79.6% of the IOSH respondents stated they 'never' had anything to do with epidemiology and 13.4% declared they were involved 'once a year' (cf Section 5.6.5).

4.5.6 Employer's liability claims

This area of inquiry was primarily included for personal reasons and partly due to references in Grayson (1981), Armstrong and Nichols (1973) and Kinnersley (1973). The two coincided and despite rebuttals from some respondents in the pre-pilot and pilot surveys, the question was included in the main IOSH survey questionnaire.

The personal reason came from experiences during several years as a senior manager with Standard Telephones and Cables (1960-1970) and also from a period as a shopfloor worker (Post Office Telephones), a safety representative, full-time branch and regional (unpaid) trade union official or otherwise involved with Trade Unions. This gave me a perspective of SPs from the position of senior manager and from the shopfloor. In some places of employment, as much as several times a month, there appeared to be a conflict between the role of the company SP as an independent 'OHS expert' (as they often claimed) and as an expert who only represented and advised management (which was never claimed).

This role or interest conflict was particularly evident following industrial accidents. Invariably the company SP advised management or even actually completed DHSS forms BI 76 or BI 77 (on which biased reporting could actually prevent an industrially injured employee obtaining DHSS Industrial Injury Compensation) or, more widely recognised by the authorities cited, advising company solicitors on 'Common Law' claims.

In both cases, it can be seen that the SP involved would cease to be an independent expert, and become purely an expert employed by the employer and concerned with reducing employers' liability. In short, a classic client/employer clash, with the SP clearly seen by

trade union officials and the workforce in such circumstances as an expert whose prime function was employer protection, as opposed to accident prevention, and thereby lose credibility (cf Section 5.6.6, 5.7 and 5.8).

The recorded response in Table 4 (25) shows that 63.5% of respondents were fairly extensively (22%) to very extensively (21%) involved in employer's liability claims. This can be compared with the 64% of IOSH respondents in Waterhouse et al. (1984) survey who reported that they were involved: annually (28%), quarterly (20%), monthly (13%) or weekly (3%), in 'preparing reports for prosecution/compensation cases' (Booth, 1987; Dabbs, 1986).

TABLE 4 (25) EXTENT OF SP INVOLVEMENT IN EMPLOYERS' LIABILITY CLAIMS

Actual Level of Involvement	Absolute Frequency	Relative Frequency (%)
Very Extensive	181	20.8
Extensive	172	19.7
<i>FAIRLY EXTENSIVE</i>	<i>192</i>	<i>22.0</i>
Little	166	19.1
Absolutely None	142	16.3
Missing	18	2.1

It was considered useful to see if the role of SPs (in dealing with employers' liability claims) varied between industrial categories. In view of the reported injury statistics from various industrial categories, wherein construction is consistently among the highest group, it was hypothesised that construction SPs would have the most involvement in employer's liability claims procedure.

Inspection of Table 4 (26) shows that compared with those in other categories SPs in the engineering category (80%) have significantly more involvement in Employer's Liability Claims procedure. The hypothesis was not supported by the strictly inferential evidence.

It is useful to speculate on the reasons for greater involvement of engineering and allied trades SPs than those employed in construction in employer's liability claims procedure. It could be that the greater trade union representation in the engineering trades compared with construction, leads to more claims against employers (in both 'common law' and through the DHSS industrial injuries social security system). It was found that respondents did not separate 'common law' claims from DHSS claims (cf Section 5.6.6, 5.8.4, 5.8.5, 7.3.16, 7.4.4). Further research would be useful.

TABLE 4 (26) EXTENT OF SP INVOLVEMENT IN EMPLOYER'S LIABILITY CLAIMS BY INDUSTRIAL ACTIVITY (n = 843)

Industrial location	Level of involvement (percentages of respondents)					Number of respondents	
	1	2	3	4	5		
Local Govt.	19	13	26	20	22	219	(26)
Chemical	17	23	24	20	15	99	(12)
Construction	15	28	25	18	13	99	(12)
Engineering	43	23	14	11	9	112	(13)

4.5.7 Product liability

When the survey questionnaire was compiled in late 1980 and early 1981 there was considerable discussion on the responsibilities of companies for 'product liability'. In SP journals at that time it was considered likely that the SP would be involved in the assessment of product liability. Therefore this question was included to determine whether the respondents had any involvement in product liability.

TABLE 4 (27)

EXTENT OF SP INVOLVEMENT IN PRODUCT LIABILITY

Actual Level of Involvement	Absolute Frequency	Relative Frequency (%)
Very Extensive	45	5.2
Extensive	63	7.2
Fairly Extensive	143	17.1
Little	228	26.2
<i>ABSOLUTELY NONE</i>	<i>350</i>	<i>40.2</i>
Missing	36	4.1

Reference to Table 4 (27) shows that 46.4% of the IOSH respondents recorded that they had little or no involvement in product liability.

4.5.8 Security

According to Fletcher and Douglas (1971), Total Loss Control (TLC) 'is a programme designed to reduce or eliminate all incidents which downgrade the system'. The concept and application of TLC was stated by its proponents to be the 'future role of the safety professional' (Tye, 1971). Others considered TLC, particularly if carelessly applied, to be deficient in consideration of the importance of human factors in effective OHS (Hale, 1979).

In 1981 there was much debate among the membership of IOSH concerning TLC. Therefore a specific question on the subject was included in the IOSH survey questionnaire (Q A 17).

It was found that 26% of the respondents reported that Loss Control techniques were used in their organization. Security, according to Fletcher and Douglas, formed an indivisible component of TLC technique. Thus a question on security was included in this section.

Table 4 (28) displays the responses.

TABLE 4 (28)

SECURITY AND THE SP

Actual Level of Involvement	Absolute Frequency	Relative Frequency (%)
Very Extensive	80	9.2
Extensive	72	8.3
Fairly Extensive	113	13.0
Little	225	25.8
<i>ABSOLUTELY NONE</i>	353	40.5
Missing	28	3.2

The recorded data shows that just over 30% of respondents were fairly extensively (13%), extensively (8%) or very extensively (9%) involved with security. This relates fairly closely with the data derived from Q A 17.

4.6 Respondents' actual level of responsibility in specified OHS areas

4.6.1 Introduction

Tables 4 (29) to 4 (39) display the response to the questions with the common core of 'What is your actual level of responsibility in specified OHS areas?' In the previous section the term was 'involvement' and it is questionable if many of the respondents noted the distinction (cf Ch. 5).

The areas were selected after analysis of the pre-pilot and pilot survey questionnaires and follow up interviews. Therefore, each of the eleven elements of role was selected by the IOSH pre-pilot and pilot respondents and only then applied to the main sample.

In some cases it will be found that the questions in this section repeat questions, using different wording, provided in section 4.4. This is partly to provide a cross-check on responses but also, as in the case of 'Employer's Liability', to use a term more generally or commonly used (i.e., 'Common Law Claims').

There were four alternative answers provided for the respondent, from which they had to select one. The alternatives were 'act personally', 'collaborate', 'provide advice' and 'no responsibility'. Only four were provided to prevent the respondent taking the middle option, often considered to be the 'safe' option (Oppenheim, 1966).

4.6.2 Establishing OHS priorities

An SP is supposedly employed to prevent accidents and to improve OHS (Robens, 1972b). However, this has to be achieved within a budget, which in turn demands the establishment of OHS priorities. The role of establishing OHS priorities may not be universal among SP respondents. Table 4 (29) displays the recorded responses to the question, "What is your actual level of responsibility" in establishing health and safety priorities?

Reference to Table 4 (29) shows that 96% of respondents held some level of responsibility for establishing health and safety priorities. Of that number, 43% acted personally and 36% collaborated. However, there was no way of ascertaining which respondents were in charge of a safety team and who therefore collaborated with staff, rather than (for example, in the case of single SP) had sole responsibility. Similar comments can be made concerning the 2% who recorded that they had no responsibility. Therefore the findings must be treated with caution.

TABLE 4 (29) ESTABLISHING HEALTH AND SAFETY PRIORITIES

Actual Level of Responsibility	Absolute Frequency	Relative Frequency (%)
<i>ACT PERSONALLY</i>	376	43.2
Collaborate	317	36.4
Provide advice	140	16.1
No responsibility	21	2.4
Missing	17	2.0

Selwyn (1982) cites from the HASAWA 1974 the section which places a duty on all employers who employ 5 or more employees;

'to prepare and revise as often as appropriate a written statement of his general policy with respect to health and safety at work of all his employees ... '

S. 2 (3) 1974 HASAWA

Following the citation, Selwyn provides some advice for his readers, suggesting that it would be 'sound procedure' for an employer to consult various authorities inside and outside the organization (i.e., trade union representatives and the HSE). However, an omission from his list of those who should be consulted is the SP (cf Section 6.3).

Table 4 (30) displays the recorded response data of the IOSH respondents' responsibility in reviewing and updating safety policies (cf Section 5.7).

TABLE 4 (30) REVIEWING AND UPDATING HEALTH AND SAFETY POLICIES

Actual Level of Responsibility	Absolute Frequency	Relative Frequency (%)
<i>ACT PERSONALLY</i>	359	41.2
Collaborate	350	40.2
Provide advice	118	13.5
No responsibility	30	3.4
Missing	14	1.6

Although 95% of respondents recorded that they had some responsibility in reviewing and updating their employer's OHS policies, it is the over 3% of respondents who recorded that they had 'no responsibility' that is more interesting. Further research was conducted and it is discussed in Chapter 5.

4.6.4

Reviewing OHS programmes

This question was intended to obtain information concerning respondents' responsibility in reviewing the employers' general, *non-safety policy* OHS programmes. However, it was found that respondents treated it as an alternative wording of the previous question (cf Section 4.6.3), hence the very similar disposition of the recorded data.

TABLE 4 (31)

REVIEWING HEALTH AND SAFETY PROGRAMMES

Actual Level of Responsibility	Absolute Frequency	Relative Frequency (%)
Act personally	347	39.8
<i>COLLABORATE</i>	358	41.1
Provide advice	117	13.4
No responsibility	24	2.8
Missing	25	2.9

4.6.5

Common Law Claims

The inclusion of a question concerning 'Common Law Claims' was to provide a check and cross reference to the recorded data and extensive discussion accompanying Table 4 (25).

TABLE 4 (32)

COMMON LAW CLAIMS

Actual Level of Responsibility	Absolute Frequency	Relative Frequency (%)
Act personally	114	13.1
Collaborate	231	26.5
<i>PROVIDE ADVICE</i>	298	34.2
<i>No responsibility</i>	198	22.7
<i>Missing</i>	30	3.4

74% of respondents recorded that, at a minimum, they provided advice to their employers in the case of 'Common Law Claims'. This should be compared with the 64% of respondents recording their 'involvement' in Employer's Liability Claims (cf Section 4.6.6).

Those SPs whose role includes investigating accidents from the standpoint of an employee, as opposed to investigating accidents to ascertain the facts, creates serious problems with respect to OHS and accident prevention. Anticipating future discussion, these problems come from the internal, seldom unrecognised, conflict within the SP. They were found to be uncertain of prime client or purpose and external conflict, the causes of which may not be recognised - which is highly relevant (cf Section 7.17). These conflicts arise between the SP and the workforce, because the SP involved in Common Law Claims lacks identity and credibility as an independent OHS expert in the workplace (cf Sections 4.5.6 and 5.8).

4.6.6 Monitoring OHS levels

This question was intended to be broadly similar to that on 'environmental measuring' (cf Section 4.5.3). Table 4 (33) displays the recorded data.

TABLE 4 (33) MONITORING HEALTH AND SAFETY LEVELS

Actual Level of Responsibility	Absolute Frequency	Relative Frequency (%)
<i>ACT PERSONALLY</i>	498	57.2
Collaborate	228	26.2
Provide advice	110	12.6
No responsibility	13	1.5
Missing	22	2.5

96% of respondents recorded that they had some responsibility in monitoring health and safety levels. The 1.5% who recorded they had 'no responsibility' in this area should be contrasted with the

13% who recorded they had 'absolutely no' involvement in environmental measuring (cf Section 4.6.3 and 5.6.3).

4.6.7 Selection of personal protection equipment

The term personal protection equipment (PPE) covers a very wide range of equipment, from ear plugs to full air flow suits. Virtually every sector of industry uses some form of PPE. Therefore it was hypothesised that the selection of PPE was a function in which all SPs would have some degree of responsibility or involvement (cf Section 5.8).

TABLE 4 (34) SELECTION OF PERSONAL PROTECTION EQUIPMENT

Actual Level of Responsibility	Absolute Frequency	Relative Frequency (%)
Act personally	282	32.4
<i>COLLABORATE</i>	296	34.0
Provide advice	248	28.5
No responsibility	23	2.6
Missing	22	2.5

The data displayed in Table 4 (34) show that just under 93% of respondents recorded some responsibility for selection of PPE and offered some inferential support for the hypothesis stated in the opening paragraph.

4.6.8 Hazard Operability (HAZOP) studies

The inclusion of this question highlighted a major problem in the compilation and use of survey questionnaires. There was general agreement amongst respondents in the pre-pilot and pilot surveys questionnaires (supported by authorities such as Kletz, 1979) that HAZOP is a virtually essential tool for SPs and was widely known - in simple terms HAZOP is a procedure whereby all possible

accident contributing factors can be discovered and eliminated through hazard analysis.

It is worthy of comment that the SPs who formed the majority of those in the pre-pilot and pilot survey samples were among the more highly trained and educated (largely in the Department at Aston University).

This fact possibly had an influence on their insistence that Hazard Operability Studies were well known and a technique widely used, since training in this technique was almost invariably an important part of OHS courses in the Department.

Waterhouse et al. (1984) IOSH survey also included a question on HAZOP and the recorded data showed that 40% of IOSH respondents were never involved in HAZOP studies. However, there was no question in Waterhouse et al.'s survey questionnaire to establish whether the respondents knew what HAZOP was or how to conduct a HAZOP study. Booth (1987) and Dabbs (1986) in their review of the 1984 survey did not make any comment to the possibility that respondents may not know what HAZOP was.

In the survey questionnaire for this study, if they did not know what HAZOP was, the respondent was advised to leave the coded answer blank.

TABLE 4 (35) HAZOP STUDIES

Actual Level of Responsibility	Absolute Frequency	Relative Frequency (%)
Act personally	44	5.1
Collaborate	89	10.2
Provide advice	83	9.5
No responsibility	86	9.9
MISSING	569	65.3

The overwhelming *recorded response* was in the missing values section - 569 (65%) respondents left the coded answer blank. The average percentage of 'recorded' missing value response throughout the series of questions in this section was just under 21%. Therefore the inferential evidence strongly suggests that the majority of respondents did not know anything about HAZOP (cf Section 5.7).

4.6.9 Solving technical problems

The philosophy of Robens (1972a) was that all should be concerned and had a responsibility for OHS in the workplace. In the report of submitted evidence, many contributors to Robens made reference to the importance of obtaining professional OHS advice during the resolving of technical problems (1972b).

It was for these reasons, as well following extensive comments made by the pre-pilot and pilot surveys during discussion and interview, that a question on this subject was included in the IOSH survey questionnaire to establish the extent of the SP respondents' responsibility for solving technical problems. Table 4 (36) displays the recorded response data.

TABLE 4 (36) SOLVING TECHNICAL PROBLEMS

Actual Level of Responsibility	Absolute Frequency	Relative Frequency (%)
Act personally	154	17.7
COLLABORATE	412	47.3
Provide advice	251	23.8
No responsibility	36	4.1
Missing	18	2.1

The 89% of respondents who recorded that they had at least some responsibility for solving technical problems provides inferential

support for the statements made in many submissions to Robens (1972b).

4.6.10 Selection of machinery safeguards

This was another area of SP responsibilities which was found to be important during the pre-pilot and pilot surveys. However, reference to the correspondence columns of the safety press shows considerable interest in the subject of selection of machinery safeguards or machine guarding.

TABLE 4 (37) SELECTION OF MACHINERY SAFEGUARDS

Actual Level of Responsibility	Absolute Frequency	Relative Frequency (%)
Act personally	159	18.3
<i>COLLABORATE</i>	353	40.5
Provide advice	295	33.9
No responsibility	43	4.9
Missing	21	2.4

Table 4 (37) shows that 74.4% of respondents recorded that they shared responsibility in the selection of machinery safeguards, while 18.3% acted personally.

4.6.11 OHS aspects of new machinery, prior to ordering and during commissioning

4.6.11.1 Introduction

During discussions with the pre-pilot and pilot respondents, several emphasised the importance of SPs being involved with the OHS aspects of new machinery, prior to ordering and during commissioning. This section analyses the data derived from two

separate but complimentary questions; both concerned with new equipment, plant or machinery.

The point was strongly made by respondents, particularly by those who worked for organizations that had a strong trade union presence, that some safety representatives made a practice of demanding information about proposed or installed new machinery and equipment. They had found it necessary, on those grounds alone (and they were the more obvious ones) for SPs to become extensively involved in the discussions leading to purchase as well as to the commissioning of new equipment, plant and machinery (cf Section 5.7).

4.6.11.2 OHS aspects of new machinery prior to ordering

The recorded data shown in Table 4 (38) show that 82.9% of respondents recorded that they were involved in OHS aspects of new machinery prior to commissioning.

Table 4 (38) OHS ASPECTS OF NEW MACHINERY PRIOR TO ORDERING

Actual Level of Responsibility	Absolute Frequency	Relative Frequency (%)
Act personally	123	14.1
Collaborate	260	29.9
PROVIDE ADVICE	339	38.9
No responsibility	127	14.6
Missing	22	2.5

4.6.11.3 OHS aspects of new equipment during commissioning

Table 4 (39) shows that 89.2% of respondents reported that they provided advice, collaborated or acted personally in determining the OHS aspects of new equipment during commissioning.

TABLE 4 (39) HEALTH AND SAFETY ASPECTS OF NEW EQUIPMENT DURING COMMISSIONING

Actual Level of Responsibility	Absolute Frequency	Relative Frequency (%)
Act personally	142	16.3
<i>COLLABORATE</i>	343	39.4
<i>Provide advice</i>	292	33.5
<i>No responsibility</i>	77	8.8
<i>Missing</i>	17	2.0

4.7 The IOSH safety practitioner

4.7.1 Introduction

The derived data from the IOSH survey questionnaire proved extremely valuable. However, the major value of this study did not come from providing a seminal description of IOSH SP role, function and responsibilities (cf Section 8.2). It came from showing why (and how) mailed survey questionnaires invariably had been inadequate and often concluded by declaring that it was impossible to determine SP role.

Nevertheless, it was through the use of a survey questionnaire that this problem was recognised. It is possible that the best which can be achieved through the use of survey questionnaires into the role of the SP is that each succeeding researcher learns from the mistakes of earlier ones. *However, this learning process can only take place if mistakes and errors are listed or acknowledged;* according to Shipman (1972) and Schatzman & Strauss (1973), this admission of mistakes, failure or errors is seldom done (or acceptable) in the academic works (cf Bell and Newby, 1977; Shipman, 1972).

The occupation of SP is one where those who follow it are isolated in every sense of the term, they are very difficult to contact. This means the majority of surveys are either professional

association based (Harper, 1980; Grayham 1981; Dabbs, 1986) or industry based (Shipp et al., 1965; Simms, 1980). As a consequence, the role description or analysis is almost invariably professional association or industry based and therefore may be biased. However, as the findings in this chapter suggest, sometimes the role description is both biased within a professional association and by particular industrial setting or requirements.

An added complicating factor is that SP role, functions and responsibilities may be changing. Partly through legislative changes, partly through changes within the occupation, particularly through the efforts of the professional associations in raising standards and levels of OHS education and training - both for SPs and managers (cf Ch.'s 5, 6, 7 and 8; Appendices F, G and H).

These factors should be borne in mind when considering the following discussion.

4.7.2 The IOSH survey questionnaire: Discussion and summary of findings

The whole of the following discussion must be set against the fact that very few of the analyses were found to be statistically significant. Nevertheless, the inferential evidence was quite powerful and showed that it was influencing variables, many outside the control of the SP respondent, which determined the role and role performance of the IOSH SP. Some of these variables have received discussion in this chapter, others have merely been identified or had received brief reference, with the discussion in Chapters 5, 6 and 7 further developing the theme.

40% reported having no formal academic qualifications (cf Section 4.3.4).

By reference to authoritative works and the findings in this study, the age of the respondent, their work background, length of work experience and number of years in the occupation of SP, all play a significant part in the manner in which they view their role or carry out their function (cf Sections 4.3.3, 4.3.4 and 4.3.5).

The inferential findings which possibly best exemplified the influence of age on respondents' perspective of their career was presented in Section 4.3.6. The influence of age on perspective of career was shown in the displayed data to be quite significant.

However, at this stage of the discussion it is only possible to declare that the inferential evidence strongly suggests that there may be an influence on role and role performance arising from the variables identified and discussed in this chapter (cf Ch. 5 and 6).

The discussion in this chapter highlights responses derived from certain questions related to the role and functions of the IOSH SP. However, these responses which, when analysed, often served to identify divisions within the membership of IOSH and within the role of the IOSH SP (cf Section 4.3)

An example of this division was found in the contrast between the findings from the pre-pilot and pilot survey questionnaires (together with follow-up interviews) and the findings recorded from the main survey questionnaire. The pre-pilot and pilot respondents were helpful and very emphatic when contributing to a list of SP functions, which were included in the main survey questionnaire. One of those SP functions was HAZOP, a technique (according to the pre-pilot and pilot respondents) which was vital to effective SP role and function.

It was recognised during the pre-pilot and pilot surveys that the respondents in those surveys were highly qualified. Earlier studies into the occupation of SP had suggested that the educational achievement level of SPs was not high. Hence, when the question on HAZOP was included in the main questionnaire an option was included inviting the respondent to leave the coded response blank if they did not have any knowledge of the technique.

The technique which the respondents in the pre-pilot and pilot surveys (and many of the staff in the Department) had claimed was a useful technique, resulted in 63.5% of respondents (569) leaving the coded response blank, suggesting that they had no knowledge of HAZOP.

This offers some confirmation of the danger in depending on the more highly qualified SPs (and experts) knowing or appreciating what the majority of the 'rank and file' SPs actually 'do'. It also suggests that there are dangers in depending purely on the analysis of data from survey questionnaires into the role of the SP, without recognising the limitations of this particular method of data collection and taking steps to rectify them, whenever appropriate or possible.

Finally and most importantly, this example suggests that there are several types or levels of SP role within the membership, not one, universal IOSH SP role (cf Ch.'s 5, 6 and 7).

It is useful to summarise the main points of the discussion, none of which provides a description of SP role (cf Ch.'s 5, 6 and Section 8.2).

First, to obtain details or information of SP role, a research methodology totally different from a mailed survey questionnaire is essential.

Second, there was strong inferential evidence that there were considerable divisions within the membership of IOSH. These divisions were largely founded in age and education differences, the two apparently often being closely associated.

Third, many IOSH SPs were concerned, even very sensitive, about their perceived inadequate training and education in OHS. This surfaced not only in the free response comments, but in the demand for OHS training courses where 631 respondents expressed their wish to complete OHS courses (cf Tables B 46 and B 47, Appendix B).

The respondents felt that their role performance suffered as a consequence of their perceived OHS inadequacies, but they could do nothing or little about obtaining further education or training.

Therefore, the statement made at the commencement of this chapter can be repeated. The finding from the IOSH survey response data confirmed that "there are at present no generally agreed up to date definitions of the roles and functions of safety practitioners".

The conclusion must be that the IOSH survey questionnaire and data discussed in this chapter (and the whole study) were extremely successful. However, it was successful even although it did not achieve its objective. It was successful because during the analysis many interesting questions were identified, but few answers.

It did not succeed in establishing the role, function and responsibilities of the IOSH SP. There appeared to be several interfering variables on the SP role, over and above SPs individual differences. These interfering variables could not be determined through the use of mailed survey questionnaires.

The need for direct contact with respondents became apparent and a revised research methodology necessary (cf Ch. 2 and 3).

* * * * *

*"What is right but what we prove to be
right? And what is truth but what we
believe to be truth"*

Georgias the Sophist

CHAPTER 5 THE ROLE OF THE IOSH SP IN THE WORKPLACE: TOGETHER WITH A DESCRIPTION OF MAJOR INFLUENCING FACTORS

5.1 Introduction

This chapter presents a qualitative evaluation of the workplace role of the IOSH SP respondent. It describes the SP role by reference to attitudes expressed by the respondents. The discussion is largely based upon the findings from the unstructured and informal methods of research. These were conducted following recognition that the data derived from the mailed IOSH survey questionnaire were inadequate for a comprehensive appraisal of respondents views (cf Section 1.5; Ch.s 2 and 3).

Throughout this chapter and the remainder of the study, reference is made to findings from other studies and to various authoritative source material. The analysis and discussion uses comments from IOSH respondents, data derived from the Aston/Works Management Survey (1982) and other sources (cf Ch. 6; Appendices C and D). The concluding section of this chapter presents the findings from

participant observation studies conducted for this project, identifies a core role for SP respondents and act as a bridge to Chapter 6, which is concerned with the occupational development of the SP.

The framework for this chapter is largely provided by Chapter 4, while the substance is dictated by the IOSH respondents - who actually determined the scope and range of the largely qualitative data and discussion. The result is a blend of the structured with the unstructured, the formal with the informal, the whole presenting a qualitative perspective of the IOSH SP role.

The discussion concentrates on describing the role of the IOSH respondent SPs at workplace level. It is unavoidable that the discussion in this chapter has implications for the occupational development of the SP and at times it overlaps with sections of the following chapter. For example, discussion on education and age should consider how these factors affect individual career development; this in turn has implications for occupational development because it takes account of factors external to the workplace. However, these comments are kept to a minimum.

The commencing discussion identifies some of the very important influencing variables on SP role. A substantial amount of the discussion considers the influence of the employer and manager in determining SP role in the workplace (cf Sections 4.3 and 5.4). The evidence suggests that the limited knowledge and understanding of OHS by many managers (and employers) places considerable constraints on the role and performance of the SP.

Anticipating future discussion, even after analysing the additional data and information, the findings show why it proves very difficult, if not impossible, to determine the role of the SP in the workplace. A further valuable contribution of the study is in identifying many of the problems in the development of the occupation of SP (Ch. 6) and strategies for the future (Ch. 7).

There is a substantial body of opinion which considers that SPs are rarely required or that they are (or may be) even unnecessary (cf Wyles, 1982; Bridden, 1981). During an interview for this study with a representative of the CBI it was stated that they (the CBI) supported the concept of OHS being a function of line management. In the ideal the CBI thought it should be possible to;

' ... integrate safety and health into the line managers' functions and designate a senior manager to have overall responsibility.'

CBI (1980)

The CBI spokesman added;

' ... there must be no statutory requirement for industry to appoint a 'Safety Adviser'. It must be left to individual company's to decide what best suits their requirements.'

CBI (ibid)

Reference to Robens (1972b) showed that many of those who offered evidence to the Committee expressed similar views, especially employers' associations, such as the CBI. However, a similar opinion is sometimes propounded in journals, even occasionally by in-post SPs.

Wyles (1982), a staff journalist of *Works Management* stated;

' ... I am tempted to think that not having a safety officer at all is not a bad thing, so long as alternative arrangements are made - for example if line managers and supervisors are fully trained in health and safety matters.'

Wyles (1982)

An example of an in-post SP promoting a similar view was a 'Safety Manager' respondent to the Insaf Survey (1973) who declared;

'The safety function is not fully effective when separated from production and training. It must be a responsibility of line management, and so a professional safety man is an anomaly.'

Industrial Safety (1973b)

The CBI declared that the appointment of SPs should be left to individual companies; Wyles followed the CBI approach but added an important caveat, suggesting that *provided* managers were 'fully trained' in OHS, then an SP may not be required; the anonymous SP respondent did not identify the need for management to receive training in OHS, while dismissing the need for SPs. However, this was found not to be unusual, several otherwise apparently authoritative papers, reports or articles failed to identify the need for management to receive OHS training, while dismissing the need for an SP (cf DOE, 1973; Robens, 1972b).

The contrary view that SPs are needed was expressed in the classic and frequently cited quotation from Robens (1972a). Despite the apparent approving tone of the quotation, according to Atherley and Hale (1975), the Robens Committee's opinion of SPs was 'generally lukewarm' (cf Section 7.4.4). The oft quoted reference to 'a need' for SPs was actually included in a summary of the views of those who submitted evidence to Robens. Robens reported;

'... there is a need for the specialist safety adviser or safety officer standing in the same relationship to line management as do other specialists such as personnel officers.'

Robens (1972a)

Bridden (1981) also identified a need for a safety specialist, he considered that such an appointment would contribute to a resolution of management deficiencies in OHS. However, he added an important coda, declaring;

'It is evident that those in control of industry cannot be relied upon to maintain proper standards of health and safety (many examples can be quoted of failures) also that specialists are needed to give advice. It is also provable that this is mainly due to inadequate knowledge, skills and possibly incorrect attitudes, and the main improvement will come through education and training programmes for managers.'

Bridden (1981)

Therefore, according to Bridden, OHS standards in industry are poor, because managers possess inadequate OHS knowledge and skills and incorrect attitudes towards OHS (cf Nichols and Armstrong, 1973). Management concentrate on acquiring knowledge or understanding of

manufacturing or production skills, and are less concerned with other areas of knowledge because they have access to experts in various fields (Goodlad, 1984; Handy, 1981; Torrington and Chapman, 1979).

Bridden's conclusion was in line with that of the majority of authorities cited throughout this study, who generally concluded that OHS specialists are needed to provide advice to managers.

Atherley (1975) noted that there was 'insufficient information to do more than speculate' about the questions that affected people who specialised in safety. Atherley referred to a study by Ackerman (1973) conducted in the U.S.A. (cf Section 5.3). Atherley concluded the section reviewing how Ackerman saw the use of specialists by large companies as follows;

' ... the specialists role seems essential ... He crystallises the issues for top management by sifting large quantities of information - often of a very technical nature. He identifies future needs. His continuing role is to apply his skills to successive problems. In Ackerman's words he becomes a multipurpose change agent.'

(Emphasis added) (Atherley (1975))

Atherley's review included reference by Ackerman to the need for the 'safety specialist' to be highly trained and qualified, and that the safety specialist could be a safety adviser. As the title of Atherley's paper indicates, *Educational and professional needs in Occupational Health and Safety*, Atherley strongly advocated management and employers to appreciate the need for OHS specialists to receive extensive OHS ongoing training, with recognised qualifications and knowledge updated regularly. However, as has been shown above, even SPs did not always appreciate or acknowledge the need for OHS education, some identifying the prime need to be experience (cf Grayham, 1981b; 1982b).

The view of senior representatives of the professional associations was most emphatic, they considered personnel appointed as SP were ineffective, if not dangerous (for their employers), without adequate OHS training. Similar fears were expressed by those who otherwise seemed to have doubts about the need for SPs. Wyles

(1982), who earlier was cited as questioning the need for SPs, nevertheless concluded his article;

Managers *must* insist on qualified safety support. After all, they too will end up in the dock if anything goes wrong.'

(Original emphasis) Wyles (1982)

However, Wyles referred to 'qualified safety support', not specifying the source or if an OHS specialist was required. In fact it was found there were several schools of thought concerning the source of 'safety support'. Some authorities made a general reference to the need for persons qualified in OHS, such as Wyles and Bridden, others referred to an OHS specialist (e.g. Ackerman), and there were those who specifically identified the need for an SP, typified by Hooper. Finally there were those who made a general approach in identifying a need for trained OHS personnel, specifying according to audience and perceived organizational requirements (e.g. Atherley, Beaumont et al. and Hale).

Indeed, as can be seen by reference to all the sources cited in this study, the major deciding factor as to the type of OHS specialist required *appeared* to have been source. The consequence was that the divisions between identifying the need for an OHS specialist and the need for an SP were found to lead to misunderstanding. During the course of the research for this study it was found that members of each specialist group considered the term 'OHS specialist' referred almost exclusively to them. Hygienists, SPs and medical practitioners (doctors) each considered that they were *the* OHS specialist receiving reference.

Quite specifically, the inferential evidence suggested that the type of OHS specialist thought to be needed often depended on the profession of the respondent, 'authority' or source of communication. For example, the article by Wyles appeared in *Works Management* - management, if adequately trained were considered suitable to carry out the functions of SP; the CBI (an employers organization), suggested employers knew best, that managers must hold responsibility for OHS, concluding that SPs were useful under certain circumstances, wholly subject to managerial discretion; medical practitioners considered they would be the most effective

and needed safety specialist (cf Grayham, 1984) ; IOSH respondents proposed that members of their occupational group were the most effective in ensuring high standards of OHS.

Whichever OHS specialist is employed by management, it was generally agreed by the authorities cited in this study, that their prime function would be to provide advice for management (not the specialist) to act upon. The SP is only one of the many specialists available for management to consult or to ask advice from (cf Ch. 6). It is useful in any discussion on the 'need' or otherwise for SPs to establish which source management turn to when OHS advice is required.

The Aston/Works Management (A/WM) survey, conducted to provide further information following the IOSH survey, included a question asking management respondents the prime source of their OHS information (cf Appendices C and D). Table 5 (1) displays the response data.

TABLE 5 (1) SOURCE OF ASTON/WORKS MANAGEMENT RESPONDENT'S OHS INFORMATION (n = 208)

Source of respondents OHS information (List provided)	Percentage response ¹	Whole number
Safety Officer	56	117
Health & Safety Executive	35	73
Senior Management	34	71
Safety Committee	34	70
Line Management	33	69
Personnel Department	30	62
Safety Representative	22	45
Other (written in response, unclassified)	19	39

1 = Percentages rounded to nearest whole number

Reference to Table 5 (1) shows that 78% (117) of A/WM respondents who employed safety advisers recorded that the SP was their prime source of OHS information. However, only one-third of the SPs

employed in A/WM respondents companies were considered to be 'professionally qualified' (by a standard of measurement determined by the respondents). It was found during a follow-up to the A/WM survey, during informal discussions with the Works Management staff journalists involved (Wyles and Fielding), that in many cases the respondent was actually the company 'part-time' safety adviser (it was not possible to establish how many times this occurred).

The relatively high placing of the Safety Committee (34%) may seem suprising. It is possible that this may have a relationship with the fact that 54% of the A/WM respondents recorded that the company safety committee was 'effective' (41%) or 'very effective' (13%) (64% of the A/WM respondents recorded that they were members of the safety committee).

The number of A/WM respondents who stated that they obtained their OHS information from Senior Management (71) and Line Management (69) is interesting and possibly revealing when placed in the context of the findings and discussion in this chapter concerning the knowledge of OHS which managers possess.

However, the clear emphasis put by A/WM respondents on the value of the SP in providing OHS information must be related to the number of SPs who were not professionally qualified in OHS. The Director General of RoSPA, Richard Warburton, saw the appointment of unqualified SPs as a failure of management in accepting responsibility for OHS, concluding;

'I see it as a fault of management if a company has an unqualified safety officer.'

Wyles (1982)

In an interview reviewing the A/WM findings, Edwin Hooper, then President of IOSH (1982) declared;

'Dreadful, quite dreadful. It proves how low health and safety is regarded by managements. Would they put an unqualified person in charge of accounting, personnel or any other vital function in a factory?'

Wyles (1982)

The A/WM recorded response suggests that managers are prepared to accept OHS advice from the unqualified staff which they have appointed (cf Section 6.3).

The employment of unqualified SPs or obtaining OHS advice from unqualified staff or sources was found to be due to three reasons: first, management have little knowledge and understanding of OHS (cf Sections 5.4 and 6.3); second, management have ultimate responsibility and control of OHS in the workplace and feel secure in their right to veto OHS advice they feel 'ill-advised' or 'unnecessary' (cf Sections 5.4 and 6.3); third, the combination of (1) and (2) contributes to a failure of employers and management to fully understand the extent which they require a 'gatekeeper' to the many facets of OHS and the OHS specialists identified in this study (cf Toomey, 1985; Ch.s 7 and 8).

The general conclusion from the literature sources was that SPs are needed and that while no general agreement over SP role was found, five key elements in SP role have been identified from the discussion in this section and are listed at its conclusion (cf Sections 5.4, 5.9 and Ch. 7). Non-academic based authorities, such as Wyles, often see the role of the SP to fulfil the (not *the prime*) source of qualified OHS advice, virtually ignoring the other four role components. By reference to chapter 4 and anticipating future discussion, some IOSH respondents failed to identify by topic or name more than a few of the five components - although they all completed the listed components of SP role.

In particular, the use and importance of the SP as change-agent and gatekeeper, was seldom identified outside academic journals. Indeed, the inferential evidence suggests that SPs are largely undervalued through the failure of many observers, employers and *themselves* to identify the range of skills and knowledge they use (cf Robens, 1972; Sections 5.8, 6.3 and Ch.'s 7 and 8). A contributing factor was the admission of many manager respondents (interviewed during the research) who stated they never read any safety or academic journals. This not only means there is a need for research to be continued in all areas of SP activities, but the findings and discussion must be communicated to a wide audience, not restricted to the academic or highly educated, and presented in

a style and content suitable for *all* involved in industry and OHS (cf Ch.s 6 and 7; Appendix H).

By reference to the sources discussed in this section, the following five key components in SP role have been identified;

1. Advisor
2. Change agent
3. Problem solver
4. Information seeker and processor
5. Gatekeeper

5.3 Research-based studies into the role of SP (1973-1987)

This section offers a selective review of survey-based studies into the role of the SP, concentrating on the period 1973-1987. The major emphasis is on considering surveys which used an SP sample. However, limited reference is made to other surveys which obtained data relevant to discussion on the role of the SP, while not restricting their sample to SPs.

The restriction to the period 1973-1987 was for a specific reason, it was best suited to consider the modern SP over a time-span when great changes have taken place in OHS and the occupation. Later OHS historians may view the period as one of historic importance, although the full extent of the historical significance of many of the events during the period only may be fully appreciated some future time. The recorded events took place in the national arena but they are shown to have had tremendous implications and effect on individual SPs and on OHS in the workplace. Therefore they demand consideration in this section.

Among the events of prime importance to OHS and the SP from the period 1973-1987 are the Robens Committee and its report (1972),

leading to the drafting and enactment of the 1974 Health and Safety at Work Act; the establishment of the Health and Safety Commission and its Executive and the introduction of Safety Representatives (with their legal standing and right to OHS training). More arguable in detail but worthy of mention are the tremendous changes which have taken place over the same period in U.K. industry which include: patterns of employment; financial, technological, industrial relations and OHS changes, these being concomitant with three terms of Conservative government, led by an unusually forceful character with emphatic ideology, Mrs. Thatcher.

The national events noted have had and will have for some time in the future, considerable direct and indirect influence on the role and performance of the individual SP as well as on the occupation as a whole. The degree of influence is not possible to assess at this time (1987). However, of more immediate consequence to this study and to the IOSH SP were the changes in the former Institution of Industrial Safety Officers (IISO), which 'came together' with the Institute of Municipal Safety Officers to form the Institution of Occupational Safety and Health (IOSH); and the establishment of the National Examinations Board in Occupational Safety and Health (NEBOSH) in 1979 (cf Ch. 6 and 7; Appendices F, G and H).

One of the features of IISO (later IOSH) was its involvement in investigating various aspects of the occupation of SP. The Institution, subject to careful checking, discussion and the decision of the Executive, freely gave assistance to researchers in contacting the membership and visiting branches, on a confidential basis (cf Table 5.1). However, relatively few studies were found which conducted research into non-affiliated SPs.

Known examples of IOSH (or IISO and IMSO) assisted research into the occupation and their membership include Harper (1980), Waring (1980), Waterhouse et al. (1984) and this study. Important research papers or documents found to investigate non-IOSH SPs and non-affiliated SPs were Shipp et al (1965), Insaf Survey (1973), HSE (1976) and Hale and Moffat (1987). These research projects can be broadly divided into five categories, the *industry specific*, *readership specific*, *protectionist*, *educational or academic* and the

membership specific. It is important to add that these categories are not discrete, i.e., an industry specific research study and report can be highly academic in all aspects. An example of each genre deserves limited discussion because each typifies a research project with different objectives or constraints.

The discussion on the various categories of research commences with the report by Atherley of a non-U.K. *academic* study into the role of the safety specialist (cf Section 5.2 and Ch. 7). It is useful to speculate if this extract identifies a difference in philosophy and ideology between the U.S. and U.K. view of OHS and safety personnel.

In reviewing Ackerman's (1973) report of a 'study of how American companies responded to social demands, including those of occupational health and safety', Atherley summarised Ackerman's analysis of the introduction and role of the specialist in the U.S. companies as a three-stage response process. The responses in the process were;

- (i) The chief executive of a company recognises that the social demand is a matter of importance,
- (ii) The chief executive recognises there is a need to choose between multiple objectives in the allocation of resources (management become involved),
- (iii) The institutionalisation of the policy (the policy becomes part of normal operating procedure).

Ackerman sees the appointment of a specialist as the 'key event heralding the transition from stage one to stage two.' The role of the OHS specialist in Ackerman's analysis is primarily a;

'change agent working towards the adoption of change in the routine operating procedures'

Atherley (1975)

The findings of Ackerman in the U.S. can be contrasted with those of Shipp et al. (1965a) in the U.K. The research by Shipp et al. (1965a) was funded by the British Independent Steel Producers Association 'in an attempt to determine the policies governing the

selection, staffing, organization and duties of steelworks safety officers and their departments' and was therefore *industry specific*. The sample size was 52, with a response rate of 90% (47 replies). The report was marked 'Not for publication' with circulation restricted to members of BISPA. Shipp et al concluded that;

- '1. Too few safety officers have sufficient training.
2. The training available is itself inadequate to the requirements of the steel industry.
3. The range of background abilities and knowledge of trainees probably forces the available training to a low level in any training course.
4. If the qualifications required for entry to a training course were publically stated, and were of a sufficiently high standard, a training course would thereby become more valuable as an instructive instrument.'

Shipp et al. (1965a)

The overall finding of Shipp et al. was that the main characteristic of the sample population was its inconsistency. Previous training and occupation, unlike the majority of occupations in the steel industry, did not provide any basis on which to appoint an SP or for evaluating their total range of skills.

The final comments of Shipp et al. were concerned with the differences between the activities of the safety departments in the same industry but in various works, the degree of effectiveness of the safety departments and the SPs. They declared 'the lack of any real differences between the works ... in terms of gross numbers of injuries requires some explanation...' and provided two alternatives;

- '1. ... the requirements of the Factories Acts ... are sufficient in themselves to reduce hazards to a level where the effort and advice of the safety department has but a marginal effect ... '
2. ... the advice being offered and the manner in which this advice was being taken and acted upon is inadequate to the task of reducing injury occurrence at any level.'

ibid

Shipp et al. concluded;

'The second alternative may be the less likely; its falsehood is non the less undemonstrated.'

ibid

The inferential evidence and findings of this study offer support to the second of Shipp et al.'s 'alternatives', despite the changes that have taken place in OHS since 1965 (cf Sections 1.5, 4.3, 5.4 and Ch. 7).

The Insaf Survey (n = approx 600) was conducted by the magazine *Industrial Safety*, and therefore the sample population was restricted to the readership of that journal. This is an example of a *readership specific* survey, the readers were not necessarily members of a professional association although respondents were SPs. The advantages include a more representative sample of the SPs in general; among the disadvantages are that the motivation for the readers is an interest in their role (e.g., the professional SP associations did not call on 'members to cooperate'). One consequence is that possibly only the more articulate will respond.

The stated purpose of the Insaf survey was to establish 'safety officers' salaries and working conditions', although the questions and respondents' comments went far beyond that restricted objective. Of far greater relevance for studies into the role of the SP was the fact that approximately one third of the Insaf Survey respondents (188) were not members of IISO, a significant percentage of a group of SPs very difficult to contact (cf Sections 1.3 and 7.3.13)

The survey was conducted and analysed by the editor of *Industrial Safety*. This association with journalism, rather than academe, may explain why the survey appears to have received little, if any, attention in the academic source material found during the literature search.

The HSE published a discussion document in 1976, based on research into a sample of 26 SPs (HSE, 1976a). The HSE document was subject to much criticism, e.g., the sample was too small to reach any useful conclusions (e.g. Dabbs, 1986; Hale, 1976). The HSE discussion placed considerable emphasis on the advisory role of SPs, declaring;

'The most outstanding ... safety officers were advisers rather than 'doers' ... '

HSE (1976)

Hale (1976) states the HSE were in error to declare that 'successful' SPs were advisors and the 'less successful' doers, largely because all occupations include a proportion of 'doing' (cf Section 5.8.5). Many members of IISO expressed their criticisms far more bluntly. As a consequence of the HSE study, some of the IOSH membership were extremely annoyed at the HSE (and its approach), and were highly suspicious of surveys and researchers in general. A typical comment was;

'I hope that you are not going to a hatchet job like the HSE (in their discussion document), they were only concerned with pushing their own role and importance.'

Whether the comment was correct or incorrect is immaterial in the context of this discussion, it was perceived by many IOSH members to be true. The HSE in general and the research and report was perceived to be designed as *protectionist* - to protect the position of the Factory Inspectorate.

The Harper survey (1980) was conducted from Birkbeck College, University of London, to investigate job-related stress in IOSH SPs. The response rate was 28% (560) from a population of 2,000. The purpose of the survey, in addition to research, was to obtain a higher qualification and therefore is a typical example of the *academic and membership* categories.

One problem for Harper and for similar academic and membership studies (such as this one) is that the sample population is restricted, with response data and findings biased. For example, Dabbs (1986), who analysed and reported the Waterhouse et al. (1984) survey data, declared 'the sample may be over-representative of the more academically qualified members of IOSH'.

A summary of the largest (by sample size) known SP survey questionnaires is provided in Table 5 (2).

TABLE 5 (2) RESPONSE INFORMATION ON THE LARGEST AND MOST COMPREHENSIVE KNOWN QUESTIONNAIRE-BASED SURVEYS INTO THE ROLE OF THE SP

Title and date when survey details published ¹						
	Insaf (1973)	Harper (1980)	Dawson et al. (1984)	Grayham (1987)	Dabbs ² (1986)	Hale & Moffat ³ (1987)
Sample population base	Reader- ship	IOSH member- ship	Indust ry	IOSH member- ship	IOSH member ship	All SPs
Size of sample ⁴	Not given	2,000	Not known ⁵	3,500	2,500 ²	1,594 ³
Method used to contact resp'dents	Printed in journal	Dist'd with journal	Visits plus quest're	Dist'd with journal	Printed in journal	Mailed survey quest're
Location of question're	Indus- trial Safety	Protect- ion ⁶	Indust- ry	Protect- ion ⁶	Safety Practi- tioner ⁷	N/A
Number of Respondents	600	560	618 ⁵	871	308	755 ³

References

- 1 = Note, dates are when surveys published or anticipated publication date, not when they were conducted
- 2 = The survey was conducted by Waterhouse and Totterdell (IOSH) and Hale and Sutton (University of Aston): Dabbs completed the analysis under the supervision of Professor R.T. Booth and Dr. A.I. Glendon. Actual number of questionnaires distributed is not known, 'due to a mistake at the printers but the best estimate seems to be around 2,500' (Dabbs, 1986). It is referred to in this study as 'Waterhouse et al.' or 'Dabbs 1986', depending on citation, source and context (i.e., statistical data 'Waterhouse et al.', comments 'Dabbs, 1986').
- 3 = Information provided by Squadron Leader Moffat during telephone conversation in September 1987.
- 4 = *Not size of sample population*
- 5 = Please see text
- 6 = At the time of survey, official journal of IOSH
- 7 = Currently (1987) official journal of IOSH

The inferential evidence from the IOSH interviews (but not the analysis of the survey questionnaire data) supported Dabbs' caveat about bias and offered further confirmation of the findings that the better articulate and educated are more inclined to respond to mailed survey questionnaires than the less well educated (e.g. Good and Scates, 1972). In addition, as reported by Montero (1974) and Knudsen (1967), it was also found in this study during interview and in the mailed survey (if they responded) the less educated the respondent, the greater the bias or prejudice in tone and content of their answers (Bailey, 1978).

The study by Dawson et al. (1984) was concerned with *Safety specialists in industry: roles constraints and opportunities*. They based their discussion on findings from a sample of 744 (cf Figure 5 [2]). 126 persons were interviewed, the remainder (618) responded to a questionnaire. The SP element in the sample comprised 16 (with one cited as 'part-time'). There was one Environmental Health Officer and one person described as 'Welfare/occupational nurse'. While one respondent would have little influence on data in a survey questionnaire, it could in an interview based research project through reported comments. This has relevance because the sex of the nurse was not given and personal research outside this study showed that sex of the respondent was likely to have a bearing on views concerning OHS (further research would be useful).

Dawson et al. conducted a research project into 'chemical and related industries' and 'detailed case studies of approaches to health and safety were made in eight establishments.' Unlike with this study, the main purpose of the research study was *not* to establish the views of SPs to their role, function and responsibilities. The very composition of the sample meant that discussion in the paper was largely (but not exclusively) from a user perspective i.e. since the majority of the respondents were non-safety personnel, the discussion and analysis of SP role was largely representative of the views of the non-safety personnel. However, Dawson et al. took care to obtain, present and analyse the views of the safety personnel when appropriate and within the purpose of the research.

An example of the latter was found when Dawson et al. asked respondents if SPs should have enforcement authority or be restricted to an advisory function. Dawson et al. reported that;

'45% (of the 618 survey questionnaire respondents) said that safety specialists should have the authority to enforce decisions whereas 46% said they should remain as advisers. 9% disagreed with both statements. ... The specialists themselves mostly felt they should stop at an advisory function, although some of them admitted they sometimes felt frustrated at lack of progress and mused on the merits of assuming a more executive role.'

A degree of ambivalence was found among IOSH survey respondents, with 54% recording they considered they did have enough authority and 26% recording that they did not - however, 17% failed to answer the question. In the course of the interviews conducted for the study there was a majority who, when asked if they felt they had enough authority, responded, 'Depends what you mean by authority.' It rapidly became evident that each IOSH respondent put a different meaning on the term 'authority.'

Many of the findings of Dawson et al. confirm or support the inferential evidence presented in this study. The elements of SP role identified by Dawson et al. included;

' ... three main types of activity which the safety specialist can undertake in relation to each aspect of technical control ... concerned broadly with processing and generating information, giving advice and participating in problem solving and lastly, taking direct executive action. These categories are not mutually exclusive but cumulative.'

Dawson et al. (1984)

Dawson et al. identified the need for the SP to act as a change agent, declaring;

'Just as there is a great deal of scope for advice on the effective technical control of hazards, the specialist also had ample opportunities for advising how to secure effective motivational control. We found however that few specialists were involved in giving detailed advice on how to generate an atmosphere or culture in which the technical control of hazards is given high priority. No doubt their reticence relates to a reluctance to comment on general management practices, particularly the need to establish systems of accountability which depend crucially on the measuring and monitoring of managerial

performance (Dawson et al., 1982; 1983). This is an area that many specialists, from a comparatively lowly position in the organization, prefer to avoid.'

Dawson et. (1984)

The inferential evidence from this study broadly supports Dawson et al.'s analysis. However, it was found the reason why the SPs did not become involved in comment on 'general management practices' were sometimes less due to the SPs desire to 'avoid' becoming involved, rather than other factors. Reference to respondents' comments in the IOSH and A/WM study provided several explanations for apparent reluctance of SPs to become involved, including the following.

First, management took care to ensure that SPs were restrained, by careful job description in this area, through denying SPs any opportunity to become involved in general management practices. Unlike with OHS, the area of general management practices is one where management invariably has knowledge and understanding, if not training. Second, the selection process and appointment of SPs in some companies ensured that SPs background was staff managerial (or if it was not, the following condition nullified their background). Third, the SP was more often located in the personnel department or reported to the personnel department - who are unlikely to be involved in general managerial practices (cf Beaumont et al. and below). The extension from the comments of respondents was speculative, but there was sufficient inferential evidence to suggest further research would be useful.

Of particular relevance was the conclusion of Dawson et al. which included the following statement;

The authors conclude that safety specialists should aim to adopt an advisory and problem solving strategy, whilst at the same time acknowledging that there are a variety of individual and organizational factors which can either block or facilitate such role development. This does not mean that there is a universal role model for all safety specialists to follow. ... Indeed, a specialists entry into an advisory role can be more or less completely blocked by organizational factors, particularly the attitudes in, and structure of, the line management's hierarchy.'

The references by Dawson et al. to SP role components included identifying all the components listed at the conclusion of Section 5.2.

The role of change agent is an important component of SP role found in this study, although as previously stated, the IOSH respondents rarely identified it by name. Reference has already been made to Atherley's review of Ackerman, and is useful at this stage to offer a further quotation from that review;

'The specialist's job is to coordinate the company's response. His appointment is at head office, and he may report directly to the chief executive. The specialist sees the problem in technical terms, identified and dealt with by specialist knowledge. He approaches the problem systematically by collecting information and outside the company. He suggests solutions and controls. He mediates between operating divisions and external organizations - such as government - from which pressure may be coming.'

Ackerman is reported by Atherley as seeing;

'... the role of the specialist in terms of a change agent working towards the adoption of change in the routine operating procedures. The specialist has to be used effectively and he must be aware of the limitations of his own role. He should be able to detect the point at which the changes which he advised are becoming routine operating procedures. He should then withdraw, only to return to give advice if asked. Otherwise there is a risk that he will assume for himself the divisional management's responsibility.'

The last sentence of the above citation partially takes account of Dawson et al.'s findings concerning the difficulties facing SPs if they stray from the advisory or problem-solving role, without the consent or participation of line managers. Indeed, there are considerable parallels and agreement between parts of the discussion and findings in the Dawson et al. (1984), Atherley's (1975) report of Ackerman (1973) and Shipman et al. (1965a) reports and papers. It is useful to consider them all together since a number of their findings offer further confirmation or support to those in this study.

5.4 Implications of employer and managerial responsibilities for OHS on the role of the SP in the workplace

5.4.1 Introduction: Managers and OHS

It is crucial to place IOSH survey respondents' answers on SP role, in mailed survey questionnaires and during informal interviews, within a wider context (cf Section 1.4.4). The context of employer and managerial responsibility, the availability of scarce resources, lack of specialist power and the knowledge boundaries of the employer and manager. Irrespective of the employment of a safety specialist, these are key factors in determining the quality of OHS in the workplace.

The knowledge boundaries of the employer and manager, combined with managerial perceived (and legally defined) responsibilities are decisive when they determine who is an SP, contribute to the organizational structure and climate within which the SP operates; and control the role of the SP in the workplace (Section 1.5; Handy, 1981, Petersen, 1978). Ultimately, through the employers' and managers' associations, they can have a considerable influence on the development and future of the occupation of SP (cf Robens, 1972a and 1972b).

5.4.2 Employer and managerial responsibility for OHS

There is a double responsibility facing employers and managers with regard to OHS in the workplace. First, employers have a statutory duty to ensure, as far as is reasonably practicable, the health, safety and welfare at work of all their employees (HASAWA, 1974). Second, the employer and manager have voluntarily assumed, even demanded, responsibility for OHS in the workplace, vis-a-vis the statements of the CBI and other employers' associations (CBI, 1980; Robens, 1972b).

One consequence is that application of OHS in the workplace is not the responsibility of the SP. (Throughout this study the term 'application of OHS' means all the factors relating to the principles

of occupational health and safety, as well as their implementation and control) Invariably it is the responsibility of the manager, often the line manager (or person with a comparable role). The employer usually is remote from the workplace, leaving production matters and often OHS to managers. The inferential evidence presented in this study supports the following observation;

'In many (companies) the ... understanding of the (OHS) problem weakened successively the higher up the management chain the subject was followed.'

HSE (1976b)

Where the senior manager and employer are the same person, the inferential evidence from this study confirms that they not only have little understanding of OHS, but actually often have very little personal involvement or concern in the day-to-day or *long term* application of OHS. There appeared to be no exceptions, even in the case of small businesses where the employer/manager is usually in direct contact with the day-to-day events in the workplace.

Dr. Carter, Director of Medical Services (HSE) succinctly summarised the situation in OHS for the small business manager (and arguably all managers) during an interview with Michael Bangs in 1985 (cf Section 7.4). Carter declared;

'For most small business managers occupational health and safety is not the first of their worries. They have far more pressing financial, production and marketing worries.'

Carter cited in Bangs (1985)

The conflict between production and OHS is a recurring theme. It received constant reference, either explicitly or implicitly, throughout discussions with SPs and managers during the research for this study. Invariably all the cited authorities make reference to the conflict between OHS and production. The evidence from this study confirms that conflict between the demands of production and OHS form a key source of pressure on the SPs role and performance.

The line manager's principal area of operations, by definition, is almost invariably the workplace, an area where they have control over OHS. Therefore it is essential that line managers have at least an understanding of OHS, particularly since they have to make instant judgements and decisions, often during a production run (Aston/Works Management Survey, 1982; Booth, 1981; Bridden, 1981).

Three areas concerned with management's 'understanding' of OHS received limited investigation for this study. First, the attitude of management to OHS. Second, the knowledge and understanding of management of OHS legislation. Third, management's knowledge of the cost to the company in applying OHS or following an industrial accident.

5.4.3 Management's attitude to OHS

Attitude is a subject which has been extensively studied, researched and discussed by many authorities. Similar to role, it would require a lengthy work to cover the subject adequately. Sufficient to offer the following as a description or outline definition, of its use in this study;

'An attitude is a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related.'

Allport (1954)

However, in respect of OHS there is an associated concept which is of particular importance. That is the concept of 'cognitive dissonance' (Festinger, 1957). Festinger concluded that when individuals are faced with conflict between their beliefs and the facts put before them, the state is intolerable and forces them to either change their original beliefs or disregard and distort the opposing facts.

Examples in OHS, supported by the inferential evidence presented in this study and elsewhere (e.g. Grayson, 1981; Kinnersley, 1973), which can be explained by Festinger's concept include;

- The support for the efficacy of 'self-regulation', when the evidence shows that 'self-regulation' means regulations applied when known or convenient
- The demand and support for managerial and employer responsibility for OHS in the workplace, when the evidence shows that management frequently has little knowledge or understanding of OHS and appear to be taking no effective action to rectify the situation

It must be added, within the context of a review of cognitive dissonance and OHS, the strength of the concept is also its weakness. For example, those who disagree with the above statements and do not see any evidence to the contrary could (with justification in their eyes) accuse me of exhibiting cognitive dissonance. It is recognised that this overly simple use of a complex concept in the highly complex subject of attitude and discipline of psychology can create problems but it is considered the explanatory advantages outweigh the disadvantages.

Comments made by SPs during discussions on the role of line and other management in OHS offer further illustrations of their attitudes to safety in the workplace and can be related to the introductory discussion;

'The line managers want to be left alone to get on with production. If I enter a workshop they think I am 'interfering' with their job and stopping production. The boss is little help, he cares less about safety, than production or not spending money. Safety, to him, is OHS legislation which forces him to spend money and preventing those accidents which may cost him a lot of money. On those rare occasions when I have called him to make an executive decision during a disagreement between myself and a line manager he invariably says, 'Don't bother me, safety is your job, production the managers.'

'From the Plant Manager down, in my company health and safety is an integral part of managements responsibility and management are appraised on their health and safety performance as well as production. No one is perfect but it is company policy that everyone strives for perfection.'

'I find that my employer listens to my comments about health and safety but actually does very little about it.'

He has said more than once (and genuinely believes), safety is only 'common sense'.'

'My boss is very good, he is interested in safety and supports me if ever there is any problem.'

'The only way I can get anything done is to quote regulations and what would happen if they are not observed. Anything that is not covered by legislation, receives little attention by the line managers - but they don't bother learning about legislation, I have to tell them, otherwise they wouldn't know about it. To them, observing health and safety legislation and regulations costs money, failure to comply costs money. To them, anything to do with health and safety means either lost production or loss of money. I seldom see the boss, but I believe he is genuinely interested in health and safety.'

These comments highlight the root problems perceived by SP respondents. The one exception in the quotations noted above was made by a Safety Manager employed by a large U.S. multi-national chemical based household and toilet products manufacturer (Procter and Gamble). The majority of SP respondents stated that there was a lack of knowledge and understanding of OHS by management, particularly the OHS regulations (cf Section 1.5). This perceived deficiency was not in relation to that of SPs, but placed in the context of what managers should know (or were apparently presumed to know by those who enacted the legislation). The SPs emphasised that generally management thought complying with OHS regulations cost the company excessive money, with no benefit to the company (cf Section 5.4.4; Tables 5.3 and 5.4).

According to respondents few managers were aware of or considered possible benefits for the company following the application (using the respondents term) of 'good OHS practices'. The respondents considered these benefits included fewer sickness absences, a reduction in industrial accidents and good employee relations. In the Aston/Works Management (A/WM) survey two questions were asked of management which provided some useful inferential evidence concerning respondents understanding of OHS and associated legislation.

TABLE 5 (3) MANAGERS' KNOWLEDGE OF OHS: RESPONSES TO TWO QUESTIONS IN THE ASTON/WORKS MANAGEMENT SURVEY QUESTIONNAIRE (n = 208)

Question to respondents	Percentage response
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What is your knowledge of OHS?

Adequate	37
Probably adequate	44
Probably inadequate	16
Inadequate.....	2

What is your knowledge of OHS legislation?

Sufficient	37
Insufficient	63

Reference to the data displayed in Table 5 (3) suggests there are contradictions or dilemmas in the mind of management between what they *think* they know and what they *actually* know. For example, 81% of the A/WM respondents considered their knowledge of OHS was adequate or probably adequate. However, 63% of the respondents admitted that their knowledge of OHS legislation was insufficient. Several questions arise from these responses.

First, if the majority of the managers' recorded assessment of their knowledge and understanding of OHS is correct, then advisers may not be needed. Second, if 63% of the respondents record that their knowledge of OHS legislation is insufficient, on what do the 81% base their claim that their knowledge and understanding of OHS is adequate or probably adequate?

Booth summarised a possible source of the problem for management. He considered that;

'Managers sometimes appear to labour under two inter-related missapprehensions. Firstly a belief, encouraged by the old law, that the control of danger is essentially a straightforward, even a trivial, subject which could be dealt with, with a minimum of expertise.

Secondly, the presumption that safety can be achieved by the combination of good intentions and exhortation.'

Booth (1981)

The comments by Booth were concerned with the attitude and lack of training and understanding of management concerning OHS. This is a subject which has received his attention for many years (e.g. cf Booth, 1979; Booth, 1981; Booth and Sherwood, 1987). Booth considers first, they consider that the control of danger is simple, requiring simple solutions, by untrained personnel. Second, if management express in public or at work often enough the need to work safely or the desirability of applying 'good' standards of OHS, these exhortations are sufficient. In fact Booth may have greatly understated the problems with and for management regarding OHS.

Examples of the contrast between reality and the public pronouncements of concern for safety by employers, management and their associations has been provided by many authorities (cf Nichols, 1975; Nichols and Armstrong, 1973; Kinnersley, 1973; Robens, 1972b). Further confirmation of the contrast between public statements and the reality of OHS, come from inspecting the series of Annual Reports from the Chief Inspector of Factories. A review of the Annual Reports over the years shows a pattern, with criticisms and comments of a particular industry periodically repeated, which suggests little remedial action is taken to resolve the problems. The costs or benefits of applying OHS are seldom discussed or identified within the Annual Reports.

5.4.4 **Managers' knowledge of the costs of applying OHS**

It is far beyond the scope of this study to investigate the cost of applying OHS or the costing of industrial accidents. Those who have attempted research in the area frequently find that OHS costs are impossible to quantify or are open to many different interpretations (ILO, 1986; Bamber, 1981). The basic problem was identified by Atherley and Kolozyn (1976), who stated that when it came to the costing of OHS services, quite often emotion over-rides reasoned argument based on facts.

The quotations from practicing SPs provided in Section 5.4.3 have offered inferential evidence of the views of their management to the costs of applying OHS in the workplace. However, it was considered useful to obtain further evidence, not from SPs (whose comments may be considered untypical or biased) but from practicing managers. The A/WM survey questionnaire included two questions concerning the cost of OHS and industrial accidents in the respondent's workplace. Table 5 (4) displays the recorded data.

85% of the senior managers in the A/WM survey offered evidence of their knowledge and understanding of the costs in applying OHS and of industrial accidents at their own place of employment. 92% of the respondents who replied declared that applying OHS added to production costs.

TABLE 5 (4) MANAGERS' KNOWLEDGE OF COSTS OF OHS AND INDUSTRIAL ACCIDENTS IN THEIR PLACE OF EMPLOYMENT: RESPONSES TO TWO QUESTIONS IN ASTON/WORKS MANAGEMENT SURVEY QUESTIONNAIRE (n = 208)

Question to respondents	Percentage response
Do you consider applying adds to production costs?	
Yes	92
No	8
Do you know how much industrial accidents cost your company?	
Yes	23
Some idea	48
No idea	28

Only one possible consequence of not applying OHS in the workplace - an increase in costs through a high number of industrial accidents - should mean that concerned, knowledgeable, cost conscious, very senior managers would have at least some knowledge of the costs involved. However, 28% of the A/WM respondents recorded they had 'no idea' and 48% 'some idea' of the costs of industrial accidents in their company. The comments of Atherley and Kolozyn (1976) concerning emotion, rather than facts, determining knowledge of costs of OHS receive further inferential substantiation.

5.4.5 Management, OHS advisers and decision taking

The fact that management have little knowledge and understanding of OHS can mean serious problems for all concerned, especially (in the context of this discussion) the SP, the occupational group and OHS. The problems range from, at worst, the appointment of inadequate, untrained personnel (cf Booth, 1981), rejection of advice, even conflict in the workplace, unless the SP can operate exceptionally effectively in the organization (cf Dawson et al., 1984). However, it is one thing to show that management have little knowledge or understanding of OHS; it is another to show why the situation exists.

Bridden (1981) concluded that OHS had little attention paid to it on management courses and after reviewing such courses Bridden (1981) declared 'there is no coherent programme which will ensure that a manager has been adequately developed' (in OHS knowledge and understanding). Bridden observed that management 'act as agents on behalf of employer organizations' and thereby are 'held accountable for their decisions' which means that 'within his position, naturally see to it that (in OHS) his decision prevails.'

Following Bridden's analysis, it is the manager who effectively controls OHS in the workplace, a position confirmed by many of the authorities cited in this study. This fact raises an important question. If the person who has final decision-making authority concerning OHS (the manager) has little understanding of the subject, how can they take effective decision with regard to health

and safety? Several IOSH respondents addressed themselves to this question. Typical comments were as follows;

'Because management do not consider health and safety important, they leave the leg work to me and then decide on my advice - decisions taken in line with their position as managers in charge of production, not safety.'

'I think until managers are licensed for health and safety, then they will never take it seriously.'

'Managers in this firm ignore anything outside production or their area of specialism that they feel is not essential or covered by legislation. The only way that managers will ever learn about health and safety is if legislation demands that they should be qualified in it. But that still would not mean that they would be worried about it any more than they are today. Managers take day-to-day decisions based on what they know, and they know little about safety.'

Responses to the Insaf Survey (1973) showed that little has changed since the time that survey was conducted. In summary, many respondents concluded;

'(Management) regard safety obligations as a brake on production objectives.'

Industrial Safety (1973c)

'... lack of management cooperation ... pay lip service to safety ... no forward look in senior management ... production comes first, safety last.'

Industrial Safety (1973a)

A key comment was made by the person responsible for the survey who declared;

' ... the general opinion (of respondents) seems to be that (management) are not wicked - just plain ignorant where safety is concerned.'

Industrial Safety (1973a)

5.4.6 Management and the control of OHS

A crucial point to consider is how advisers whose function is purely advisory can effectively contribute to an improvement in standards

of OHS when ultimate control remains in the hands of those who possess, according to many authorities (in addition to those cited in this study), very little knowledge *or understanding* of OHS. The following comment by Bridden is highly relevant;

Current (and very likely future) organizational power structures ensure that control (*of OHS*) is totally in the hands of line managers. The important future improvements in health and safety standards will therefore be obtainable through line management development.'

(Bracketed italics added) Bridden (1981)

Although Bridden considered that it was useful to appoint a safety specialist (not necessarily an SP), his analysis of the key role of the line manager in the application of effective standards of OHS in the workplace is largely confirmed by the findings from this study. A major problem arising from this analysis must be considered.

Managers and employers quite properly have the right to appoint an OHS specialist of their choice. This OHS specialist may be an SP, who could have received little training or obtained little relevant experience. Then, after making such an appointment, the problem is compounded by the SP operating in an environment where the person or persons who have effective *control* of the all aspects of OHS in the workplace, actually possess little knowledge or understanding of OHS. These factors receive discussion in this section, for *they are of prime importance in influencing and determining the role of the SP in the workplace.*

The question of control is of central importance in the appointment of any OHS specialist. If managers have little knowledge or understanding of OHS, it is unlikely that they will see or feel the need for an OHS specialist, which means that one is less likely to be appointed. Some respondents considered that managers may see the need for a medical practitioner, or hygienist for specialist reasons, i.e. an outbreak of dermatitis, but such specialists are frequently called in only on a consultancy basis.

Alternatively, management, because of their lack of understanding and knowledge of OHS may appoint a totally inappropriate or

untrained person to the role of SP. Wyles (1982) noted this tendency, observing;

'... managers who feel that they themselves do not have enough time or knowledge to deal with safety are simply pinning a label marked 'safety officer' on someone equally unqualified, and then relying heavily on that person to provide them with information and advice. It's a dangerous game.'

Wyles (1982)

One respondent who held qualifications in industrial hygiene and had qualified for IOSH membership by examination, summarised the feelings of many respondents when he declared;

'It appears the closer the professional is to medicine, the more 'acceptable' the specialization by management. I find that accident prevention is considered to be 'common sense' and SPs treated accordingly; occupational hygiene a specialist profession and associated with medicine, benefitting from the recognised association. The managers initially found it difficult to accept that I have had training, qualifications and expertise covering accident prevention and industrial hygiene.'

Booth (1981) also noted the importance of appointing competent SPs and criticised the quality of what he called the 'traditional' safety officer, stating;

'The fundamental responsibility of all managements must be to employ competent staff and organise them in a coherent way to deal with health and safety matters'

Booth (1981)

Booth later added;

'Traditional safety officers, who in many cases lack a good general education as well as competence in the technical and procedural aspects of accident prevention are unlikely to be very helpful. *They lack credibility with management and the workforce.*'

(Emphasis added) Booth (ibid)

After acknowledging the deficiencies of the 'traditional' SP, Booth detailed steps being taken by the professional SP associations to rectify the situation. However, Booth did not develop the theme concerning the prime responsibility of management in the

appointment of unqualified or unsatisfactory persons as SPs (cf Appendix F).

The general conclusion of respondents was that even when a fully trained and qualified SP is appointed, the fact that control remains in the hands of the manager can mean that at best the SP will find it difficult to contribute to OHS, at worst, the SP's advice could be ignored.

Once the need for an SP has been determined, the appointment of an SP is the responsibility of the employer, invariably with the assistance of their managers.

The appointment of staff with any type of skill is a problem. It is common to find that in many areas of skill employers or managers do not possess training or qualifications. For example managers may have little knowledge of accountancy (or fitting, to take a typical shopfloor trade). However, there are universally recognised qualifications for accountants and apprenticeship qualifications for fitters, in any case, management freely utilise the services of the many recruitment agencies for such staff (cf Appendix F). In the case of OHS there are several important differences to what can be described as the 'more usual' areas of professional knowledge, such as accounting or fitting.

In the recruitment of staff, it is not necessary for the manager or employer to have any knowledge or education of many occupations or professions. The combination of specialist professional recruiting agencies and the existence of recognised qualifications assists to ensure that any employer (or their staff) can recruit staff with a fair degree of confidence and assurance, *except with regard to OHS.*

It is possible the professional recruitment agencies would see and enter a new market, although some agencies already have had experience of advertising and recruiting SPs for clients. Following up on this point, a small scale telephone survey was made in 1987 (n = 7) of the major recruitment agencies who had offices in Birmingham.

In each case I stated I was an employer with a shopfitting and shop conversion business and wished to appoint a 'safety officer'. I asked for the senior member of staff and on three occasions I was transferred to another person. Staff at all the agencies stated that they dealt with the recruitment of SPs, but 5 declined to state how they would determine an effective SP, other than by reference to the experience and qualifications of the applicant. Two stated their head office in London would be dealing with that grade of appointment. However, none knew what the terms 'IOSH', BSC or RoSPA represented. One person stated that he thought the latter referred to an organization for 'sick animals' - the headquarters of RoSPA was located about 800 yards from where that particular person was working.

It was difficult to check with OHS consultants, due to their dispersal and variation in work and quality. It was claimed by respondents and various authorities that OHS consultants and agencies have been involved in the selection process of SPs for some time, usually by the larger organizations (Booth, 1986; St. John Holt, 1986; RoSPA, 1982; Tye, 1980). Anticipating future discussion, the recruitment and placement of SPs could form part of the functions of IOSH (cf Appendix H).

The distinction for the employer and manager seeking to appoint safety personnel is that in the case of OHS and the SP, (unlike with virtually every other occupation or profession) not only is there limited knowledge and understanding of the role of SP but there is limited knowledge generally about OHS (House of Lords, 1983). In addition, traditionally there has been no universally recognised certification or registering of SPs, a factor which was intended to be resolved by the establishment of NEBOSH (cf Ch. 8; Appendices F, G and H). Hale (1983a) made reference to this point, noting resistance by the Factory Inspectorate to legislation requiring the appointment of competent (or sometimes any) OHS personnel (cf Sections 6.2.7 and 7.4.4). Hale observed;

'The Factory Inspectorate, for much of its history was not in favour of the appointment of such people (Atherley and Hale 1975). A Factory Order to require safety supervisors to be appointed in four dangerous trades (Shipbuilding, iron and steel, heavy engineering and iron foundries) was drafted in 1927, but never implemented,

partly due to the opposition of Sir Duncan Wilson, Chief Inspector from 1932-1939 (see e.g. Annual Report for 1934). Although subsequent legislation did require such people to be appointed ... it is only in the most recent provisions that the Regulations have got around to specifying competence or training for them.'

Hale (1983a)

According to IOSH respondents, the fact that managers (and employers) have a legal responsibility for safety, if not for all aspects of OHS, was found to have little bearing on the situation. The respondents noted little demand from management for OHS training, declaring that unless legislation demanded such training, little change was likely. However, some IOSH respondents doubted if legislation *per se* would be effective. They considered strict enforcement would be necessary, but difficult to apply.

A comparison was made by respondents between Company Law and OHS. Similar to responsibilities under OHS regulations, companies have had a legal responsibility for providing annual reports and accounts for many years. As one respondent stated, summarising the views of many other IOSH respondents;

'Accounts, production and profitability go hand in hand and managers recognise this. They generally fail to recognise any connection between production, profitability and OHS.'

It is true that companies have a legal responsibility for providing annual reports and accounts. However, respondents stated that managers readily recognise the need for strict accounting, but less readily recognised or accepted the need for high standards of OHS. The respondents hypothesised one reason for this was the high priority offered to accounting or finance on management courses where company law is taught and recognised as an important component of running a business, but safety was considered almost as an optional extra. One respondent observed;

'Until safety is inbuilt into the managers repertoire of essential skills, which can only be done through effective legislation and enforcement, I think safety will always receive a low priority.'

The rate of inspection and penalties for non-compliance are too remote from the activity or action in the workplace for managers to

take OHS seriously (Kinnersley, 1973; Thompson, 1972; Appendix F). Following a contribution from a senior Factory Inspector, a respondent stated during a recess at an OHS conference;

'Employers and managers will only observe what they know are enforced and enforceable. Not only is OHS in the workplace dependent on legislation, but safety officers will only be widely employed if and when legislation compels their appointment.'

However, if SPs were required by law, then selection and appointment of SPs could present tremendous problems for managers and employers. There would be problems associated with supply and demand of suitably qualified staff. During the IMSO conference at Keele in 1980, a delegate declared;

'Are we (the occupational group) in the position equipped to supply large numbers of safety officers if legislation was brought in to compel employers to employ safety officers? I think not.'

It was found that many managers and employers, particularly in Local Government and the larger organizations, favoured appointing existing SPs to the post (cf Local Government case study Section 6.3). The IOSH respondents reported 117 SPs employed in Local Government were previously employed as SPs in a variety of industries (cf Table 5 [6]). A few respondents stated that they were later informally told by managers that this reduced the chance element to the minimum.

Many respondents, particularly in local government, identified a pattern to SP appointment. They reported that local government appeared to prefer to appoint from experienced SPs. A summary of their comments suggested that - quite frequently - the pattern to SP appointment in local government was the following.

First, the majority learnt of the vacancy through an 'old boy' SP information network. Second, the successful candidate received the support of an SP who held the post previously or from one who was well known to the employer (or management). This meant that although the vacancy was advertised (often necessary in local government, to satisfy internal agreements), the selection virtually already had been made. As a consequence, some respondents

considered the entry to the occupation of SP, particularly with large organizations, was the most difficult step to take.

The IOSH respondents declared that the selection 'panel' was usually comprised of one or more local management or, in large organizations, personnel office staff. The respondents claimed that it was rare that those interviewing had any knowledge or understanding of OHS; they appeared more concerned with the organization's productive activities and staff.

IOSH respondents interviewed declared that in the majority of cases, with reference to their own applications and experience, the SP job description at the time they made their application was vague and even ambiguous. Many added that it became evident the final decision concerning appointment invariably was that of a senior manager, the person in control of OHS in the company, who may not even have been involved in the selection process or interview.

5.4.7 Conclusion: Managers and OHS in the workplace

The conclusions which can be drawn from the above quotations and data are admittedly inferential. However, there is a considerable amount of supporting evidence which suggests two areas in particular demand and would reward further investigation. First, the matter of the employers', managements' and shopfloor workers' understanding and knowledge of OHS. The evidence increasingly suggests that this knowledge is limited and suffers from serious deficiencies. Further research may find ways to resolve this problem, which the evidence presented in this study confirms has existed for many years with little significant improvement.

Second, it appears the responsibility for OHS, which employers and managers demand, is largely on their own terms and within the managers own limited knowledge bounded terms of reference. Terms of reference which many authorities have noted, often seem to place production first, safety second (Booth, 1981; Nichols, 1975; Nichols and Armstrong, 1973; Kinnersley, 1973; Stellman and Daum, 1973). Further research would prove very useful in clarifying the matter and assist in identifying solutions.

The general conclusion must be that management have very little knowledge and understanding of OHS and that the situation has not improved over the years (cf Sections 5.4.3 and 5.4.4). The employer and manager has been shown to have little understanding and knowledge of OHS, although holding final and prime responsibility for OHS in the workplace, decides SP role content and functions. The consequences for OHS, the SP, the image and future of the occupation can be quite damaging.

The SP is frequently appointed by people who probably have little knowledge or understanding of OHS (cf Section 5.4.4); the role, education, training, and performance of the SP is usually decided by persons who have little knowledge and understanding of OHS (cf Section 5.4.5). Most disturbing of all is the fact that the final decision concerning OHS, *the control of OHS in the workplace*, is in the hands of those who have very little knowledge or understanding of OHS - employers and managers (cf Section 5.4.6).

The conclusion drawn from the inferential research evidence is that the *prime* determinant of SP role and function is *not the SP*. SP role and function was found to be largely determined by those who have least knowledge or understanding of OHS or SP role - the employer and manager. Therefore comments concerning the variation in education, training, role content, performance and function of SPs (Booth, 1981; HSE, 1976; Robens, 1972) are largely criticisms of those who appoint and control the role of the SP, the employer and manager, *not the SP or the occupational group*.

5.5 Influencing variables, internal and external to the individual, on SP role and role performance

5.5.1 Introduction

The response data has shown that the prime determinant of SP role, function and performance is the manager or employer. *It is only following appointment* that the individual SPs education, training and attitude assumes importance in the workplace. This section considers some of the influencing variables, largely internal to the individual but including some that may be influenced by external

factors that affect performance and content of SP role, function and responsibilities.

An example is education, which prior to appointment will have been achieved outside the organization and in that respect is internal to the individual. However, following appointment a major part of education input is under the control of the employer, in the form of training, or providing finance and time off from employment.

The layout of this section broadly follows that of the previous chapter, with the first paragraph usually describing the salient points from the comparable subsection in chapter 4. As an example, Ch. 4.3.2 deals with 'age and education'; Ch. 5.5.2 is also concerned with age and education. However, continuing the example, discussion in the previous chapter was concerned with age and education placed in context with a table (or tables) displaying derived data. Discussion in this chapter is placed in context of informal comments and source material, including data from other surveys.

5.5.2 Age and education

The connection between age and educational achievement was inferentially shown in Ch. 4.3.2. In broad terms, the higher the age, the fewer the academic qualifications. 386 (44%) of the sample were found to hold no formal academic qualifications. Of that number, 46% were in the 'over-50' years of age group (cf Table 4 (11)).

However, it is important to place these findings in perspective. For the purpose of discussion, an SP will be considered comparable to a manager. There are some authoritative references which place SPs in the category (and role) of management (Grayson, 1981; Nichols, 1975). Just as pertinently, many SPs themselves consider themselves to be managers (cf Ch. 4.3.6). While the findings of this study show such categorization to be an over-simplification, it is a useful point of reference.

Using the qualifications of management as a comparison, Moore (1984) noted that 27% of managers in Britain have no formal

educational qualifications, while 12.8% hold only GCE 'O' levels (compared with 51% of IOSH respondents). Moore suggested that 'A useful analogy with commercial management is that of the officer cadre in the military'. The officers who are considered most likely 'to reach the top are given the most education and training'. Moore comments;

'This approach ironically is rather different in many commercial organizations where it is often asserted that those who are going to undertake senior tasks are unable to spare the time, nor have the need for further education. Consequently management education is commonly seen as a way of motivating and improving the ongoing performance of those who will not reach the top, rather than the converse.'

(emphasis added) Moore (1984)

The poor attitude of many employers in the U.K. to providing education and training for their staff is well recorded. These criticisms are usually offered by comparison with the standards in other countries, particularly the USA, Japan and Germany (cf Ouchi, 1981). Almost annually reports are published in the U.K. which demonstrate that while the problem and deficiencies are noted, little appears to be done actively to rectify the situation. Indeed, every report continues to repeat the major criticisms of the earlier reports (cf Handy, 1987; MORI/ITV, 1985; MSC, 1984).

In the case of the SP, the closure of the Department at Aston meant that one important source of OHS research, education and training was closed. However, OHS courses, of various kinds and disciplines, are available at many centres of higher education throughout the U.K. (HSE, 1983). In addition, the activities of the professional associations in providing OHS courses continue to expand, although the current economic situation (1980 - 1987) has had an adverse effect on applications and the type and content of OHS courses (Hale, 1986; St John Holt, 1985).

It is important to recognise that no institution (or any OHS training course) can be divorced from 'its context in the political and organizational structure of its country' (Hale, 1985). If legislation applies sufficient pressure on employers and managers for them to see the need for an SP, then an SP will be appointed

(cf Sections 5.2 and 6.2). However, the recognition of need for an SP does not necessarily mean that employers or managers will have much knowledge of role content or of the educational and training requirements. This is particularly true in the case of OHS, where legislation may provide pressure for action, but does not provide the employer with assistance through identification of SP role content or training needs (cf Sections 5.6, 6.2 and 6.3; Booth, 1987; Hale, 1985; Morris, 1981).

Finally there is the matter of the individual's perception of education and training needs, which may conflict with those of the employer or manager (henceforth, for convenience, 'manager' will be inclusive of 'employer'). Prior to appointment, subject to the normal constraints, the SP may be able to decide for themselves the extent and content of training courses. However, after appointment the SP is largely dependent on the manager's perception of need, and this can inhibit education, training and more pertinently, individual and occupational role development.

Dawson et al. (1984) noted the importance of individual factors in SP role development, making particular reference to training. They declared;

'Within a common advisory strategy, the content of the individual specialists' job must be appropriate to their own particular operating context as shown in the nature of their establishments technology, workforce, size and structure. ... Individual factors, for example the content and extent of the specialists own training can also inhibit appropriate role development.'

Dawson et al. (1984)

The core problem for the SP, following appointment, is that of matching the 'content of the individual specialists' job' and the 'content and extent of the specialists own training'. Usually, as in many professions and occupations, it is only after appointment that the individual realises or learns the content of the job. The individual (and the manager) frequently knows the general requirements of a particular position, but *not* the specific differences between or within a particular position.

One respondent who had been appointed an SP after 28 years on the shop floor as an engineering turner declared;

'If I had known what the job (as an SP) entailed, I may not have taken it. At the very least, I would have asked for and got a training course before I took the job. I can't get one now - can't be spared I'm told.'

In addition to the differences between what the manager tells the applicant the job entails and the reality of the position, there are also problems arising from the introduction or development of new technology. The same ex-turner SP was typical of many respondents who drew attention to the problems in up-dating knowledge, stating;

'Things have altered so much in engineering since I was an apprentice. I would like to do a short course to update my knowledge. I think that would help me in my job as an SP. However, all the courses (in this area) require full time attendance and I cannot get the time off.'

The perceived need by respondents for additional OHS training was a continual theme, expressed in many different ways and less tempered by age. However, it was found that the older the respondent, the less likely they were to be interested in learning new technology, particularly with regard to the use of computers (cf Section 5.8.4; Boyle, 1985; Sparrow, 1984). In addition, the respondents near the end of their working career tended to seek short, up-dating OHS courses, rather than lengthy specialist courses (cf Appendix B Tables B8 - B9). Typical of the older respondents' view of courses was a 61-years old SP employed in construction who declared;

'You can't teach an old dog new tricks and I don't like going back to school, I find the classroom atmosphere stiffling. All I want is to be shown the problems with new processes and workpractices, and updating on legislation. In any case, I don't fancy the idea of being the oldest student on a course.'

Relating OHS training strictly to the perspective of the manager, many respondents declared that management saw training strictly in production terms. The views of management towards OHS training was neatly summarised by one respondent who declared;

'The range of training courses offered to management by my company (a large engineering group) is quite comprehensive. None of them are safety courses. According to management here safety is something that you

either know, or don't know. They think that safety is common sense at workplace level, therefore safety courses are not required. The spinoﬀ from them holding this view of safety is that management think it a waste of time for me to go on safety courses. In any case, many line managers see me purely as a backstop - keep out of the workplace, give them potted versions of the current safety legislation when they call me and most of all, keep them out of trouble.'

The major emphasis in this section has been on age and education, with the last comment drawing together the thrust of the comments made by IOSH respondents. However, discussions on the subject of qualifications, whether formal educational or OHS, was a very sensitive area for IOSH respondents.

There appeared to be a division between those who possessed degrees and those who held no or very few, 'low level' qualifications. In addition, during the informal research the inferential evidence strongly indicated that there was a decided difference in attitude concerning the value (or otherwise) of qualifications between the over 40 and under 40 groups of IOSH members. The following section continues and widens the discussion.

5.5.3 Formal educational qualifications and OHS training

The IOSH respondents reported that 40% possessed no formal educational qualifications; 13.5% had degree qualifications and 2.6% of all IOSH respondents had a higher degree.

These figures cannot be directly compared with all of those from the Dabbs (1986) survey, because that survey requested respondents to record their 'highest qualifications attained.' However, with that caveat in mind Dabbs, similar to the findings from the IOSH survey, also reported that 2.6% of respondents had attained an M.Sc. A comparable result was recorded by Waterhouse et al. (1984) for HNC/HND 21% (IOSH study 21%) and degree 13% (IOSH survey 13.5%).

The only qualification discussed in the Insaf (1973) survey was degree level, with 7% of respondents reporting that they possessed degrees. Of the 408 IISO members in the Insaf survey, 5% had degrees, contrasted with 13% of the 188 non-IISO members.

The general conclusion of many respondents was that they would like to achieve or to attain more qualifications (73%), but owing to a variety of circumstances were unable to do so.

Qualifications, whether formal education or OHS, were a very sensitive area for many IOSH respondents, especially the respondents with few qualifications but with years of work experience. Two factors would reward investigation.

First, there was sufficient inferential evidence to suggest a definite division between those who possessed degrees and those who possessed very few, or who had 'low level' qualifications.

Second, it was found during informal discussions that there was a difference in attitude concerning the value (or otherwise) of qualifications, particularly (in broad terms) between the over 40s and under 40s.

These two factors were often inter-related and may lead to problems for IOSH, although as one IOSH Executive member said in confidence in 1985, 'It doesn't matter, the older, less qualified SPs will die out' (cf Section 4.3.2 and Ch. 6).

During informal discussions the respondents relaxed and freely identified or admitted some of the reasons why they felt unable to obtain further qualifications. These reasons included a feeling of inadequacy (or fear of failure) within the respondent, prevented or not allowed by their employer to take the necessary time off work to obtain the qualifications and the fact that educational institutions failed to respond to a market demand. All comments regarding lack of availability of OHS courses were made during the period 1980-1982 and was the subject of a special research paper circulated to members of staff in the department at Aston in late 1981 (cf Table 5 [5]). It is important to add that the comments may have been different after the advent of the Open College, offering 'health and safety learning materials for people who are unable to attend full time courses away from their place of work' (cf Booth and Sherwood, 1987).

The complaints about the lack of availability of suitable OHS courses was often cited, with many respondents offering combinations of salient points from the following comments;

'I went to the local university and asked what OHS courses they ran in engineering. I was told to apply for a degree course - a full time degree course! When I asked if it was possible to attend the parts on health and safety in the ordinary course, they said it couldn't be done as there was no separate OHS component. I later found there was little safety knowledge taught, other than at a 'watch your eyes' level.'

'At our IOSH branch we found 8 members who wanted to attend an evening course on biological hazards. I approached the local technical college and asked for an evening course to be run on the subject. The college office staff told me that there was no demand for such courses; when I told them of the numbers I had already had obtained who wanted the course, they said they had no staff or facilities to teach it.'

'I can never understand why correspondence courses offering OHS training and qualifications, like the Open University courses, are not available for working safety officers. We can usually attend weekend or short courses, perhaps these could be combined with a correspondence course and provide an opportunity for safety managers like myself to obtain further qualifications and knowledge.'

A major problem for many IOSH respondents was that in their area there were no facilities available for study. One Scottish IOSH respondent declared;

'The nearest technical college is 60 miles away from where I live and work. I have little opportunity to attend OHS courses at college, even if they were available, which they're not!'

'Its O.K. for people living in big cities, they have the facilities. I think NEBOSH and IOSH could do far more for those of us who wish to extend our training.'

Many respondents made a similar point concerning an improved contribution by NEBOSH and IOSH for SPs who wished to develop or increase their training and qualifications. The point is further developed in Appendix H.

There was reported to be a considerable demand for OHS courses among the IOSH respondents, with 73% recording a wish to obtain further OHS training, but only 10% of that total thought that

correspondence courses would be the most effective. Table 5 (5) displays the recorded data.

TABLE 5 (5) RECORDED TYPE OF OHS COURSE WHICH WOULD SATISFY IOSH RESPONDENTS' REQUIREMENTS

Type of OHS course required	Absolute Frequency	Relative Frequency
Degree	60	6.9
Certificate or diploma	143	16.4
Minimum 6 months full-time attendance possible	51	5.9
Short, i.e. 10 day continuous attendance possible	288	33.1
Linked weekend courses possible	105	12.1
Correspondence courses required	92	10.6
Company finance possible	223	25.6
Short (e.g. 100 hours) specialist area correspondence courses	82	9.4

Reference to the Insaf (1973) survey data indicated that this unsatisfied demand by SPs for further OHS training has existed for many years. The IOSH survey data indicated that it was a demand that would reward attention, possibly now satisfied by the Open College (cf above) .

Respondents reported a lack of enthusiasm or reluctance by employers to support their request for further OHS training. In addition to the comments by IOSH respondents already recorded, the Insaf survey respondents had made similar comments, nearly a decade earlier;

' ... managements are never keen to spend money on non-production matters.'

'Too many employers will not permit their safety advisers to be properly trained.'

Industrial Safety (October 1973)

The problem for some IOSH respondents was that management expected SPs to carry out their functions, without providing the opportunity for further or, in some cases, even basic training in certain areas

of responsibility. However, the SPs were still expected to provide advice in areas of management defined functional responsibility, despite their inadequate training (cf Section 5.6). The comments of one respondent clearly described the dilemma apparently faced by some SPs;

'My company introduced a new chemical process for cleaning metal, a subject about which I had basic knowledge. The introduction of a new production line, new products and new processes of work meant that the use of chemicals was about to considerably expand. When I asked senior management for permission to attend a specialist course I was told I could not be spared because the introduction of the new processes required my attention. The same damn process for which I wished to attend a course to learn about the chemicals, safe systems of work and potential hazards involved!'

(Italic emphasis added)

The inferential evidence found during the IOSH research suggests that those studies and papers which declare that some SPs are inadequately trained or qualified often fail to identify the true reasons for any perceived inadequacies (e.g. Booth, 1981; HSE, 1976). In addition, the same critical assessment of the qualifications of SPs often fail to offer comparisons with other staff in senior positions who also are poorly qualified or trained.

The example cited by Moore (1984) deserves re-emphasising - 24.6% of male and 36.4% of female managers possess no formal qualifications, and 14.6% male and 18.3% female managers possess CSE or GCE 'O' level qualifications. When placed in this context the 40% of SPs (almost wholly male) who possess no formal qualifications is near average for British industry. Moreover, the inferential evidence suggests that for several reasons, the quality (in training and qualification terms) of in-post SPs are the responsibility of employers or managers, rather than deficiencies in the SPs concerned (cf Section 6.3).

First, employers and their agents, management, sometimes select and appoint personnel as SPs who are inadequately trained. Nevertheless, it was claimed by respondents that their management and employers demand they carry out a variety of duties in which the SP has had no formal training (cf Section 5.6 and 6.3).

The contrast between responsibility and function seems to have been overlooked by many of the otherwise authoritative surveys, studies and reports into the role of the SP (e.g. Dabbs, 1986; Harper, 1980). The majority, typified by the survey initiated by Waterhouse, Totterdell, Hale and Sutton, reported by Dabbs (1986), concentrate on what the SP does, even on what areas of OHS the SP has had experience in covering, but they failed to invite the respondent to record the extent of training the SP respondent has had in the noted areas of role functional responsibility (cf Sections 4.5, 4.6, and 5.6).

This contrast between functional responsibility and extent of training is particularly important, since for many years criticisms have been made of the SP performance, often based on their lack of qualifications or training. However, since it is the employer or management who select and appoint SPs and usually determine the role, function and responsibilities of the SP, *it is the employer and manager who are primarily responsible for any claimed or perceived inadequacies or shortcomings in their staff.*

Second, considerable inferential evidence was found which suggested that many IOSH respondents were aware of the need to expand or update their OHS knowledge and training. However, some were prevented by conditions and pressures at their place of employment or for various other reasons, many SPs found it difficult to take advantage of courses on offer.

Finally, there appeared to be a mismatch between the demand and supply of OHS courses. In particular course content or length of course were unsuitable and many were run at times and venues inconvenient for many respondents at the time of the IOSH survey (1981) (cf Appendix H).

The inferential evidence leads to the conclusion that although education and role performance are inexorably linked (cf Hale, 1985; Booth, 1981), the prime determinate of both with reference to the SP is invariably the responsibility of the person or group who appoints the SP - management and/or the employer.

74% of IOSH SP respondents recorded they had held their post 6 years or less at the time of the IOSH survey (1981). This suggests that the 1974 HASAWA had a considerable impact on the appointment of SPs. The biggest influx of newly appointed SPs over this period was into local government (89%), followed by construction (36%) and engineering (27%). Chapter 6 presents a case study discussing many of the factors surrounding the influx of SPs into local government.

The data in Table 4 (7) show that 59% of IOSH respondents had previous work experience in management or professional occupations. 50% of IOSH respondents reported that they had 8 or more years experience as an SP, contrasted with 45% who reported 8 or more years with their present employer, not always as an SP (cf Tables 4 (4) and 4 (5)). 336 (39%) of the IOSH survey respondents recorded data which showed that they had changed employers, while continuing in the occupation of SP. These figures suggest an occupational drift, that is a number of SPs changed their place of employment while remaining in the same occupation.

This occupational drift is inspected in Table 5 (6). This shows that 111 respondents employed in local government were recruited and appointed from outside that industry, with recruits from engineering (34) and construction (21) being the most numerous (cf Section 6.3).

The occupational drift suggests two important points. First, at least some SPs consider their occupation to be a career (cf Section 4.3.6). Second, some employers may prefer to appoint an experienced SP and then to train them in the organizational environment, instead of appointing a new recruit and train them in OHS (cf Section 6.3). The inferential evidence from this study on these two points contradict the findings of Beaumont et al (1982), although it must be added they stated that published discussion and findings were from an intermediate stage of their research.

TABLE 5.(6)

RESPONDENTS' CURRENT INDUSTRIAL CATEGORY BY
RESPONDENTS' PREVIOUS INDUSTRIAL CATEGORY

Current industrial category	Previous industrial category	Agricul.	Chemical	Const.	Distr.	Elect.	Eng.	Food	Ins.	Localg	Metal	Mining	Print.	Text.	Trans.	Misc.	Forces	Gains
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1 Agricultural		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2 Chemical & Oil Products		-	6	4	-	1	7	1	-	2	2	-	-	-	2	3	1	29
3 Construction		-	1	5	-	-	11	-	-	6	-	5	-	-	-	5	2	35
4 Distribution		-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
5 Elect. Gas & Water		-	5	7	-	2	9	1	-	3	1	1	-	2	-	1	-	32
6 Engineering & Allied		-	1	4	-	1	8	-	-	1	2	-	1	1	-	9	-	28
7 Food, Drink & Tobacco		-	2	2	-	-	6	-	-	2	-	-	-	-	-	2	-	14
8 Insurance, Banking etc.		-	-	1	-	-	3	-	-	-	2	1	-	-	-	-	1	8
9 Local Government		2	15	21	3	6	34	3	1	6	1	6	-	2	2	12	3	117
10 Metal Manufacture		-	-	2	-	-	-	-	1	-	-	-	-	-	-	-	-	3
11 Mining, Quarrying		-	-	2	-	-	1	-	1	-	-	-	-	-	-	1	-	5
12 Printing, paper, publ.		-	1	1	-	-	3	-	1	-	-	-	1	-	-	1	-	8
13 Textiles, leather, etc.		-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	2
14 Transport & Communic's		-	1	-	-	-	1	-	-	-	-	-	-	-	-	1	3	6
15 Miscellaneous		1	6	3	-	1	12	2	1	4	6	4	-	1	3	4	-	48
Loss		3	38	52	3	11	96	7	5	25	14	17	2	6	7	40	10	336

Beaumont et al. conducted a survey (n = 50) concerned with a 'study of the operation of joint health and safety committees in the manufacturing sector of Britain.' They presented in their intermediate findings (n = 36 in 1982) information on the background of SPs located to date. Beaumont et al. found that the 33 SPs in their survey 'had rarely been recruited from outside the company.' The numbers involved were not identified possibly because at the time of publication Beaumont and his team had not completed their study. However, that may not have been the major or only reason for differences between the findings from Beaumont et al.'s survey and this study. 51.5% of Beaumont's sample were full-time SPs, as opposed to the 74% of the IOSH sample; only 9% of Beaumont's sample were members of IOSH, contrasted with (as its name suggests) 100% of the respondents in this study. It is possible that these factors provide the reasons for the differences.

Beaumont et al. described the route their respondents took into the occupation of SP. It is useful to provide an extensive extract, since the italicized emphasis supports some of the findings and comments made in this chapter. Beaumont et al. declared;

'The overwhelming impression we gained was that there was no obvious, single, management route to becoming a safety officer (in terms of previous positions held) and that, in the case of the part-time officers (n = 16), *no conscious systematic decision had been made by senior management* as to who had the capability, in the sense of existing workload, to take on this *additional* function. This is nowhere better illustrated than in one part-time safety officer's description of the origins of his function and prime occupation:

The company was building up and the works foreman job (which he held) was taking up too much time so that *it was impossible to do two jobs.* The education officer was then made safety officer. Fire was split and the security officer became fire and security. But then the education and training officer's job workload increased, but my job became easier because the works manager got a deputy, *so I could take on safety again.*'

(Italic emphasis added) Beaumont et al (1982)

The comments made by the part-time safety officer in Beaumont et al.'s study suggests that safety was a job that was passed around according to who had the time to do it, rather than being considered

a function requiring training or commitment (cf Sections 6.3, 7.3, 7.4). Further evidence in support of this contention was found by Beaumont et al. who provided the example of a part-time SP, employed in a company with 'over 1,000 employees' who;

' ... after 16 months in his new combined post felt the job was too big for one person. ... Moreover both management and union expressed considerable dissatisfaction about the operation of existing health and safety arrangements.'

Beaumont et al. (ibid)

Beaumont et al. stated that part-time SPs found in their survey tended to suffer from conflict of priorities and came from a variety of occupations (cf Section 5.5.4, 6.3, 7.3 and 7.4; Harper, 1980). The decisive factor in their appointment was, according to Beaumont et al.;

' ... plant-specific considerations that led to a particular individual in an existing management function assuming a part-time safety officer role, *rather than a systematic decision-making process* ... '

(Italic emphasis added) Beaumont et al. (ibid)

The comments from IOSH respondents in this study as to how they entered the occupation of SP or proposed to enter the occupation of SP are illuminating. They are summarised by the following, from a former lathe operator, an office supervisor and a company trade union branch official.

'In my firm I just drifted into it (being a full-time SP). I became interested after one of my mates had an accident. I read up on machine guarding and kept being asked to look at machinery in other sections. I was asked if I would like a part-time (SPs) job, then it became full-time after I took the IISO courses and exams in my own time.'

'After the Act (HASAWA) the firm stuck up a notice (for an SP). I was the only applicant and got it.'

'I was a branch secretary (trade union) and became a safety representative, then Chairman of the Safety Committee. One day I was asked if I would like the job of Group Safety Officer, as the old one was leaving. I like being a safety officer. I have done a BSC course and look like being in it for good.' (47 years old respondent)

The inferential evidence in this study indicated there were three most common routes into the position of SP, with previous occupation (*as opposed to industry*) most usually having little influence on selection (cf Sections 5.8, 6.3 and 7.3; Dawson et al. 1984; Booth 1981). First, there was the appointment of SPs from among existing employees. Second, there was the appointment of SPs with some experience, from outside the company. Third, there were those who entered the occupation of SP, following retirement from the military, police, fire service or similar.

In the case of appointments from existing staff, the previous occupation or work experience appeared to play little part in the selection or appointment of an SP. The prime consideration was 'availability' or 'who could be spared' (cf Section 6.3).

Those companies who appointed experienced SPs from outside the company provided the exception to the general rule of previous occupation having little influence on selection. Reference to 50 advertisements from OHS journals over the period October 1981 until April 1982, showed that employers in construction and civil engineering often stated that previous experience in the industry was preferred (5 out of 17) or essential (3). Any reference in the advertisement to previous occupation was restricted to those concerned with previous experience as an SP and in particular, IOSH corporate membership (which includes years in the previous grade as a required condition for certain grades of membership).

One third of the IOSH respondents reported that they entered the occupation of SP from a 'security or military' background (cf Table 4 [7]). This must not be taken to mean that they entered the occupation at an advanced age.

As an example, it was found that short term commission military officers, with an entitlement to complete a six month course paid for by the military authorities on completion of their period of service (aged around 28), found OHS an attractive proposition. However, apparently the position of SP was seen by former military personnel to offer benefits seldom considered as attractions by some in the occupation (especially SPs with a family). During

further research in 1987 a former army Captain and potential SP stated;

'It appears that being a safety officer offers me the opportunity to continue travelling round the world. I can have a six month course on any subject paid for by the army. You've some knowledge of safety, how can I go about obtaining the best safety qualifications?'

At a 1981 OHS course held at Trent Polytechnic, which led to the examination for IOSH membership, several students came from Rolls Royce. When asked why they were taking the IOSH course, one of these students declared;

'I am a foreman but cannot easily obtain promotion or breakthrough into management grades. However, the company rules allow safety officers to apply for management posts. Therefore I am taking this course and hope to qualify as a safety officer. After I get the job as safety officer I shall be qualified to apply for a job in management.'

In summary, the inferential evidence suggested there appeared to be no systematic decision making process, utilising to the best advantage existing skills, in the selection and appointment of SPs. The company who appointed an SP from within their own workforce apparently did not carefully select and train the most suitable recruit to become their SP.

In the majority of cases IOSH respondents reported a series of happenstances which led to them entering the occupation of SP, with previous occupation only playing a minor part; with the exception of local government, 'industrial background' was far more important (cf Table 5 (5) and Section 6.3). This latter requirement was not due to employers wishing to appoint a particular grade of employee, suited to the demands of the role. It was reported to be a combination of recruiting someone with a knowledge of the industry and, most important, recruiting from inside the organization, someone who was familiar with the organizational climate and available - particularly the latter.

The term 'career' in this section is largely restricted to considering the career of in-post SPs. The IOSH survey data, discussed in Section 4.3.6, indicated the older the respondent, the more likely they were to remain within the occupation and with their employer. In short, the over 50 years of age SPs saw their occupation as a career hopefully continuing until retirement.

The following of an occupation which offers a satisfying career pattern influences the manner in which employees carry out their functions and responsibilities (Speakman, 1980; Goldthorpe et al, 1968). The SP respondents almost invariably cited 'job satisfaction' as a prime reason for continuing in their occupation. It was found that those IOSH respondents who were not satisfied with their occupation also stated that they had problems with carrying out their functions and responsibilities. A similar connection between job satisfaction and problems was found in the Insaf (1973) Survey response. Thus the inferential evidence suggests that the individuals' perspective of career pattern has an influence on SP role performance and function.

Watson (1980) declared;

'It is an important part of the analysis of any given occupation to note what shape the typical career, or variety of careers, may take.'

Watson continued that the possible length, insecurity and risks inherent in the career;

'... are all factors which must influence the orientation to work of the occupational member. ... Of course, any one occupation can offer more than one typical career pattern, depending on certain characteristics of the individual and various other career contingencies (which Ritzer (1972) defines as 'chance events which occur at critical points in a career').'

Watson (1980)

Among the 'career contingencies' and 'chance events' may be included the manner in which the career of SP was entered (cf Sections 5.5.4, 7.3). A small scale telephone survey was conducted in 1984 of five

schools in the Birmingham area and found that none of the careers advisors at those schools had even considered the role of SP as a career choice. The schools ranged from those in high immigration areas to one from a predominantly middle class area.

During the re-write period for this report the schools survey was reconsidered. Since the position of SP requires a degree of maturity it was thought that the survey of schools where the leavers were aged 16 was less appropriate than institutions of higher education where the age of the graduates or those who had obtained higher level qualifications would be at least 21. The age and qualification should allow them to apply for at least Assistant SP posts which are advertised in the *Safety Practitioner* and mention the lower age ranges (i.e., 20-25 is typical).

27 careers officers at colleges of higher education (6), polytechnics (11) and universities (10) were contacted in 1987. (This total excludes Aston, where the careers officer when contacted in 1982 had stated the Department where this study was conducted 'was in a better position to offer advice on career prospects than' they were) All were helpful when I explained that my own university could not assist, but as a 24 year old I was interested to enter the career of SP but found it difficult to obtain advice or information. However, none could offer advice beyond suggesting I contacted the appropriate professional association - none could name 'the appropriate professional association'.

Once in the career of SP there can be problems, not merely of promotion but even in retaining the current position. Stowe (1983) described the manner in which the recession affected the career of SPs, using the phrase 'Safety Officers fight for their existence' as the title of his article. Certainly, the correspondence columns in the *Safety Practitioner* reflected concern for SPs over the effects on the recession on their career prospects. Discussion among SPs at conferences and IOSH meetings reflected this concern. As a consequence it was decided to see to what extent SPs had been affected by the recession.

The first concern was to determine if it had affected performance of function in the workplace. One IOSH member, in charge of a large

safety department for a chemical company, upon being asked how the recession was affecting his department responded;

'When one of my full-time staff left, he was replaced by a part-timer; part-timers do not get replaced. I'm fed up, it is becoming difficult to cover adequately all the sites in our responsibility. Promotion prospects have been badly hit and no one knows how their career will be affected.'

The respondent was dispirited and beginning to 'get fed up with the job'. He was considering leaving his place of employment and obtaining a position (as SP) elsewhere. This feeling of disenchantment was repeated by several other respondents. The inferential evidence was that the recession was influencing SP role performance and functions in the workplace.

The second concern was to establish if the problems arising from the recession had been over-stated. In 1983 a large number of SPs expressed concern over the uncertainty of career prospects, owing to the consequences of the recession. A small scale postal survey (n = 50) was conducted. All the respondents were known to the researcher and the use of follow-up letters ensured a 100% response rate.

There were four questions asked in the survey, three of which are displayed in Table 5 (7). The question not displayed asked respondents to draw from all sources, not restricted to their own personal experience, if they had knowledge of SPs who had been made redundant and not replaced. Accordingly the answers may have been inaccurate and they are omitted from the displayed response data. All the respondents claimed to have knowledge of SPs outside their own company who had been made redundant and not replaced.

This finding suggests that the recession was having an effect on the career prospects of SPs and, according to discussions with SPs held in 1987, the recession is still affecting SP careers and career prospects. The evidence indicates that the economic recession is reducing the number of employees at work while the results of the survey offer confirmatory evidence that SPs are being made redundant and not replaced.

TABLE 5 (7) SMALL SCALE SURVEY (n = 50): FUTURE CAREER PROSPECTS FOR THE SP AS A CONSEQUENCE OF THE RECESSION (Period 1981-1983)

Question asked respondent	Response	Whole Number
Have any SPs been dismissed or left the respondents company since 1981?	Yes	31
	No	19
If SPs have been dismissed or left, have they been replaced?	Yes	3
	No	28
How did the respondent see the future of the occupational group, in view of the economic recession in the U.K.?	Good	10
	Fair	18
	Uncertain	14
	Bad	8

The reduction in the numbers in employment, including SPs, suggests a reduction in career prospects for SPs. The effect this may have (or have had) on role performance deserves investigation. Several SPs observed that for career advancement, including increase in salaries and promotion, it was necessary to change the place of employment, typified by the respondent who stated;

'I have reached the limit of salary and promotion with my present company. I changed jobs before to get more money but owing to the recession (1985) the problem is finding another position. But I'll find one, even if it takes longer than before.'

The majority view of the younger (under 40 years old) IOSH respondents was optimistic concerning the future career prospects for the SP, individually and as an occupation. The findings of the small scale survey showed that 56% of respondents saw the future for the occupation of SP as being Fair (36%) to Good (20%). Therefore the majority of SPs, of all ages, saw the occupation of SP as offering at least a reasonable career, however they may have entered the occupation.

Comments from SPs have already been offered which demonstrate that some commenced their career as an SP by the 'chance event' method (cf Section 5.5.4). The displayed data in Appendix B, Tables B 63 - B68, combines to show that the under 40 year old IOSH respondent quite frequently reported that the role of SP was one step in their overall managerial career. The contrast between the age groups is quite clearly shown and summarised by the following comments from two IOSH respondents, the first aged 54, the second 35 years of age;

'I like my job as a safety officer, it will do me nicely until I retire in 11 years time.' (54-year old respondent)

'It is an interesting job (safety manager), but not one that I would like to make a career. I find the job provides me with an overall training in management. In convincing a line manager that he should change a system of work, you use just about every management technique in the book. In about four years time I intend to return to general management, benefitting from my period in safety.' (35-year old respondent)

Typical of the comments from older respondents was the following from a 57-year old senior SP employed by a company with over 10,000 employees;

'The only thing which is certain about the future for the SP is the uncertainty. In our firm we have stood-off about 800 workers and one of those was a safety officer - not replaced. We now have two full-time safety officers and one part-time, with the personnel staff doing more and more safety work. It wouldn't surprise me if I was offered early retirement, I'd take it and I'm damn sure I wouldn't be replaced.'

On the other hand, a 30 year old graduate SP employed by a London Borough Council stated;

'The demand for SPs is increasing because we are proving our worth. Most of the time I'm checking conversions (of buildings) and demolitions. Our department is going to increase in numbers from three to four full-time safety officers and take on two more part-time safety officers. Since the senior safety officer is quite old I think I may get his post. Provided the safety officer is well qualified, I think there is a damn good career open in OHS.'

Another SP, 37 years old and working for an oil company said;

'Our company offers a good career, not just a 'job' for a safety officer. There is great variety, good money, an opportunity to travel and a career structure. Mind you, I wouldn't like to work for a small firm - that's a real struggle!'

The oil company respondent typified the consensus opinion of the younger (in relative terms) IOSH respondents. They considered a well qualified SP working for a large company, particularly multi-nationals, could find an excellent career in OHS, expect to obtain good rewards and obtain considerable job-satisfaction (cf Section 5.5.4). Therefore the rewards expected by some SPs were not exclusively financial, although as has been demonstrated by respondents' comments, salary was particularly important when considering a change of place of employment.

5.5.6 Respondents' salaries

Section 4.3.7 offered discussion and analysis of the IOSH survey response data. In summary, within each industrial category, the largest number of respondents in the highest salary group were found in the Chemical and Allied Products (59% of respondents recorded salaries of 'Over £9,000') and next came Electricity, Gas and Water with 41% of respondents recording salaries 'Over £9,000'. In the industrial category Engineering and Allied Industries, 58% of respondents recorded salaries of £8,000 or under, with 32% reporting that they earned £7,000 or under. Age appeared to make little difference to salary (cf Table 4 [15]). However, the more educational qualifications an IOSH respondent possessed, it was usual to find the higher the reported salary (cf Table 4 [16]).

The influence of salary on job satisfaction, role performance and career choice has been the subject of much research and discussion (cf Parker, 1971 for a review of the major contributions). The studies are too many for discussion in this study, but in (admittedly overly) simple terms, many authorities conclude that employees' satisfaction derived from work can be divided between the 'intrinsic' - work provides a challenge and enriches the individual - and 'extrinsic' - work is a means to an end, satisfaction is obtained outside the work (Goldthorpe et al., 1968).

The recorded comments from IOSH respondents confirm that many achieve considerable intrinsic job satisfaction, but that did not mean that salaries were unimportant. Indeed many respondents claimed that they had changed their employer for improved salary, with work content receiving second mention (cf Section 5.5.5). Therefore, for IOSH respondents, as exemplified by the comments by the oil company SP in the preceding section, salary is an important but not the only consideration (cf Herzberg, 1966).

Nevertheless, many of the SP surveys which considered salary levels restricted their research and analysis. Salaries received by respondents were established, but no SP survey was found which compared SP salaries with those of other groups. Even the *Insaf Survey into Safety Officers' salaries and working conditions*, which by reference to its title was very concerned with salaries, failed to make any comparisons with other occupations or professions.

A problem in comparative analysis is to decide which group offers the most appropriate comparison. Reference to Capelli (1981) and his wide ranging review of occupations and salaries found no mention of the SP. Indeed, a major problem with occupational literature and occupational coding is that the SP seldom, if ever, receives mention. In the standard text for occupational classification, CODOT, 'Safety' is placed in the 'Welfare' section.

An arbitrary decision was made to compare SP salaries with an occupational group often mentioned in conjunction with SPs, the engineers. Table 5 (8) displays the comparative data based on late 1980 salary levels (the IOSH survey was conducted in April 1981).

The median salaries displayed in Table 5 (8) do not reveal the £20,000 per annum received by one IOSH respondent - nor the lowest recorded salary of £3,600. However, 'perks' received by respondents were not identified in the IOSH survey and following discussions with many SPs it was found that frequently a company car was included as part of the rewards for the position. In particular, it was found that construction and local government SPs either received a company car or a mileage allowance plus, from some employers, a low interest loan to assist the respondent in purchasing a vehicle.

TABLE 5 (8) MEDIAN EARNINGS (1980) OF SELECTED PROFESSIONAL GROUPS AND THE IOSH RESPONDENT GROUP (1981)

Selected professional groups	Median earnings (£'s per annum)
Institution of Civil Engineers	8,150
Institution of Production Engineers	8,350
IOSH survey respondents	8,369
Institution of Structural Engineers	8,450
Institution of Municipal Engineers	8,500
<i>All chartered engineers</i>	8,650
Institution of Mechanical Engineers	8,900
Institution of Chemical Engineers	9,330
Institution of Mining and Metallurgy	10,075

Source (except for IOSH recorded response) : Capelli (1981)

It is recognised that salaries for part-time SPs may reflect the non-safety component, but this is not always to the betterment of salary. For example, a SP employed in a textile mill (part of a large group) located in Mill Hill near Blackburn, Lancashire, held five positions. Originally the 'safety and training officer', he was informed over a period of time that his duties would be expanded. His employer stated that due to the recession and the need to make savings he must also take over the duties of personnel officer, fire officer, security officer and eventually, transport manager. His option was assume these duties or face redundancy, and there was no salary increase offered. He declared;

'At my age (52) I had little option. But I assure you that I have little interest in what I am doing, I do just enough to get by.

The example just cited was exceptional, but it offers further evidence of the link between salary and role performance. It also identifies useful areas of further research concerning part time SPs.

The areas of further research should include the following: First, establish what role or roles is shared with the safety function;

second, find out what contribution the non-SP element of role made in establishing salary levels; third, establish from which element of role the individual received the greatest satisfaction and fourth, identify the element which receives priority in allocation of individual time and effort.

5.5.7 Number of sites

88% of SPs in the Electricity, Gas and Water industrial category reported that they had six or more sites (some noting over 200 sites) within their area of OHS responsibility, followed by Local Government wherein 85% of SPs reported a similar position. In contrast, 77% of Construction SPs (who may have been expected to head the list concerning number of sites per SP) reported that they held OHS responsibility for six or more sites. 46% of SPs employed in Engineering and Allied Industries held OHS responsibility for one site, a further 35% for two to five sites.

The finding concerning the number of sites over which the Local Government SP held OHS responsibility was surprising. The respondents in the Insaf (1973) survey included many SPs in this industrial category and reference was made of the large number of small work groups spread around their area of responsibility. Similar comments apply to recorded responses in the Insaf survey to Construction SPs, where 'nearly half the answers from multi-site safety officers came from the construction industry' (Insaf Survey, 1973).

However, with the exception of the Insaf Survey (which found that 25% of 'municipal authority' SPs held responsibility for more than 5 sites) the literature review for this study found no reference to Local Government SPs in any reported survey (cf Sections 6.3 and 7.3.13). Nor was any reference (with the exception already noted) found of the large number of sites over which, the inferential evidence showed, it was quite common for Local Government SPs to hold OHS responsibility.

During further research it was found that the reason for the large number of sites within Local Government SP OHS responsibility was because of groups of staff were distributed throughout a wide range of premises. These included not only offices but such diverse activities as schools, old peoples homes, libraries and waste disposal units etc., as well as the wide range of direct labour construction activities still associated with local authorities. However, even the employment of contractors meant that the Local Government SP was involved in OHS checking and even supervision.

Typical comments from Local Government respondents, two English, the other Scottish, included;

'Officially I have to cover 600 sites, of course, it can't be done. What I do is pick the ones most likely to give problems, and visit them as often as possible. Luckily I have two assistants, but they are quite inexperienced and can only effectively cover a few sites.'

'How the hell I get anything done is a wonder. At present the schools are my biggest problem, there are 43 of them outstanding and it takes two or three days to check them properly. A 24 hour day is just not long enough.'

The Scottish Local Government respondent held OHS responsibility for 5,000 employees. However, these were distributed over an area exceeding any English county (including Yorkshire treated as one county). In his area of responsibility were 48 islands and to visit them often demanded a flight in an aircraft, taking three or more days to complete his business - and he was the only full-time SP employed. His position combined occupational and geographic isolation. He declared;

I have to fly to parts of my area. I leave Inverness one day, spend a day on site, then return the following day - that means it takes three days whenever I leave the office to visit just one island site. In fact I have over 2,000 sites at present, spread over a vast area. When driving it is sometimes impossible to visit more than one site and then only for an hour or so.

An interesting perspective of surveys and problems arising from multi-site responsibility was given by a National Federation of Building Trades Employers (NFBTE) Group Safety Officer. He was a corporate member of IOSH, which he had not obtained by qualifying

examination. He had received but not responded to the IOSH survey questionnaire. When asked over the telephone, during arranging an interview, why he had not responded to the IOSH survey he declared;

'Surveys are a load of crap. All they do is provide work for blokes like you. Now if you got a job as a safety officer, that would be more sensible. You could then see what the job is really like.'

After agreeing to give me an interview (the introduction was via a friend who was member of the NFBTE) he met me, by appointment, at the railway station nearest to his office. He then informed me that his employers had instructed him not to co-operate in the research and the interview was cancelled. Over a cup of coffee while waiting for the return train, he confided several important points. They deserve reporting in depth, maintaining confidentiality, for they were blunt and uninhibited and expressed his perspective of (as he termed it) 'the reality of life as a safety officer in the building trade';

'I have around 2,000 employees, spread over several hundred sites, all located within the (large) county. It is physically impossible for me to visit all the sites, partly because of their number but also because they may open one day and by the time I learn of their existence, they're closed.

Many members (of the NFBTE) are small employers, with less than 20 or so employees - sometimes even less. Many couldn't care less about safety, other than minimising accidents to themselves. They know the possibility of a visit from the Inspectorate is very low, if ever.

If I say 'clear up this site' (to workers on site) they do not exactly laugh, but they may call their boss, a member of the Federation. Their boss contacts my office and I am told to 'back off'. It is bloody frustrating.'

Anyway, how the hell can you apply some of the stupid safety legislation? For example, if a painter is sent on a job by himself and the job needs the use of a ladder, how can he foot the ladder and work at the same time? The whole lot needs revising, because there are many other examples of stupidity by people who have never worked in painting and decorating in their lives.

(I think) the Federation appointed me largely because members thought it would look good. How can I force them to take my advice? Advice that is not wanted anyway in the majority of cases.

I used to be a site foreman but in this job the money's good and I'm not laid off like I was before. I'll stick it out until I retire. Then that's it. Unloved and unwanted, that's me.'

This feeling of frustration was expressed by other respondents. In the IOSH survey, 56% of respondents were the only SP employed by their company. Of the solitary SPs, 36% held OHS responsibility for 5,000 or more employees. These factors increased the perceived pressures on some of the respondents.

It is important to separate the comparatively large numbers of respondents who perceived pressures from job related factors (i.e. overwork) from the relatively few who reported perceiving conflicts associated with role (i.e., conflict over client identity) (cf Sections 5.8, 7.3.16 and 7.3.17). Two further examples of comments from SPs who felt the pressure of work *and recognised these pressures affected their performance* were;

'I am worked off my feet, with 14,000 employees to take care of (over nine sites). I was promised a part-time assistant safety officer but now he (the senior manager) says he cannot afford it, saying that I manage anyway.'

My problem is less the number of workers I am responsible for, than the huge amount of travelling I have to do. I have only 1,600 employees to look out for, but they are spread over 47 sites (over the whole of England). I just can't manage to visit them all. Worse, only three sites have safety supervisors and they are useless. No one, literally no one understands my problems and no one cares.'

It was found that many IOSH respondents who felt they were overstretched adapted to the circumstances, in the best way they could. A typical comment from those who utilised what OHS expertise was available was the following;

'My duties include visiting 2 (other) plants, each with 50 or so workers. This one has 700. The problem is that each plant has a different main process and in one instance it is potentially very dangerous. The boss likes me to be here, whereas the best place to be would be mainly at the dangerous process (plant). I could do with an assistant; all I've got are the Safety Representatives and in that I'm lucky. They are very helpful and they are the only ones who understand what's happening (in OHS).'

The above comments clearly identify one of the main problems for the multi-site SP. Their performance of function is a question of prioritising and, as one respondent succinctly put it, 'hoping that I'm in the right place at the right time'.

Aside from the increased pressure and prioritising, some SPs with multi-site OHS responsibility reported that the necessity to travel to many sites considerably increased their feeling of isolation. In the case of the multi-site SP this feeling of isolation was exacerbated, partly due (similar to single in-single-plant SPs) to the 'uniqueness' of the role, compared with other managers, but also because of a greater isolation from information sources and support. The degree of perceived isolation was found to largely depend on individual differences (cf Harper, 1980).

SP respondents were found to suffer from three main types of isolation, (1) physical, (2) occupational and (3) informational. First the SP is frequently isolated in the organization, with few fellow staff members sharing SP interests and certainly even fewer with any real understanding or knowledge of OHS (cf Section 5.4). Second the SP is often isolated from fellow members of the occupation of SP and therefore finds it difficult to obtain support, a factor that may be intensified if the SP is not a member of one of the SP professional associations. Third, and this applies particularly in the case of SPs with multi-site OHS responsibilities, they are often isolated from many of their sources of information (cf Section 5.8). Each of these factors were reported to have an important influence on performance of SP function. Indeed, in the write-in component of Q. C 1 of the IOSH survey, 63% of respondents reported that SP colleagues were the prime source of OHS information.

Some multi-site SP respondents reported that these factors of isolation created particular problems in influencing 'management' style. As one construction SP noted;

'The problem is that one finds it difficult to build up relationships with staff at the sites, not helped by the constant turnover of staff. I would like to be in the position of a one site SP, when it is possible to identify personal differences and therefore offer the best advice, suitable for the purpose and person. This

can't be done when I have over 300 sites to look after and spend so much time travelling.'

Unfortunately the IOSH survey did not allow for respondents identifying the type of geographic area within their area of responsibility. By reference to the respondents' comments, this was found to be an important consideration. The ease (or otherwise) of travelling, distance, the type of area (rural, urban or city), the climate, all were found to play an important part in facilitating or obstructing SP role performance.

Therefore the number of sites *per se* is only one aspect of an important influencing variable on SP role performance. The fact that an SP has multi-site responsibility introduces many complicating factors, some of which have been identified in the discussion and respondents comments in this section. The inferential evidence suggests that further research would prove extremely valuable.

5.5.8 Extent of clerical support staff for SPs

69% of IOSH respondents reported that they had clerical assistance or support staff to help them in performance of function, with 39% reporting that they had one clerical assistant. However, further investigation showed several interesting features concerning the type and quality of the clerical support staff.

A typical comment covering all respondents was the following from an SP employed in local government;

'I listed one clerk on the survey questionnaire, but in fact it is two 'half-time' clerical assistants. One is a clerk, who keeps files, statistics and other records up-to-date. The other 'half-time' assistant is a typist who types reports, letters, etc.'

An SP employed in a large engineering works declared;

'In fact I have no full time clerical assistant, but if I want anything done I simply go to the office and ask for help. Usually there is no problem.'

Some respondents found it difficult to classify their circumstances. For example, an SP employed at a chemical plant stated;

'I was wondering about this question (Q B 17). I have an assistant who is not employed as an assistant safety officer or a clerk, he is officially termed 'storekeeper' but he does storekeeping, keeps records up-to-date and because he is interested, some filing and even answers basic safety enquiries if I'm not around. Is he classified as a 'clerical assistant' or what?'

The conclusion of all the IOSH respondents contacted was that clerical assistance, whether formally attributed or otherwise, was vital to release the SP from the repetitive and mundane (although important) non-advisory functions.

5.5.9 Levels of Management

The discussion on this topic is placed in this section, instead of Section 5.4, because the comments and data come from SPs, concerning their perception of how levels of management affect their performance in the workplace. The IOSH survey response showed that 56% of respondents employed in organizations employing under 1,000, reported that they had only one level of management above them (i.e., they reported directly to the most senior manager); 54% of SPs in large organizations (over 5,000 employees) reported they had two or more levels of management between themselves and the most senior manager (cf Ch. 4.3.10). However, following discussions with respondents it was found that they had interpreted the question in various ways. In many cases the interpretation was *not* what had been intended during the construction of the questionnaire.

The intention was for respondents to identify the levels of management between themselves and the 'Chief Executive'. Some of the IOSH respondents' comments were as follows;

'When I read the question (Q B 7) I thought it meant the levels of management between me and the person in charge of safety. In my case that is the personnel manager.'

'I took the question to refer to the Works Manager, but he is not the senior manager for the company.'

'I work in a large safety department and I report to the Safety Manager in this works, who in turn reports to the Chief Health and Safety Manager - these are the levels of management I counted in making my answer.'

However, some respondents reported, the more levels of management between themselves and the senior manager, the more problems with carrying out their responsibilities. One respondent observed;

'By the time I have gone through the system, I cannot go direct, the place could have blown up. I have to tell each manager (there were 5 levels reported) what I want and why, to maintain protocol. I then get permission to move 'up the ladder'. God, it takes all day and then some to get a decision.'

On the other hand, even if there were many levels of management between themselves and the senior manager, some had a direct route to the senior manager. One multi-national chemical products company SP declared;

I have no problem. Each week I see the Works Manager, and if anything important comes up I can go to him direct. In any case, I have a great deal of autonomy to make my own decisions - it is then up to the line managers to approach the Works Manager if they wish to object (and they rarely do).'

Beaumont et al (1982) found that the majority of their respondents (n = 33) reported to the personnel department (13). 10 respondents reported to the Works Manager, 8 to the Technical Manager (e.g. security/safety controller) and 2 reported direct to the Board (both of these SPs were Board members). Beaumont et al. concluded;

'In summary, our findings suggest that the question of to whom the safety officer reports, with its obvious implications for the prestige of the role and the way it is perceived, very largely is a function of how the safety officer role and function has come about in a particular plant. And this is, as we have seen, the result of relatively unplanned process, based very largely on plant specific considerations at any particular point in time.'

The Waterhouse et al. IOSH Survey showed that 18% of respondents reported to the Personnel Manager (7%), Personnel Director (6%) or Personnel 'other' (5%), 12% to the Production Manager, 11% to 'other

General Manager' and 7% to the Works Manager (Dabbs, 1986). Dawson et al. noted that the 'safety specialists';

' ... line of reporting should lead to a person who commands respect and authority from senior people in the operating core. In some circumstances this can mean the operations manager or director himself, provided he and the rest of the organization are committed to establishing effective systems of technical and motivational control. If however such a situation has not been created it is probably better for the specialist's line of reporting to remain separate from the central operations core - possibly in the personnel or administration directorates.'

Dawson et al. (1984)

The inferential evidence from the IOSH survey shows that respondents in this study largely agree that the line of reporting identified by Dawson et al., is an ideal which can or should be effected if no other exists. However, IOSH survey respondents (similar to many SPs) commenced employment utilising existing or predetermined reporting procedures, with their predetermined levels of management. Therefore it was *not* the SP respondents who either established the organizational reporting procedure or the levels of management between themselves and the senior manager - it was the employer and their management. Although there were always exceptions, in general, problems or inadequacies in OHS systems and procedures which existed as a direct consequence of levels of management (or reporting), were usually outside the remit of the SP respondents to change, or at best, to change with great difficulty.

It was reported by IOSH respondents that the major consideration in determining to whom they reported at their plant was less the 'specific considerations' noted by Beaumont et al. (1982) than 'happenstance', coincidence or where they were located in the organizational structure by the management. Sometimes these factors combined. The following examples illustrate;

'I was the first full-time safety officer this plant appointed (2,500 employees). Until my arrival the post was part-time, with a line manager/safety officer, he reported to the production manager. On my arrival I too reported to the production manager, but the hassle (conflict between safety and production) proved too much for everyone concerned. After a time I was transferred to the personnel and welfare department. I now report direct to the personnel manager but it is not what I

would like, for often he has to refer questions (of OHS) to the Works Manager.'

'On my arrival I actually was asked who I thought I should report to. I referred to HSE recommendations and stated that it should be the managing director. They accepted my suggestion and I have found it far better than reporting to personnel, which I did at my previous works.'

'I report directly to the Works Manager, but he is only concerned with production. I have been trying to change this to a direct reporting system to the Board, or a specific director. However, all attempts to do so are blocked by the Works Manager.'

In summary, the inferential evidence in this study broadly supported the conclusions of many authorities (cf Dawson et al., 1984; HSE, 1981; Petersen, 1978). It was found that the person to whom the SP reports can be and often is a key source of power and influence not only for the SP, but also influenced the standards of OHS achieved throughout the organization. However, that inferential conclusion is tempered by a caveat.

There was strong inferential evidence, by the number of times the subject was raised during the informal discussions with SPs following the IOSH survey questionnaire, that the levels of management between the SP and the Senior Manager or Chief Executive was *less important* than three other factors. First and primarily, the attitude of the senior person in the company towards OHS. Second, the attitude towards OHS of the person to whom the SP reported. Third, individual factors in the SP.

The last factor was emphasised most strongly in anecdotal evidence from IOSH respondents and received reference by Dawson et al. (1984) in their concluding paragraph. The anecdotal comments during the informal discussions were always about 'other safety officers' (never about themselves) and were repeated sufficiently to collectively indicate that the decisive factor may not be the levels of management or the person to whom the SP reported to in the organizational structure. The prime decisive factor identified by the anecdotal evidence were the individual characteristics of the SP, such as attitude, approach, education and training but always tempered by the attitude of the senior manager (or most powerful

manager) towards OHS. This area needs in-depth study in some future research project.

5.5.10 Time spent in the safety function

The time spent in the safety function can be related to the division between full-time SPs, whose sole responsibility is towards OHS and part-time SPs who divide their functional responsibilities between OHS and another role. In the IOSH Survey 74% of the respondents reported that they were full-time SPs and 14% reported that they spent 'more than half their time' on OHS duties (cf Section 4.4.2 and Appendix B 61).

It should be noted that the discussion in this section effectively acts as an introduction to the following section, 'activities of the IOSH respondent' as the two are highly inter-related, since SP workplace activities and role performance are highly influenced by the time and commitment afforded to SP role. The full-time SP should have far fewer problems in deciding prime function than the part-time SP, who has the constant pressure or conflict between role demands.

Those authorities who have investigated the subject, including Dawson et al. (1984), Beaumont et al. (1982) and Peterson (1978), have concluded that many part-time SPs have problems in prioritising their divided functions. For example, Dawson et al. in a short report of their survey of 618 establishments, included a review of the problem facing part-time SPs found during their research. Their comments are useful, for although understandably study specific, much of Dawson et al.'s statements succinctly summarise the consensus authoritative view. They declared;

'The part-time recruit has been given safety as an additional responsibility whilst retaining their existing job which is either (a) in the 'personnel' area, e.g. training, industrial relations, or (b) in the 'operations' area, e.g. in supervision or management. He generally has more status in the organization than the blue collar recruit but his other commitments mean that safety and health matters are not his only or even main concern. The part-time personnel recruit can advise on and implement training programmes but usually lacks credibility in technical areas. The part time

operational recruit has far greater technical credibility but is often torn in two directions by his 'twin' concerns.'

Dawson et al. (1984)

This concern over part-time SPs being 'torn in two' by their 'twin concerns' is one identified by respondents in this study and by many authorities (cf Beaumont et al., 1982; Grayson, 1981; Petersen, 1978; Nichols, 1975; Kinnersley, 1973). The evidence shows that an important question when examining role performance of part-time SPs is what function forms the other part of their role and to which first priority is afforded (cf Section 5.5.6).

In the IOSH survey a quarter of respondents recorded they were part-time SPs - the two further questions that demanded examination (i.e., 'what was the other role?' and 'which role took priority?') did not form part of the IOSH survey questionnaire. A prime reason for the omission was the need to keep the questionnaire at an acceptable length for the respondents.

The reaction of one IOSH and one non-IOSH respondent, whose comments are provided below indicate the depth of the problem. However, it was found that in the case of questions concerning priority in dual roles, a mailed questionnaire was not the best method of determining the answer. The IOSH respondent declared;

'I am a Personnel and Safety Officer (with a local authority) and we take safety very seriously. However, if you ask me which takes priority, the job or safety I would not like to commit myself beyond saying that it depends on the job, the worker and the supervisor.'

The non-IOSH member was a member of the Institution of Safety Management. He had been trained by the British Safety Council (BSC) and held their Diploma in Safety Management, declaring that BSC courses 'combined practicality with a good grounding in theory' (cf Ch. 6). However, he was a line manager with a part-time function as an SP ('less than half the time'). When he was asked, which assumed priority OHS or production, he immediately responded 'safety', then hesitated and said, 'Well it all depends' adding;

'As a line manager and safety officer, it is my job to ensure that safety and production goes hand in hand.'

When strongly pressed he insisted 'the two are inter-related' and would not go further, eventually leaving the bar (the interview took place at an Institute of Personnel Management conference, OHS Section, 1978).

It was found the matter of allocating priorities by part-time SPs is extremely sensitive and the reaction of respondents suggested it is one of those areas which, in mailed survey questionnaires, typically is more likely to receive a 'socially acceptable answer' rather than the whole truth (cf Oppenheim, 1966; Selltiz et al., 1965). Nevertheless, it is an extremely important area of research. Since the IOSH survey had been completed, it was decided the best method of pursuing the question would be during participant observation studies (cf Ch. 2, 3 and Section 5.8).

5.6 Activities and actual responsibilities

5.6.1 Introduction

Section 4.5 reported the recorded degree of involvement of respondents in seven predetermined areas of activity, where the frequency count of recorded responses to coded questions on respondents 'actual level of responsibility in specified OHS areas' was displayed in Tables 4 (19) to 4 (29). This section offers extended discussion on the whole response data, whereas section 4.5 was largely concerned with merely reporting the data.

In each of the seven areas listed in the survey questionnaire (Q. C 2-4) - 'audiometry', 'environmental measuring', 'job design or redesign', 'interpreting epidemiological information', 'employer's liability claims', 'product liability' and 'security' - three interrelated sets of questions were asked, each had coded answers.

First, the respondents were asked to record their *actual* level of involvement in each area of function at their place of employment (cf Section 4.4.3); second, they were asked to record the *extent of formal training* the respondent had received in each of the seven areas listed; third, the *extent of involvement the respondent thought SPs should have* in each of the seven listed areas. The coded

answers ranged through 'very extensive', 'extensive', 'fairly', 'little' and 'absolutely no (or none)' actual involvement/formal training/extent of involvement the SPs thought they should have.

Wherever appropriate, references are made to the findings from the Waterhouse et al. (1984) survey, which, similar to this study, largely drew its sample from IOSH respondents. No similar study into the activities, levels of training and extent of involvement SPs thought they should have in those activities was found (cf Table 5 [1]). Nevertheless, it is considered useful to broadly compare the Waterhouse et al. (1984) survey recorded responses with those recorded for this study, even though this research extended the areas investigated and the terms are not strictly comparable.

It is stressed that this comparison is strictly useful at an inferential level, in the absence of any other data. The terms used in the Waterhouse et al. (1984) survey are different, but 'weekly' is treated as broadly comparable with the 'very extensive' used in this study, 'monthly' with 'fairly extensive', 'quarterly' with 'extensive' and 'annually' with 'little'.

It was found during the informal component of the IOSH survey that some respondents had not provided an accurate response to questions in the IOSH mailed survey questionnaire. Most frequently this was because of misunderstanding the question or lack of in-depth knowledge of the subject area. The known instances that this happened to any significant degree are noted in the following discussion (e.g., Section 5.6.2). However, there is no way of knowing how many times this happened in the IOSH survey (or any of the other SP surveys). Indeed, no references were found to this problem in any of the reports on SP role. The inferential evidence found during this study suggests that this problem is more prevalent in SP surveys than perhaps realised or acknowledged and further research into this problem would prove useful.

Tables 5 (9) to 5 (15) summarise the recorded data, displaying it in *rank order* for each of the separate questions and areas. In each case, the rank order is based upon the absolute frequency count, with 1 representing the highest number of responses, in descending order down to 5 representing the lowest number of responses. The

whole IOSH survey frequency count is shown in Appendix B, Tables B 78 to B 98 inclusive.

The following abbreviations, applying to column headings and the respective responses, are used throughout this section;

ALI = actual level of involvement in subject under discussion,
 EFT = extent of formal training received by respondent and
 ISH = level of involvement respondent thought SPs should have in the subject under discussion.

5.6.2 Audiometry

Table 5 (9) displays the rank order of responses to the three questions (C 2-4). The general similarities in rank order between the ALI in audiometry and EFT contrasts with the respondents' recorded ranking of the ISH.

During follow-up research, at informal interviews there appeared to be a difference of opinion between those respondents (generally younger, better qualified) who had achieved their IOSH membership by completing courses and examination, and the (often older, less well qualified but frequently highly experienced) respondents who had become corporate members of IOSH by application.

TABLE 5 (9) RANKED ORDER OF LEVEL OF INVOLVEMENT, EXTENT OF FORMAL TRAINING AND LEVEL OF INVOLVEMENT RESPONDENT CONSIDERED APPROPRIATE: AUDIOMETRY

Level	Coded responses in rank order		
	Actual level involvement	Extent formal Training	Involvement should have
Very extensive	5	5	3
Extensive	4	4	2
Fairly extensive	3	2	1
Little	1	1	4
Absolutely none	2	3	5

These differences of opinion are illustrated by the following comments from two IOSH respondents. A 61-year old IOSH corporate member (by application), declared;

'I think audiometry is a medical practitioner's job. If I have any tests to make, I call in the Occupational Health Nurse, she takes care of everything.'

On the other hand, a 35-year old degree qualified SP (corporate member by application), employed in the chemical industry, stated;

'A component of my degree was Industrial Hygiene, I am perfectly capable of being able to conduct many if not all audiometric tests. However, my employer insists on calling in the Occupational Health physician. I think this situation is absurd in the majority of cases. An essential part of the role of the safety officer is to know when to call in other specialists, I am not allowed to use my professional discretion. It wastes company time and money.'

However, it became evident that some respondents completely misunderstood or did not know what the term 'audiometry' meant. A comment by a 57-year old respondent during interview illustrates;

'I think safety advisers should be allowed to do audiometric tests, I know how to use a noise meter and I have had years of experience in my job.'

It was found that several respondent SPs, mainly the unqualified and older members, during interviews and discussion revealed that they thought audiometry was principally concerned with the measurement of noise levels. Schilling (1973) offers the standard definition of audiometry; 'the measurement of hearing acuity and is used in occupational medicine to evaluate the hearing of those exposed to noise at work.' The inferential evidence indicates that responses may have been affected by some respondents not understanding the meaning of the term 'audiometry'. In SP and OHS surveys asking similar types of questions, it would be useful to determine if the respondent truly understood the meaning of the terms used (cf Section 4.5.8).

The Waterhouse et al. (1984) survey questionnaire asked IOSH respondents '(Have you ever) carried out biological monitoring (e.g. audiometry)?' Bearing in mind the comments made in section 5.6.1, 65% of the 302 Waterhouse et al. (1984) respondents who answered

the question reported that they never carried out this function. The remaining 35% respondents reported that they conducted biological monitoring weekly (2%), monthly (5%), quarterly (10%) and annually (16%).

5.6.3 Environmental measuring

The data in Table 4 (21) show that 62% of IOSH respondents reported that they were fairly extensively to very extensively involved in environmental measuring (cf Section 4.4.3). Table 5 (10) displays the rank order results from the three questions on ALI, EFT and ISH.

The data displayed in columns 1 and 2 in Table 5 (10) closely coincide. The prime rank order, 'fairly extensive' coincides exactly across all three columns, it showed that ALI, EFT and ISH balanced.

TABLE 5 (10) RANKED ORDER OF LEVEL OF INVOLVEMENT, EXTENT OF FORMAL TRAINING AND LEVEL OF INVOLVEMENT RESPONDENT CONSIDERED APPROPRIATE: ENVIRONMENTAL MEASURING

Coded responses in rank order			
Level	Actual level involvement	Extent formal Training	Involvement should have
Very extensive	5	5	3
Extensive	3	4	3
Fairly extensive	1	1	1
Little	2	2	4
Absolutely none	4	3	5

IOSH members considered environmental measuring formed an important part of their role. A typical comment was that from a chemical works SP who declared;

'Environmental measuring and monitoring is one of the key elements in the SP role. It is important to be well on top of this part of the job and it is one that can rapidly cause tremendous problems, inside and outside the factory, if this is not regularly done.'

The Waterhouse et al. (1984) survey included a question asking respondents how often they carried out environmental monitoring. 306 respondents replied, reporting 11% weekly, 25% monthly, 23% quarterly and 18% annually (cf Section 5.6.1).

5.6.4 Job design or redesign

A short review of the importance of job design and redesign for the SP was presented in Section 4.4.3. After noting that 69% of IOSH survey respondents indicated that they were 'fairly' to 'very extensively' involved in job design or redesign, cross tabulation Tables showed that SPs from the industrial category 'engineering and allied trades' were most likely to be involved (75%), with 64% of SPs in the chemical industry the next highest percentage.

Table 5 (11) displays the rank order of ALI, EFT and ISH for job design or redesign.

TABLE 5 (11) RANKED ORDER OF LEVEL OF INVOLVEMENT, EXTENT OF FORMAL TRAINING AND LEVEL OF INVOLVEMENT RESPONDENT CONSIDERED APPROPRIATE: JOB DESIGN OR REDESIGN

Coded responses in rank order			
Level	Actual level involvement	Extent formal Training	Involvement should have
Very extensive	5	5	3
Extensive	3	4	1
Fairly extensive	1	1	2
Little	2	2	4
Absolutely none	4	3	5

However, it was possible that the IOSH survey response data understates the actual depth of involvement of IOSH respondents in job design or redesign. During informal conversations many IOSH members, including some of those who had participated in the IOSH survey, declared that they were involved in monitoring and changing

systems of work, to ensure safe working. However, many of them declared they had not considered these activities to be 'job design' or 'redesign' and had not recorded them as such on the IOSH survey questionnaire.

An example of the problems faced by some respondents when completing survey questionnaires was found during the informal interview research period for this study. At a Regional IOSH training session held at Malvern, following a long discussion on the IOSH survey, in which he had participated, an IOSH member (by application) who was a full-time SP in an engineering works frankly stated;

'Listening to you I can see what many of the questions (in this section) actually meant, and the reasons for asking them. I often check tasks and systems of work, and the way they are carried out in the factory. I never thought of job design and redesign in that light. I have been carrying out a highly technical activity, without knowing what it was called. I ticked 'absolutely no involvement' (for job design or redesign) on your damn questionnaire, when there it is, I've been doing it for years!'

The inferential evidence strongly suggested that many respondents answered the question on job design and redesign 'incorrectly', or failed to answer it at all, for the reasons provided by the engineering works SP respondent.

This was another of the occasions when *many* IOSH respondents, for a variety of reasons, were found to fail to understand the question or to have insufficient knowledge of the subject of the question and thereby providing an inaccurate response (cf Section 4.5.8; Section 5.7). This factor should be borne in mind when inspecting the displayed data (and it is interesting to speculate how many times this 'misunderstanding' through insufficient knowledge of a particular subject may have happened in other SP surveys).

5.6.5 Interpreting Epidemiological Information

The response data showed that 68% of IOSH respondents had little or absolutely no involvement in interpreting epidemiological

information. This compares with the finding that 80% of respondents in the Waterhouse et al. (1984) survey 'never' had anything to do with epidemiology and 13% reported that they were involved 'once a year'.

Table 5 (12) displays the ranked response to all three questions concerning the interpretation of epidemiological information in the IOSH survey, ALI, EFT and ISH.

TABLE 5 (12) RANKED ORDER OF LEVEL OF INVOLVEMENT, EXTENT OF FORMAL TRAINING AND LEVEL OF INVOLVEMENT RESPONDENT CONSIDERED APPROPRIATE: INTERPRETING EPIDEMIOLOGICAL INFORMATION

Level	Coded responses in rank order		
	Actual level involvement	Extent formal Training	Involvement should have
Very extensive	5	5	4
Extensive	4	4	3
Fairly extensive	3	3	1
Little	2	2	2
Absolutely none	1	1	5

Comments made by IOSH respondents on the subject of epidemiology and worthy of note included those made by a blunt speaking SP, who emphatically stated;

'Epidemiology, demiology, sociology, who gives a damn about all these 'ologies'. I have been a safety officer for over 30 years, respected by my employers and the workers at my plant. The modern trend to give everything fancy names is rubbish. Look lad, if I can do it, I DO IT, if I can't, I know who to pass it on to. That's where experience - not booklearning - comes in, knowing what you can do and when.'

An alternative perspective was offered by another SP respondent, employed by a local authority. He said;

The problem with your question on epidemiology is that the subject area is so wide. I could ask, what aspect or sector of epidemiology are you concerned about? I suppose all safety personnel are involved, in a greater or lesser degree, with identifying or interpreting

epidemiological information but at the time, would they classify it as 'epidemiological'? Certainly I have found that the safety officer is ideally placed to identify epidemiological problems and suggest solutions or palliatives. Conversely, many occupational health physicians and nurses seem to fail in this area, only identifying the obvious after a patient has attended their clinic or it has been reported. Even then they treat the patient, not establish the hazard and resolve the main problem - unlike the safety officer. To answer your question (on the extent of my involvement in epidemiological problems) is a problem in classification rather than providing a straightforward response.'

Thus it was found during the informal interviews that many SPs were involved in some aspect of the epidemiology, but were reluctant or failed to record the fact (cf Section 5.6.1).

5.6.6 Employer's Liability Claims

The principal reason for the inclusion of questions on the SP respondents ALI, EFT and ISH in employer's liability claims procedure was because of the possibility of client/employer conflict in the performance of SP role (cf Atherley and Hale, 1975). Those SPs who became involved in the many aspects of claims investigation *for the protection of the employer* and not as an investigation into an accident leading to the *improvement* of accident prevention, may suffer from internal and external conflicts, as well as from client/employer conflict and lose credibility as an *independent* OHS specialist and expert (Grayson, 1981; Nichols, 1975; Kinnersley, 1973).

Waterhouse et al. reported that 63.5% of their respondents were involved in employer's liability claims procedure. The IOSH survey showed that 63% of respondents were 'fairly extensively' (22%), 'extensively' (20%), or 'very extensively' (21%) involved in employer's liability claims. This should be contrasted to the 30% of IOSH respondents who recorded they had been 'trained', 23% received 'little training' and 20% who had received 'absolutely no(ne)' training in employer's liability claims procedure.

Table 5 (13) displays the recorded ranked order of ALI, EFT and ISH IOSH survey responses concerning employers liability claims.

TABLE 5 (13) RANKED ORDER OF LEVEL OF INVOLVEMENT, EXTENT OF FORMAL TRAINING AND LEVEL OF INVOLVEMENT RESPONDENT CONSIDERED APPROPRIATE: EMPLOYER'S LIABILITY CLAIMS

Level	Coded responses in rank order		
	Actual level involvement	Extent formal Training	Involvement should have
Very extensive	2	5	3
Extensive	3	4	2
Fairly extensive	1	1	1
Little	4	2	4
Absolutely none	5	3	5

Inspection of the data shown in Table 5 (13) suggests that some respondents are engaged in activities for which they have little formal training, with the data in column ALI almost mirrored in reverse in column EFT. The rank order displayed across columns ALI, EFT and ISH offers some inferential evidence that respondents feel that they are overly involved in employer's liability claims procedure.

However, a more significant difference was found between those who saw the SP role and occupation as a 'job', working for an employer, and those who saw the SP as an independent OHS specialist, a professional *whose profession transcended any monetary interchange*.

The concept of the role of SP as an occupation or a profession as *perceived by the IOSH respondents* receives further discussion throughout the remaining chapters of this study, since it was found to have a crucial influence on the future of the occupation of SP (cf Ch. 6, 7 (especially 7.3.17) and 8; Appendices F, G and H).

During an evening session in the bar at an IOSH conference, the debate turned to the question of SPs and their involvement in employer's liability claims. Salient comments included;

'My employer pays my salary, what he wants me to do, I do.'

'I feel that there must be a line drawn between working for an employer and being an independent specialist. You can't be independent and pursue liability claims for the employer.'

'The workers have their unions and they are only interested in compensation. I have known men carried into work with a broken ankle and then a claim entered for an industrial injury. We have to help our employers counter that sort of fiddling.'

'When I investigate an accident at work I show my findings to both employer and employee's representatives. My prime role is accident prevention, you cannot do that if you hide findings from those most concerned.'

The above comments can be broadly divided between those from the older respondents (45 years of age or more) who were more frequently employer biased and the younger respondents (usually ten years younger than the first group) who were more inclined to support the concept of occupational independence, or profession based role performance (cf Gouldner, 1970; Section 7.3.17).

During extensive informal conversations the subject was often raised in an attempt to establish the feelings of SPs towards the subject of employers' liability and SP involvement. It was found that the division of opinion was even more marked between the usually older, frequently less qualified IOSH respondent, who had been promoted at his place of employment from a low supervisory or shopfloor position into the role of SP (occupationally and employer biased) and the younger SP either recruited from outside the organization or promoted from a managerial or professional position within the current organization and (by comparison with the first group) often with some formal education and/or OHS qualifications (profession biased).

It would be useful to follow the inferential evidence uncovered in the IOSH survey and to conduct further research into the connection (if any) between involvement in employer's liability claims and abstraction from such involvement, to see if the division influences the perception of professional or occupational SPs *and performance of SP role in the workplace or vice versa.*

The reason for the inclusion of this subject in the IOSH survey was explained in Section 4.5.7. In 1987 the very considerable debate and discussion conducted on this subject which existed in the 1970s and early 1980s has since dissipated. The debate was a consequence of the statutory bodies in the U.K. considering introducing product liability legislation, possibly based on the U.S.A. model. The core of the debate, for the occupational group, was would (or should) the SP be involved in the monitoring or advisory procedures. Table 5 (15) displays recorded responses in rank order to questions on ALI, EFT and ISH in 'product liability'.

TABLE 5 (14) RANKED ORDER OF LEVEL OF INVOLVEMENT, EXTENT OF FORMAL TRAINING AND LEVEL OF INVOLVEMENT RESPONDENT CONSIDERED APPROPRIATE: PRODUCT LIABILITY

Coded responses in rank order			
Level	Actual level involvement	Extent formal Training	Involvement should have
Very extensive	5	5	4
Extensive	4	4	2
Fairly extensive	3	3	1
Little	2	2	3
Absolutely none	1	1	5

The recorded responses in ALI and EFT showed that at the time of the IOSH survey (when the debate was arguably at its height) 66% of respondents had little (40%) or no involvement (26%) in product liability. This lack of involvement was almost exactly equalled by the 61% of IOSH respondents who recorded that they had received, little (26%) or absolutely no (35%) training in product liability. 64% of respondents recorded that they thought they should be fairly (29%), extensively (19%) or very extensively (16%) involved in product liability.

The informal research found that the views on the subject of product liability by the IOSH membership varied. Short comments on the subject included;

'I've got too much to do now, I don't want anything else added to my plate.'

'I am already involved in product liability because at throughout all stages in the design and manufacture of new products (heavy machinery) I am consulted on the safety aspects.'

'We have to expand our (SP) role, therefore I am very much in favour of getting involved in product liability.'

The comments of the respondent who declared that because he was involved in preliminary stages of manufacture he was concerned with product liability probably best summarises the true situation. That is, many SPs always have been involved in product liability, but without realising the fact.

5.6.8 Security and the SP

The relevance of security being included in this range of seven areas of ALI, EFT and ISH was to link this component of SP role with the claimed widening use of Loss Control or Total Loss Control (TLC) in the 1970s and early 1980s (cf Tye, 1971; Fletcher and Douglas, 1971). A major part of TLC was that it was an all inclusive approach to OHS, designed to;

'reduce all factors which downgrade the industrial system, thereby improving profitability through greater operating efficiency.'

Tye (1971)

In the U.K. James Tye was a major innovator of TLC and the BSC, for whom he is (1987) director, placed considerable effort in extolling the virtues of TLC and it formed the basis of their philosophy, approach and concept of OHS. The BSC courses in 1981 were largely based on the TLC method of OHS, although in the latter 1980s it is noticeable that the BSC (and James Tye) has moved on to extolling the virtues of Risk Management (cf Bamber, 1987).

In the comprehensive range of techniques which make up TLC, security is of prime importance. Fletcher and Douglas summarised the role of security in the TLC concept of OHS in the following manner;

'The total loss control concept sees industrial security as an organization which assures adequate protection of buildings, personnel, equipment, funds and confidential data by protecting against sabotage, theft, pilferage, vandalism and whatever else might endanger or interrupt normal operations.'

Fletcher and Douglas (1971)

The critics of TLC claimed that it was 'dehumanised OHS' but considered that the concept of 'total OHS' was useful (Hale, 1980). In the OHS journals in the U.K. of the late 1970s and early 1980s there was considerable debate and many articles concerned with TLC. The pre-pilot and pilot survey results showed that a reference to TLC in the questionnaire would be necessary in any investigation into SP role.

However, just over a quarter (26%) of IOSH respondents recorded that Loss Control techniques were used in their organization. In theory this could mean that at least a quarter of the IOSH respondents would be involved or concerned with security. Table 5 (15) displays the rank order of responses to the IOSH survey questions on ALI, EFT and ISH and security.

TABLE 5 (15) RANKED ORDER OF LEVEL OF INVOLVEMENT, EXTENT OF FORMAL TRAINING AND LEVEL OF INVOLVEMENT RESPONDENT CONSIDERED APPROPRIATE: SECURITY

Level	Coded responses in rank order		
	Actual level involvement	Extent formal Training	Involvement should have
Very extensive	4	4	4
Extensive	5	5	5
Fairly extensive	3	3	3
Little	2	2	2
Absolutely none	1	1	1

The data displayed in Table 4 (29) show that 30% of IOSH respondents recorded that they were concerned with security at the 'fairly extensive' (13%) to 'very extensive levels' (9%).

A unique feature of the ranked order for security is that ALI, EFT and ISH exactly coincide. Therefore, each is balanced (i.e., similar ranking for the reported responses for each level). It is useful to speculate, but it is pure speculation - further research would be useful. Provided the same respondents recorded the same levels, in theory at least, the employer has ensured that role content and training is balanced. Since the respondents reported ISH balanced, extending the speculation as a guide for further research, it is possible that the result will be that role performance will not suffer from lack of training or lack of interest (job-satisfaction).

Respondents' views on the subject of loss control were found to be equally divided. The comments recorded during informal discussions and interviews included;

'In my view total loss control is more effective if the insurance rating reflects its use, successes and of course failures.'

'(TLC is) An American concept, reduces everything to cash. It is damned effective though, if properly applied.'

'Loss control techniques overlooks the fact that workers differ in attitudes and that unless you can spend large amounts of money and time on training the workforce, it is a waste of time.'

'We find Loss Control the best technique for health and safety. Our plants throughout the world use Loss Control very successfully. It makes every manager and supervisor fully aware of their health and safety obligations and therefore we have consistently low accident rates year after year.'

The last comment came from an SP employed by a large U.S. chemical products multi-national. Those respondents who were against the technique of TLC generally stated that they had never been involved in its application, whereas it was found that those who had applied TLC were almost unanimously very enthusiastic about its advantages.

The discussion in this section has drawn extensively from the comments of respondents concerning the seven selected areas of OHS responsibility. This concluding discussion considers general points made by respondents on the series of questions, some of which inevitably refer to the value and use of mailed survey questionnaires. Since these criticisms affect the possibility of achieving an understanding of SP role in the workplace and concern the questions considered in this section, they demand examination in this concluding discussion.

The IOSH respondents were very critical of the value of mailed SP survey questionnaires in general (not merely the IOSH survey questionnaire). In particular, they were concerned about two aspects of the IOSH survey questionnaire concerning ALI, EFT and ISH.

First, many (not just a few) respondents declared that surveys were restrictive, in that only questions asked could be answered, giving as an example the seven areas of responsibility with its sections on ALI, EFT and ISH and the selected areas of OHS responsibility (cf Section 5.7). They considered that if survey questionnaires were inevitable, then questionnaires which allowed free responses were of greater value (to the research and the SPs) than the standard coded response questionnaire - however *apparently* comprehensive.

The majority of respondents considered that personal interviews were preferable to survey questionnaires, claiming that they give respondents 'the opportunity to modify or correct wrong questions'. However, the majority invariably added that 'actually going round with a safety officer' was by far the best, if not the only method, which would establish SP role, function and responsibilities. Therefore the comments made by the respondent in section 5.5.7 contrasting the disadvantages of mailed survey questionnaires with the advantages of (in effect) participant observation studies was not an isolated example.

A typical in tone but unusually comprehensive comment which summarised the feelings of most of those who advocated participant observation studies in preference to survey questionnaires and commented on the seven areas of responsibility, was the following made by a respondent who held a Ph.D.;

'Its really little use sending out a questionnaire which has predetermined questions with coded answers. It would be far better if you spent several days with a number of safety officers, working in different industries and recorded what you observed. How can I really describe my job or role when each day is different, each job I do (although superficially the same) can be different, because of the different personnel involved, task differences or workplace differences. Those seven areas of responsibility which you identified were totally inadequate and too far small a selection to find out anything useful. Go out and find out from a selection of respondents what we do, why we do it, how we do it and what we think about the duties we have to do.'

Second, some respondents declared that the component which asked them which level of involvement they thought they should have in each of the seven selected areas of OHS responsibility inevitably would result in SPs stating that they should have more responsibility. As one respondent stated;

'Of course I'm going to say that I should have more responsibility in an area of health and safety, if that means that I increase the number of areas I cover and my usefulness to my employer at the same time. That means I am less likely to be made redundant, possibly assist me to get an assistant or a salary increase and unquestionably improve my status.'

In fact, reference to the rank order of ISH showed that in five out of the seven areas of OHS activity, respondents recorded that they wanted to have more involvement than they had at the time of the survey. In three of the five areas (audiometry, environmental measuring and job design or redesign) the respondents increased their ISH by 2 points, i.e., an ALI ranking of 5 became an ISH ranking of 3 and in two cases (interpreting epidemiological information and product liability) they increased their ISH by 1 point, with an ALI ranking of 5 becoming an ISH of 4.

However, it was interesting to note (in view of the cited comments and the discussion in section 5.5.6) that in the case of employer's

liability claims, the displayed data showed that respondents who recorded they were 'very extensively involved' (2) in this area of activity stated that they had absolutely no training (5) in the subject and considered that they should only be 'fairly extensively' (3) involved.

The inferential evidence, by reference to the rank order and the informal comments, suggests that a *minority* of IOSH respondents is concerned over their degree of involvement in this area of responsibility demanded by their employers (through defining SP role content and activity) because, again by reference to the respondents' comments, they consider it may result in reduced credibility as an independent OHS specialist (cf Ch. 6).

In the case of the EFT for each of the seven areas under investigation, in three areas of activity (interpreting epidemiological information, product liability and security) the respondents recorded the same rank order for EFT and ALI. The inferential evidence from this finding suggests that SPs in these areas have been adequately trained to carry out their functional responsibility. In three other cases, audiometry, environmental measuring and job design or redesign, the ALI and EFT almost coincided, the difference was marginal. The inferential evidence suggested that the majority of SP respondents engaged in these activities also had been adequately trained to complete their role requirements.

In the case of security the inferential evidence showed that the ideal situation was achieved, all rank orders within ALI, EFT and ISH coincided. In theory at least and provided the same respondents were found throughout the response categories, SPs in this group would be able to carry out their functions efficiently, adequately trained and obtaining maximum job satisfaction.

The exercise in attempting to establish facts concerning ALI, EFT and ISH proved useful but inconclusive. Sufficient inferential evidence was derived to suggest that further research into this subject was required and would prove extremely useful.

In particular, the inferential evidence showed that it is insufficient to establish the OHS activities of SPs, without finding out the extent of training they had received for those OHS activities in which they are involved and ascertaining how the respondent feels about their degree of involvement in the activity identified. In only two out of the seven areas of activity did rank order for ALI and EFT coincide and in one (security) did ALI, EFT and ISH exactly coincide.

The inferential evidence from the research conducted for this study strongly indicates that research into SP role, function and responsibilities should not be restricted to considering SP activity. It is important to find out the extent of training the SP has received for the activity, since training and performance are closely linked. It is advisable to establish how the SP *feels* about carrying out the activity, since this influences job-satisfaction, which in turn influences role performance. If these areas are not researched then any comments, findings and conclusions on SP role performance are made disregarding some crucial influencing variables.

However, the prime influencing variable on SP role, function, responsibilities and performance, is the control over these factors by the employer and manager. The employer and manager select, appoint and particularly important in the context of this part of the discussion, control SP functional responsibilities, role content and training following appointment. The inferential evidence suggests that it is *all* these factors which combine to largely determine the performance of SPs in the workplace and lead to a tremendous variation in SP role, function and responsibilities.

The conclusion is that *individual* SPs have little control or influence over actual level of involvement (ALI) and extent of formal training (EFT) (or role, function or responsibilities).

5.7 Respondents' actual level of responsibility in specified OHS areas

Chapter 4.5 presented an analysis and discussion of the IOSH response data to questions on eleven elements of SP functional responsibilities. This section offers further discussion on selected elements, utilising respondents comments made during the follow-up informal research component of the research for this study. Attention is drawn to the comments made in the last paragraph of the preceding section concerning the inferential finding from this study - the necessity to combine measurement of activities with establishing the extent of training a respondent has received.

The SP who has not received training in a certain area may not ever become involved in the activity. Either the employer will not let the SP carry out the function, or the SP may act as gatekeeper and decide for themselves that the OHS activity would be better carried out by an expert in that activity (cf section 5.6.2). However, if presented with a coded questionnaire, they may offer a response - a response inadvertently rendered invalid due to the limiting factors within the questions or the knowledge boundary of the respondent (cf Section 5.6.6.).

Since the list of areas of OHS responsibilities provided to IOSH respondents was extremely restricted and did not include any questions on the attitude or role demands originated by management or employer, then the derived data from this part of the survey questionnaire had limited value. However, this is not exceptional in the case of surveys into the role of the SP.

For example, consideration of the Waterhouse et al. survey is a useful exercise. Waterhouse et al. presented IOSH respondents with a comprehensive list of 257 activities (including involvement in hazards and aspects of security). However, in common with every other mailed survey questionnaire, as opposed to field research, no opportunity was given to respondents to comment on their management's control over the functions which they performed (i.e. decided role content) or *the extent of training the respondents had received in each activity*. The inferential evidence from this

study indicates these factors are important determinants of SP role content and performance. To be specific, the untrained SP cannot effectively carry out SP functions or activities, whatever their manager or employer dictates.

The group of questions in this section contained one example which provided further inferential evidence supporting the theme of this discussion. The question on HAZOP encouraged respondents who had no idea what this activity meant, without making the respondent feel inadequate, to make a 'nil' response. The nil response effectively identified that the respondent had not been trained in the technique, since knowledge presupposes some form of training input.

The possibility was that on the law of averages, several respondents would fail to answer the question in the normal course of events (shown as 'missing values' on the SPSS9 computer printout). The average number of respondents recorded as 'missing values' throughout the range of activities, excluding HAZOP, was 20.8.

There were 569 respondents who were registered as missing values, i.e., failed to answer the question on HAZOP. It is not possible to establish how many of those took the opportunity to register a 'not known response'. However, since the average of missing values over the whole series of questions was 2%, the fact that 65.3% of the respondents failed to answer the question on HAZOP, combined with the relevant respondents' comments presented in Section 4.5.8, suggests that a considerable number of them did so because they had never heard of (or never been trained) in the HAZOP technique (cf Section 5.6.6).

It is not possible to provide statistical support, but the inferential evidence in this case appears overwhelming. In the event an opportunity was provided for the respondent to provide evidence. However, no other example has been found in any of the surveys whereby respondents, without losing face or feeling embarrassed can indicate that they have no knowledge or training in an OHS discipline or subject area. The very strong inferential evidence suggests that such an opportunity is *essential* to obtain accurate and valid response data concerning the activities of SPs in the workplace.

It is likely that these comments apply, to a greater or lesser degree, to any form of research into the role of the SP. However, in face to face interviews and during field research, particularly participant observation studies, it is possible to make an evaluation, through a variety of methods, of the individual forming the subject of the research. Depending on the skill and training of the interviewer, and the *modus operandi* it is possible to conduct this evaluation sufficiently accurately to ensure valid research data.

The conclusion must be that any further discussion on the derived data on IOSH respondents activities is unnecessary. The derived data on the respondents' actual level of responsibility in specified OHS areas, as an attempt to establish SP role, performance and functions, has served its limited usefulness in Section 4.5. To obtain an accurate assessment of SP role in the workplace it is far more productive to utilise participant observation studies.

5.8 SP role: Participant observation studies

5.8.1 Introduction

This section discusses the participant observation studies conducted as part of the follow-up research. Participant observation studies were considered necessary because all attempts to obtain from respondents a list of their daily, weekly or monthly activities had been unsuccessful.

The pilot and pre-pilot survey questionnaires had requested respondents to list their activities, the first on a daily basis, the latter requested an average over a period, instead of listing them on an hourly basis each day. A telephone response from an IOSH potential pre-pilot respondent typified the general reaction;

'How the hell can I detail what I do each day? I don't know myself sometimes, since I have been too busy doing it. I have time to answer foolish questions and anyway, the answers cannot be quantified in neat pigeonholes.'

Many respondents stated that averaging their activities, even if it were possible, probably would be inaccurate owing to difficulties in remembering the days events - it was considered virtually impossible to stop during the day and constantly and regularly take notes.

Following preliminary analysis of the derived data from the IOSH survey questionnaire and conducting informal interviews, the most satisfactory research method which would obviate many of the identified problems was considered to be participant observation.

5.8.2 The participant observation study sample

Originally it was proposed to conduct 50 participant observation studies. The subjects were to be drawn from 547 IOSH survey respondents who had agreed to personal interview but, following telephone calls, many had stated that they would cooperate in participant observation studies. However, circumstances intervened (cf Ch.'s 1 and 3). The eventual number of subjects in the sample was 5, all full-time SPs, four of whom were selected from those who agreed to assist further in the research. The remaining subject had read articles by myself published in various OHS journals and had offered assistance in the project

There were advantages in visiting SPs who had not participated in the IOSH survey, including the possibility that those who respond to survey questionnaires may not be truly representative of the population (Dabbs, 1986; Moser and Kalton, 1979). There was one subject each from the industrial categories *chemical and oil products* (henceforth *chemical*), *construction* (a very large site), and *local government* (LG), with two employed in *engineering and allied trades* (engineering).

The number of persons employed at the subjects place of employment varied between approximately 630 (including sub-contractors) at the construction site, to over 5,000 employees within the responsibility of the local government SP. Aside from the LG SP, none of the subjects held OHS responsibility for more than one site. With the

exception of the LG, all other employers were multi-national, two headquartered in the U.K. and one in the U.S.A.

The age of the subjects ranged from 29 to 54 years of age; their formal educational qualifications ranged from two 'O' levels, to an engineering degree. Their occupation immediately previous to becoming an SP was an ex-clerk, a former Trade Union Branch Secretary (an apprentice qualified turner), two foreman (one engineering, one storekeeper) and a retired RAF pilot/GD.

Three of the subjects had been recruited from inside their company, one had responded to an advertisement asking for 'experienced SPs' (the local government subject), the subject employed in the chemical company had learnt of the vacancy 'through contacts' and had received his appointment following interview - the position had not been advertised.

5.8.3 The research method

One whole day was spent at each plant. I met the subject at a place decided by them, at a convenient railway station, place of employment or collected them on their way to work. I usually left them at the point of meeting. In short, the *whole working day* was spent with the subjects.

Throughout the period of observation, a record was made every fifteen minutes of the activity of the subject at that time (cf Tables 5 [16] and 5 [17]). In addition to the 15-minute record, notes were made of any relevant event, in writing or through use of a Phillips micro-recorder (for conversations).

Telephone calls made and received by the subjects were logged. These calls were further subdivided into calls made to or originated from within the company and those to and from outside the company premises (cf Tables 5 [16] and 5 [17]).

The location, size, type and furnishing of the office served to identify the position of the subject in the company hierarchy (Handy, 1981). The more isolated the office, in spatial terms, the

higher the person in the organization hierarchy (March and Simon, 1958; Drucker, 1946).

The subjects' offices varied between one little larger than a cupboard, against the inner wall of a workshop (noisy and stuffy), to a very large office of around 30 by 20 feet. The latter office was shared by a 'safety assistant' (who assisted in record keeping, maintained files, issued and maintained safety equipment and acted as a 'gofer'). The large office was sumptuously furnished, by any standard of measurement. The subject whose office was extremely small was entitled 'safety officer' and the occupier of the large office, 'safety manager'.

5.8.4 The participant observation study findings

The time which the subjects officially commenced work varied between 0800 and 0900 hours. Two commenced work at 0800 (one engineering; the other chemical), two at 0830 (an engineering and construction) and the LG SP commenced work at 0900.

The employees at the various establishments worked different hours than the subjects. In three cases the plant was on a 24 hour operation (both engineering and the chemical), in the remaining plants the hours of work varied according to the demands of the organization. Only in the case of the local government SP were the hours of work for the SP and the remainder of the workforce broadly similar.

However, according to the subjects it was difficult to define 'hours of work'. All of them stated that they were 'on call' 24 hours a day and the SPs whose plant operated 24 hours a day said he had been called out at night and weekends. Without exception the subjects claimed to work many hours outside officially paid working hours (keeping up to date with journals, attending courses and meetings).

In certain areas the work pattern of all the subjects had broad similarities (their OHS activities had more differences than similarities). During their progress to their office, all of them

were stopped by colleagues or members of the workforce and asked questions concerning OHS problems. Inquiries during lunch break with the subject and fellow members of staff established that the subjects were more often approached and asked role related questions at this period (before commencing actual work) than other staff.

In three instances, the subjects were approached on the car park and asked for information. One was an enquiry regarding the progress of a 'common law claim' investigation. The other two questioners were concerned with safety equipment which was on order.

After entering the premises proper, the progress of the subjects towards their office was one of continuous interruption. As well as the typical exchange of pleasantries, there were also brief exchanges concerning OHS matters. 'When are you coming to see me?' with reference to this or that, typified the interchange.

However, the subjects rarely stopped during these interchanges, again made before the commencement of the official working day. It was found that all the subjects arrived at work ten or so minutes early. One subject declared, 'It gives me time to settle down before the rush' and that was the consensus reason.

On entering their offices, all the subjects checked their mail - usually taking the opportunity to have a drink (tea or coffee) at the same time. The waste bin was much in use during this period, since all the subjects claimed to receive a lot of 'junk mail', a matter for comment by all the subjects. However, it was noticeable that advertising material which was considered useful by the subjects was filed. Aside from junk mail, there were personal letters and data sheets from various sources, material from the HSE (and other authorities), OHS journals and manuals. Three of the SPs (or their employers) were subscribers to publications that were regularly updated (i.e., Kluwer, Croners').

In all cases the subjects attended to the initial filing personally. They declared they preferred to do this personally for two main reasons. First, they 'wanted to know where things are' in case 'something was wanted in a hurry'. The second reason was because subjects wished to 'keep up with what was happening in OHS'.

Tables 5 (16) (and 5 [17]) provide a breakdown of the subjects' activities as SPs, recorded during the participant observations studies.

TABLE 5 (16) OHS ACTIVITIES OF THE SP SUBJECTS RECORDED DURING PARTICIPANT OBSERVATION STUDIES (n = 5)

Activities of subjects (In outline)	Average recorded hours per visit	Telephone usage ¹			
		Incoming		Outgoing	
		Int	Ext	Int	Ext
Problem solving/Administration					
(Filing and reviewing data and advice. Contacting various authorities. Solving minor OHS problems via the telephone. Appointments made for visits or meetings).	2.25				
	Max. 3.75	9	3	3	3
	Min. 0.5				
Information/Administration	0.75				
(Consulting references and finding, preparing and providing OHS information [as opposed to immediate 'problem solving'])	Max. 1.5	2	2	1	3
	Min. 0.5				
Inspection/Problem solving	1.5				
(Walking around the works, checking and resolving 'on-the-spot' problems)	Max. 1.5	2	1	1	-
	Min. 0.5				
Research	0.75				
(Reviewing literature, sources, and new developments in OHS)	Max. 1	2	1	1	1
	Min. 0.5				
Clerical	0.75				
(Dictating or typing letters, reports, checking past typing etc. and arranging future clerical work)	Max. 1.75	2	1	1	1
	Min. 0.5				

1 = The total excludes telephone calls made or received by the subjects' assistant or clerk.

The time the subjects spent in the office for the morning session was broadly similar. The chemical and allied products and one of the engineering and allied products SPs had full-time clerical assistance, the remaining subjects had 'part-use' of clerical assistance and typists. The number of employees employed at the plants where the SPs had full time clerical support was 900 and 1500 respectively.

The various areas are listed in outline and identify the main thrust of each grouped SP role activity. The total time on each activity is averaged, but the tables show the maximum (max.) and minimum (min.) time spent by the subject on each of the listed activities. The subjects all declared that the day of the study was an 'average day', while adding that no day was truly 'average' (in that each day was different).

The records showed that the subjects spent around 1½ hours in their office. During this time, relative to the rest of the day, there were a large number of telephone calls. Some were quite long, 20 minutes or so, and many originated from within the organization. The subjects explained the reason why the telephone calls were numerous at this period was because many people knew the SP was 'available' at the time. The calls from within the company were often to make arrangements for visits by the SP during the day.

Several of the calls were from Safety Representatives (SRs). The workforce at all of the companies visited were unionised. The subjects reported that all plants had SRs (some of them apparently very active) and active Safety Committees. One subject declared;

'This is the settling in period, when I get all sorts of questions asked, especially by SRs. I sometimes think they spend all night thinking them up.'

The same subject found SRs 'useful' and sometimes 'keen to help with resolving OHS problems'. However he stated that they often (not merely sometimes) used the cover of OHS for problems which were more properly placed within the context of industrial relations.

Similar views on SRs were expressed by three of the remaining four subjects, whereas one subject described SRs as 'troublemakers, politically motivated in everything they do and not concerned about the realities of life'.

In one case a telephone call was with reference to the Safety Committee (SC). All the companies visited had SCs and three out of the five subjects were full of praise for SCs. They thought they were 'an excellent way to motivate safe working'. The general consensus amongst the subjects was that SCs provided a useful communication channel, through which (as one subject stated) 'the Gospel of safety could be spread to all the staff'.

However, one subject thought that 'without firm chairmanship, SCs could become waffling shops' (he was chairman of the company SC). Another subject declared that he was unimpressed with the SC in his company (of which he was an ex-officio member), which he found 'was used by SRs as a stick to beat management'. The remaining SPs were two ex-officio members and secretary of their company's SCs.

During the morning session all the SPs reported to their immediate superior. Petersen (1978) states that ideally SPs should report to the senior manager in the company or plant, otherwise problems can develop in motivating OHS (cf Dawson et al., 1984; Beaumont et al., 1982).

The subjects were asked to identify the grades and levels of managers who they *regularly* contacted to report their activities. Four subjects regularly reported to the Personnel Manager, the fifth (employed by a U.S. multi-national) reported directly to the Plant Manager, the most senior manager at his place of employment (cf Beaumont et al., 1982).

It was found that only the U.S. company SP had regular meetings with the most senior manager at his plant, the Plant Manager. Furthermore, the U.S. company SP sent a daily report to his Plant Manager and once a week attended a meeting in the Plant Manager's Office, where they went through the week's OHS activities. This was aside from the opportunity to contact the Plant Manager directly at a moment's notice, either in person or by telephone.

The U.K. companies were in complete contrast. They operated an *ad hoc* system, whereby the company SP only saw the senior manager 'if something went wrong' or 'an OHS proposal was made that demanded heavy expenditure'. The LG SP stated that at his place of employment, 'the Chief Executive is too much of gentleman to become involved in anything so mundane' as OHS.

It was found that with one exception (the U.S. multi-national) meetings with senior managers followed a similar pattern. Since the meetings were held 'only if things had gone wrong', or some important change in legislation had taken place that would demand expenditure, the SP was requested to provide the solutions or range of options available. Invariably the senior manager took the final decision, usually (but not always) involving other managers in the meeting and discussion. The subjects stated that their principal role was to act as an adviser but sometimes their advice was ignored or over-ridden by operational constraints. Two of the subjects specifically stated, 'When it comes down to it, I do not have sufficient authority, even over OHS matters' (cf Dawson et al, 1984)

In contrast the SP employed by the U.S. multi-national declared that he held 'the same authority as all other managers.' He added that because of the daily reports, OHS matters seldom became a 'problem', merely 'normal day-to-day managerial decision taking events'. He added;

'Everyone knows that the Plant Manager has been involved in the decision taking and has endorsed the instruction, that gets things moving.'

The other four subjects declared that on occasions after they had issued an instruction concerning safety (after agreeing the matter with the Personnel Manager) they found their instruction countermanded or amended by the works or senior manager (cf Section 1.5). In each case the pressure for change had come from line management. The subjects were not happy with this arrangement, but accepted it as a fact of life.

Following the initial period at work spent in the office (cf Table 5 (16)) the subjects went on a tour of the works. As one

SP said, 'This 'walkabout' is very important, it is when I am seen'. There was a general consensus that 'being seen' in itself acts as a reinforcement for OHS consciousness amongst the staff. Another feature of the walkabout was that it gave an opportunity for employees to approach the SP informally and discuss OHS matters with him. These factors are above and beyond the opportunity to check on various outstanding OHS matters and to identify new hazards.

As a relevant aside, one respondent to the IOSH survey suggested that SPs should 'wear a standard uniform, common to all IOSH members, this would ensure that they were easily recognised by the staff and give them added authority'. He stated that 'the uniform should be military in style, similar to an army officer's uniform'. He was contacted by telephone and the 'write-in' suggestion, he assured me, was perfectly genuine.

With one exception (not the IOSH survey respondent earlier cited) all the SPs visited wore what can only be described as standard business clothing, appropriate to the industry in which they worked. Overalls or other protective clothing were worn when circumstances decreed. The exception was an SP who wore a form of uniform (brown shirt and brown slacks during the visit), complete with Sam Browne belt (on which was attached a two-way radio telephone).

All SP subjects stated that they were extensively involved in both forms of accident claims procedure; DHSS claims and Employers' Liability cases, the so-called 'common law' cases (cf Table 5 [17]). Four subjects stated that when a worker entered a claim for a declaration of industrial accident, the event was so unusual it invariably meant the worker (or union representative) thought it to be a serious accident and there was the possibility of further action through the courts.

In view of the possibility of further action, the four subjects stated while checking on the accident for completion of the DHSS form sent to the employer, they also checked to see if there was any Employer's Liability (this additional function was kept strictly confidential) (cf Section 6.2.5).

TABLE 5 (17) ACTIVITIES OF THE SP SUBJECTS REFERENCE TO EMPLOYEES CLAIMS FOR INDUSTRIAL ACCIDENTS TO THE DHSS AND AGAINST THE EMPLOYER ('COMMON LAW' CLAIMS) RECORDED DURING PARTICIPANT OBSERVATION STUDIES (n = 5)

Activities of subjects (In outline)	Average recorded hours per visit	Telephone usage ¹			
		Incoming		Outgoing	
		Int	Ext	Int	Ext
Accident claims (DHSS)					
Investigating accidents to the workforce where DHSS claims were involved, checking with staff, consulting OHS nurse or physician (where employed). Completing necessary DHSS and insurance forms. ²	1.0 Max. 2 Min. 0.5	1	2	1	1
Accident claims ('Common Law') ³					
Investigating accidents to the workforce where employer's liability involved Check with medical practitioners (inside and outside the company), reporting facts to insurance representatives (Company and employee ⁴). Completing necessary forms (e.g., insurance and HSE)	1.0 Max. 4 Min. 1 ¹	2	3	1	2

1 = The total excludes telephone calls made or received by the subjects assistant or clerk.

2 = See text concerning the relationship between DHSS and Employer's Liability claims by workers and the activities of the SP.

3 = Only two subjects were involved in 'common law' claims procedure during day of visit.

4 = See text concerning the provision of industrial accident information to plaintiff's representatives.

Two of the subjects stated that they never provided any information to the plaintiff's representatives, unless or until the company solicitor advised otherwise. One subject stated that his instructions were never to divulge anything concerning accidents that led to court cases, the employer's solicitors dealt with everything. Two subjects stated that as a matter of course, in the interests of accident prevention and the maintenance of the independent OHS specialist role, the results of all accident investigations were sent to management and staff representatives.

One subject declared that in the interests of accident prevention, the company's anonymous OHS overall statistics (i.e., industrial accident and disease) were disclosed to SRs and SCs on demand. The statistics were not computer based, although computers were extensively used throughout the firm. It was found that none of the subjects made use of computers. Recording of OHS statistics was completed manually either by the subjects themselves or by their clerks.

The period when the studies was conducted was over the years 1980-1983. Computers had been used for some time in offices and the PC range was well established, with a rapid expansion in their installation and use. All the companies possessed computers and the subjects were asked, 'Have you considered using computers for maintaining OHS records?' Table 5 (18) displays the recorded responses, *none* of the subjects at the time of the participant observation study either used or wished to use computers.

Each subject gave more than one answer to the questions displayed in Table 5 (18). The first answer was given quickly and often with considerable emphasis. Probing follow-up questions were then used, including asking the subject outright, 'Are you afraid of computers?' None of the subjects replied 'yes' to that question, but the avoidance type answers (if such a phrase is allowable) gave the impression, in three cases, that apparently 'fear' was the core reason for not using computers. The subjects felt that computers were so highly technical, that it was beyond their understanding. This response was not related to age, but the education level of the respondents - the three subjects with the lowest standard of formal educational qualifications gave the strongest 'fear' response.

TABLE 5 (18) SUBJECTS' REASONS FOR NOT USING MICRO-COMPUTERS IN THEIR OCCUPATION AS SP (n= 5)

Reason provided by the subject	Number of responses
It would take too long to learn how to use them	3
Too expensive compared with expected use	3
I do not like them	2
Never thought of it	2
I'm too old to learn how to use them	1
Why?	1
There are no advantages to be gained from their use, not yet anyway	1
Total number of reasons provided ¹	13

1 = Subjects provided more than one reason for the non-use of computers.

This fear syndrome concerning the use of computers is not exceptional or unrecorded. Boyle (1985), in his article *Health and Safety Applications for Micro-Computers*, noted the existence of something he called *techno-fear*. It was this he considered created a mental barrier for many who, in effect, showed all the symptoms of being afraid of computers and their use. Boyle listed several contributing factors, largely internal to the individual, which contributed to this feeling of techno-fear. A principal component was fear of something which is regarded by the individual as being highly technical, virtually beyond their understanding.

The reaction of the subjects to questions concerning the use of computers is useful for it provides an assessment of the individual SPs perspective of change. There are many areas where computers would be useful for OHS practitioners. For example, Boyle (1985) identified the advantage of maintaining computerised records of industrial accidents and near misses. These records would greatly assist accident prevention by identifying areas of concern and the circumstances which led to the accident or near miss.

All the subjects agreed that such records would be useful, yet at the time of the participant observation study, none anticipated using computers (cf Table 5 [18]). Nevertheless, in 1987 it was found that computerisation of records had been achieved in the case of two of the five subjects - two of the remaining three had either changed their employer, one had taken early retirement. The two who had adopted computerisation of records agreed that it considerably helped in accident prevention.

During the study it was found that the *purpose* of accident investigations could be divided into two distinct categories. The first was an investigation concerned with establishing the cause of the accident and reduce the possibility of a similar accident recurring. The investigation was solely concerned with accident prevention.

However, the respondents claimed the second type of investigation was far more usual. The thrust of the more usual type of accident investigation was still concerned with establishing the cause of the accident, but equally important was searching for evidence that would protect the employer (cf Sections 4.5.6., 5.6.6, 5.6.9 and 7.3.16; Table 5 [13]).

In both types of accident investigation every attempt was made to establish the cause of the accident, but there was a considerable difference of emphasis and application of the findings. In the former, all the evidence was considered in relation to accident prevention; in the latter, subjects stated that the evidence may be selectively presented outside management circles and possibly be less effective as part of the accident prevention evaluation process - most important of all, subjects agreed that the latter process may lead to loss of credibility and evidence be suppressed by the workforce (Nichols, 1975; Nichols and Armstrong, 1973).

At the time of the participant observation studies the Notification Accidents and Dangerous Occurrences Regulations, 1980 (NADOR) and fairly wide ranging DHSS regulations were in effect (such as the notification of the HSE of industrial accidents by the DHSS as part of the automatic process). These wide ranging regulations demanded extensive and in depth research into accidents by OHS personnel on

behalf of the employer (Occupational Health, August 1983). However, these regulations were changed in 1983 and as a consequence;

'Much of the data on workplace injuries and illness hitherto available to the HSE dried up almost overnight. With it went the ability to get a clear picture of occupational health priorities.'

The Health and Safety Commission was evidently surprised by the uncharacteristic swiftness of the government's action and found itself without a substitute for the DHSS reporting scheme.'

Occupational Health (Editorial) (1985)

The salient point is that the information the DHSS supplied the HSE came from the employer. The person most likely to be involved in the collation of the information was the SP (cf Section 6.2.5; Tables 5 (17), 5 [18] and 6 [iv]). This was confirmed by all subjects during discussions and observation. Furthermore, according to the subjects, the requirement for information on industrial accidents to satisfy the demands of DHSS forms far exceeded that required by the HSE.

It is useful to record that owing to the 'information gap' found to exist, following the changes in the regulations noted above, the HSE and HSC successfully pressurised the government into introducing new regulations (cf OH Editorial cited above). However, according to *Occupational Health* the new scheme does not come into effect until 1987. The following editorial comments are highly relevant for the SP at this stage of the discussion;

'Undoubtedly it will be up to occupational health staff in many cases to make sure that employers have the relevant information and that it reaches the Health and Safety Executive.'

Occupational Health (ibid)

Two subjects in particular had ethical qualms about this aspect of their role (cf Appendix G). They felt that the prime purpose of investigating accidents was to aid accident prevention, and that the findings should be distributed to all concerned. Both declared that since the employer paid their salaries, as employees (a revealing remark) they had little choice. One subject had no doubts about the matter, he declared;

'My role is to protect my employer from loss. That includes me assisting in the preparation of defence briefs for solicitors. Why not? After all, trade unions employ solicitors to attack us.'

However, all subjects recognised the ethical dilemmas in their role; the difference came in how they defined or applied their ethics (cf Appendix G). An example was found during the course of one of the participant observation studies which raised serious questions of ethics, *not* restricted to the subject SP.

A 'common law' claim had been entered by an employee in respect of an industrial accident (the DHSS had registered the injury as industrially caused). The company's insurance assessor visited the plant during the observation period. The subject and the insurance assessor agreed that it was necessary to consider the medical condition of the employee (not to obtain a specialist medical opinion).

The subject then telephoned the company occupational health physician, *who coincidentally was the medical practitioner of the claimant*. In my presence, a conversation was held over the telephone and *arrangement made for the complete medical records of the employee/claimant to be delivered immediately to the office of the SP subject*. In addition, the subject received extensive advice and information from the G.P./occupational health physician over the telephone. Following perusal of the medical file, which was offered to me for my comments, the conclusion was that the claimant/employee was 'trying it on, the claim was unjustified and the insurance company solicitor would fight the case, on behalf of the subjects employer'.

The ethical considerations involved in this example are far too complicated to receive specialist discussion in this study, but the general ethical considerations for SP role are worthy of further consideration. Appendix G offers proposals for an ethics committee to be established by IOSH, this would contribute towards ensuring high credibility and professional standing of the Institution and its members - extremely important in the professionalization of the occupation of SP.

Over the lunch period, extensive discussions were held with the subjects, centred on their perception of SP role and their activities. All five stated that they spent a considerable time outside their formal hours of work on activities related to their chosen occupation. There were two areas of activity which appeared to be largely conducted outside their paid hours of employment.

The first was an interest in their occupation and OHS extending far beyond the working day. All the subjects claimed to spend several hours per week researching into various aspects of OHS. On questioning it was found that the subjects' definition of 'research' varied from reading OHS journals, to visiting various centres of information (outside working hours and without payment).

Secondly they emphasised the value and importance of meetings with their peers. It was found that four of the five subjects regularly attended IOSH branch meetings and all five subjects were regular delegates to OHS conferences. In the case of IOSH Branch Meetings, two did so without payment, two were paid by their employer during attendance. All five received payment from their employer during the attendance at OHS conferences, four had their conference fees paid by the employer. Hooper (1981) claimed that only 4% of the IOSH membership actually attended IOSH meetings. This means that since 100% of the subjects holding IOSH membership claimed to attend IOSH meetings, they were not a representative sample of the IOSH membership.

The subjects all claimed to be 'ex managers' (another revealing phrase). They all saw their role as a staff function, but three of the subjects declared they had told managers they could not do 'this or that'. In other words they exercised a control function over managers. Three of the subjects had been SPs with other organizations, but they all agreed that the core role of the SP remained the same, wherever they worked.

They provided details of what they considered were essential for an effective SP. These were;

1. To be trusted by everyone in the company
2. Show favouritism to no one,
3. Always be ready to listen,
4. Never divulge the source of information on OHS problems within the company,
5. Never 'tell tales',
6. Be good at industrial relations

The subjects often expressed their opinions about IOSH (they knew that I was conducting a survey with the support of IOSH). All the subjects (bar one) agreed that the IOSH syllabus adequately covered the core role requirements for the SP (despite the fact that three (of four) subjects who were IOSH corporate members had not taken an IOSH course to achieve that membership). The principal criticism of the IOSH courses was the claimed lack of course content on loss control or risk management. Further criticism was offered on the lack of attention paid by IOSH courses on financial matters, such as accounting and the 'poor standards of lecturing, especially in the behavioural sciences' (cf Section 5.5.3 and Table 5 [5]).

However, it was apparent that there was some concern over their ability to assimilate or learn course material which (the subjects thought) was near degree level in standard. The conflict was between wanting additional OHS knowledge, but concern over their own limitations (although they did not state their fears openly).

The one exception was the non-member of IOSH. He considered IOSH to be a low grade organization, 'full of (he said) uneducated and ill-trained people'. He declared that if he joined IOSH or any of the professional SP associations, it would provide no benefits to him (or people like him). He saw the role of the SP as a developing one, 'held back by short sighted, ill-qualified people who are ill-suited to the post (referring to those in charge or members of the Executive of the professional associations). He was very emphatic and articulate in how he saw the role of the SP.

He thought that the SP should be independent, professional (his term), well qualified and experienced in industry before appointment.

He considered there should be a minimum age on appointment, 'possibly around 35' since before that age 'they would not have sufficient experience or be able to obtain the respect of older management or staff'. He emphasised that it was essential for a 'successful safety officer' to obtain and maintain the respect of management and the workforce. During the visit there was every indication that management did respect him.

Invariably the relationship of the subject with members of management formed part of the lunchtime discussion (lunch was taken with all of the subjects). The colleagues (if any) who attended gave an indication of the status of the subject and provided information on their relationships within the organization. Only on one occasion did the senior manager of the company join the lunch group.

During the period of study observation was kept on the relationship between the SP subjects and their colleagues at each of the places visited. It appeared that in the hierarchy of management (with the exception of the non-IOSH member) each of the subject SPs were quite low in status. During my visit, which had been by arrangement, I was introduced to other members of staff not merely by name, but as 'the chap from Aston University' - not as a matter of form, but with strong emphasis on the words 'from Aston University'. I gained the impression that some of the subjects were exhibiting me as a means of raising their status by (as they saw it) association with academe.

All of the subjects attempted to interest or enlist me in a subjects 'pet' area of OHS. In four of the five studies, the SP specifically asked me to support a particular project in discussions with senior managers (this was not exceptional, similar pressure to participate in respondents pet research projects occurred many times during discussions with SPs everywhere). In three of the cases the proposed project was concerned with costing *OHS benefits* (their phrase, notably *not* 'costing OHS') and in the remaining case where it was raised in the presence of management, the subject wished to 'research ways of making the staff work safely'. The exception was the non-IOSH member, who had a particular problem that he wished to research but only referred to it in private.

The four IOSH member subjects appeared to suffer a basic insecurity as to how they fitted into the managerial hierarchy (cf Harper, 1980). Each of the five subjects acted as an individual within the organization, with significant differences in style, training and approach, reflecting and influenced by the different management tone and style within each organization (cf Shipp et al., 1965a). They had no clear idea as to how they 'should act', no sense of cohesion across the occupation as a group (cf Section 7.3).

Finally, the subjects were extremely isolated and even lonely in the organization (cf Section 7.3.13). Each of them actually expressed the view that 'It is a pleasure to have someone with whom I can talk about OHS'. Normally they had no-one who could 'really understand my problems' - by which they meant OHS matters. It was perhaps for this reason that all five maintained extensive contact with their fellow SPs and IOSH members - many of the daily telephone calls, particularly in the latter part of the working day, were to other SPs.

Since none of the subjects had OHS colleagues within their place of employment, these telephone calls seemed to act as a catharsis. They discussed OHS 'problems' and the day's events with occupational colleagues, winding down preparatory to finishing the day's work and going home. The period was a long-distance version of the office chat, near the end of a long and tiring day (Beynon, 1973). In view of the tone of the telephone conversations it was part work, part banter, the whole conducted with someone who could share task and role triumphs and problems - which could not be found within the employing organization.

5.8.6 Participant observation studies: Concluding remarks

The discussion on the participant observation studies has been wide ranging in scope. The term 'role' has been extended to cover many aspects of SP activities apparently not directly related to performance of duty and responsibilities, but nevertheless influence through interaction the role incumbents' activities.

Recording the activities of the SPs over the course of a one day study illustrated why it would prove extremely difficult for potential subjects to note their own activities in any accurate or consistent form. In addition, the variation in role content between the subjects during the period of observation was so great that it could have been claimed that there were three or four different occupations instead of one common occupation. Arising from the participant observation studies, six matters deserve particular consideration.

First, it was found that the allocated time was insufficient to establish a *common pattern of activity*. Each subject emphasised that the one factor common to their occupation was that each day was different. They stated it was this factor which contributed to their feeling of great job-satisfaction. They did not know what would happen during the day's work and it was very difficult to plan ahead, since events only could be forecast in the most general sense. Obviously appointments, such as the regular Safety Committee meetings, were made in advance and usually kept, but the unexpected made even regular appointments difficult to keep on occasions. Therefore the pattern recorded per subject was only valid for the day of observation and averaging the activities of the five subjects was useful as an indication of the areas covered.

Second, the extent of *doing* by the subjects was considerably more than that assumed by themselves (cf Hale, 1976). True, it varied due to circumstances, but the greatest influence was respondent individual differences. For example, the ex-RAF officer SP (during the visit) obviously was very reluctant to become dirty and remained remote, as far as possible, from such activity. However there were activities, such as replacing filters in personal protection equipment, which he did despite it being a 'dirty job' because his assistant was engaged elsewhere (checking fire extinguishers) and 'the job had to be done'. Each subject was informally asked to review their day's activities, which were then compared with my record. During subsequent discussion the subject did *not* include 'replacing filters' among those he listed as 'my day's activities' (cf Appendix F).

Third, the separation of SP activities envisaged by the HSE (1976) sample survey between 'doing' and 'advising' proved totally impractical and confirmed Hale's assessment that all SPs' role included elements of doing and advising (Hale, 1976). The division could not easily be made for the recorded activities during the five participant observation studies conducted for this study.

Fourth, it was possible to identify common role content and *three areas of knowledge, skill and activity* apparently common to all the subjects (cf Sections 5.9, 5.10, 6.3 and 7.3; Figure 7 (1)).

Fifth, despite the small number of observation studies possible due to the limitations noted above, it was found that *participant observations studies provide an effective method of establishing SP role* (cf Section 5.9).

Sixth, there was found extensive inferential evidence indicating that survey questionnaires are inadequate to obtain a satisfactory description of SP role, function and responsibilities. The variations in role content are very great and not solely or largely dependent on differences between industries or individual SPs. Many of the factors which are the source of the greatest influence on SPs role, function, responsibilities and role performance have been identified in Section's 4.3, 5.4, 5.5. Further influencing factors are identified and discussed in Chapter 7.

The conclusion is that throughout the participant observation studies the role, functions and performance of the SP are very variable. The variations in SP role and performance in the workplace are so great that it can appear that roles are different (cf Section 5.3; Atherley, 1975; Ackerman, 1973). However, it is *why* these variations occur that is important.

These differences in performance of role are due to the influence of different factors on and within the individual SP. The majority of the external factors stem from the control of management over selection, appointment, training following appointment, role content and job description of SPs. Thus the external factors find expression internally, in SP role, functions, responsibilities and

performance (Sections 1.6, 5.4; Booth, 1981; Report, 1976; Nichols and Armstrong, 1973).

5.9 Conclusion : The role of the SP in the workplace

It is useful to review the discussion in chapter's 4 and 5. At the conclusion of Chapter 4 it was stated that it proved impossible to establish the role of the SP following an analysis of the survey data. However, it was added that the survey had proved successful in identifying questions - rather than answers - which possibly would be useful in the pursuit of a definition of SP role.

Following a discussion on the need for an SP in Section 5.2, it was found that the authorities identified several core elements in SP role. The core elements were also identified during the review of research findings on the SP role. However, the purpose of this research project was to try to establish SP role by reference to the respondent's perspective, not by reference to others' perception of SP role (cf Section 1.5).

Nevertheless, it soon became clear that respondents were continuously referring to the five core role elements earlier identified - although not always by name. For example, motivation was a term often used by respondents - but the connection between 'change agent' and 'motivation' was seldom made.

Furthermore, the participant observation studies, surveys and interviews conducted for this study established certain core skills and knowledge elements (as opposed to role elements) common to all SPs. The knowledge or skill elements are required before the role components are exercised - i.e. to be consistently successful in motivating people it is useful to have a knowledge of psychology. Therefore, in conjunction with identifying SP role *per se*, it is useful to identify core knowledge and skill elements which are necessary to carry out the role.

In all cases the prime role of the SP was found to be advisor and change agent. However, the extent that the advice of the SP was accepted or rejected was found (by reference to respondents'

comments) to largely depend on several factors: e.g., the attitude of management, the circumstances and the level of training (cf Sections 5.4, 5.5, 6.2 and 6.3).

If the advice was legislation based, the respondents reported that the probability was that management would be more likely to accept it with less argument or questioning, than advice known to be based on the technical knowledge of the SP (particularly if the area of technical knowledge - even though it was associated with OHS - was within that of the manager's professional expertise).

The conclusion is that SP role contains several core elements, that were found to be common to all SPs. However, it was also found that although the influence education and standards of training has on SP role performance is very important - the decisive factor is the degree of management control over OHS and SPs in the workplace.

5.10 Conclusion

It was found that the following role components were common to all IOSH respondents, although many did not identify them by name or list them in any particular order. However, although the core role components were common to all respondents, that does not mean that they were *equally* applied or commonly used by all of the respondents. The common core role components exhibited by all SPs are;

1. Advisor
2. Change agent
3. Problem solver
4. Information seeker and processor
5. Gatekeeper

To apply or use the common role components at the local level the respondents drew on skills and knowledge derived from a combination of training and experience - decided at national level by educators,

professional associations and influenced at local level by employer and manager requirements (cf Sections 1.5, 5.4, 5.9 and 6.3)

The skill, knowledge and training requirements for SPs are discussed in the following two chapters, largely concerned with the role of the occupation and professional OHS associations, as opposed to the role of the individual SPs. Once these have been established, then it is possible to present a more detailed description of SP role, function and responsibilities (cf Section 8.2).

* * * * *

'(The future) promises the triumph of information in occupational health and safety. ... As information work continues to grow in stature, occupational health and safety professionals position themselves as information providers, as the drivers of occupational health and safety information along the electronic track.'

Atherley (1987)

CHAPTER 6 OCCUPATIONAL DEVELOPMENT OF SAFETY PRACTITIONERS: THE NATIONAL SCENE

6.1 Introduction

This chapter continues the theme of the previous chapter, the role of the SP. The discussion in chapters 4 and 5 described the role of the SP in the workplace, this chapter discusses the occupation of SP from a national perspective. It is found that the prime motivating force behind the development of the occupation of SP has been the need for information and advice, largely to satisfy legislative demands.

The first section is concerned with the history and development of the occupation of SP, with references to other important OHS groups (including the HSE); the second offers a case study of the reaction of a major employer to the introduction of the HASAWA and changes in their policy of SP recruitment and training; the third section reviews the major SP professional associations in the U.K. The linking theme is the development of the SP.

It is unavoidable that there is some overlap with the individual SP, because occupational and individual development are often inter-related. For example, 'job-titles' are decided by the employer, in conjunction with their managers, influenced by national agreement and acceptance. The consequence is that an entire occupation can be identified by the job title (cf Section 6.2.2). Therefore what has been a title decided at workplace or organization level, becomes a nationally accepted title, which leads to an occupational group being identified and the process becomes self-generating.

6.2 The occupation of the safety practitioner: A history of reaction to pressure

6.2.1 Introduction

The history of the SP would form an important study in its own right. It is the history of an occupation that has developed as a reaction to pressure. It is beyond the scope of this work to provide more than an outline, identifying the relevant factors in SP development. The forthcoming study to be published under the auspices of IOSH may offer a more comprehensive record (personal communication, Sept 1986).

A problem for the would-be historian of the occupation of SP is that references are fragmented and often discovered in works that have little apparent relationship to the role of SP. For example, in research for projects as diverse as Pre-school Playgroups and Roman History, references were found to SPs (i.e., the 1826 daybook of a school, founded in 1814 in Preston, Lancashire, recorded the visit of an inspector who checked on 'safety and health'; Tacitus (60 BC) in his massive work, *The Annals of History* made reference to Construction Safety Inspectors).

6.2.2 The history of the safety practitioner

The history of the SP showed that role content of SPs throughout the ages varied, as did the way 'SPs' motivated the workforce,

depended on the demands of the employer and the constraints and philosophy of the society. Handley (1973) made reference to the requirement for slave stonemasons to wear protective masks to prevent asphyxiation some 3,000 years ago, during the reign of Hannurbi. These measures were enforced by untitled persons - who executed the slaves if they failed to comply.

Tacitus (60 B.C.) made reference to the appointment of a coliseum 'safety inspector', following the collapse of a coliseum and considerable loss of life during a 'performance'. His principal duty was to check the building of coliseums during construction and after. However, although reference to literature and prime source material showed a variety of job titles for the SP, the core elements of role which allowed identification remained fairly constant.

The SP in the U.K. could be said to date from around 1666, appointed as a consequence of the Great Fire of London. The fire insurance companies, many of whom were formed around the same time, appointed 'risk assessors' whose duties included advising clients on fire protection (BIA, 1966). However, Muckleston (1977) considers that the risk manager originated from the 18th. century, although he concedes that there had been 'some previous insurance activities'. The disparities in the date of the origin of the occupation of SP was found to depend on definition of role.

The evidence suggests that the occupation of SP as recognised today dates from the onset of the industrial revolution. As shown in this study the occupation of SP probably developed because of demands placed on employers and later their managers, for information through increased complexity of legislative requirements and the rapid changes in technology associated with the industrial revolution (Hobsbawm, 1976; Ashton, 1973). The occupation is still developing, in line with the rapid changes in technology and processes, a change process that never finishes (cf Ch. 7; Galbraith, 1967; Ellul, 1964).

Job-titles for SPs were found to be consistent only over relatively short periods. During the 19th century the term 'safety inspector' appeared prevalent; from around 1918, the term 'safety officer' assumed greater prominence. The inferential evidence suggests that job-titles in the occupation of SP reflect the role content (cf Anderson, 1987) and the safety philosophy of the period when they were established, *vis a vis* 'Mines Inspector' and 'Factory Inspector'.

Several retired SPs who responded to my appeal for information claimed that the job title 'safety officer' was a consequence of the recruitment of ex-army officers (two majors in London were continually cited) following the second world war into the role and they continued the term 'officer' in their title. Their reputation was that they organized their safety responsibilities similar to their army career, *discipline and orders*.

However, the respondents unanimously stated that the two 'officers' were so successful in improving standards of safety at their places of employment, that they gained employer respect and in turn the title 'safety officer' gained universal acceptance for members of the occupation of SP (cf Terry, 1977). It is pertinent to add that according to the respondents, the success of these two ex-army officers contributed to the rise of the important (in OHS terms) London Safety First movements in the 1920s (cf Figure 6 (iv)).

The relationship between the job-title and the holder's position in an organization is well known (cf Terry, 1977; Torrington and Chapman, 1979). However, it was found that job-title determined organizational acceptance and recognition of the occupation of SP, acting as a reference to those *outside* the organization - a very important point, for SPs conduct a large part of their work in conjunction with outside bodies and other professionals (cf Section 5.8; Appendix F).

Terry declared;

'Preferably a title should serve two purposes: (1) help identify and define the nature of its work and its

relative importance, and (2) indicate that the person possessing the title is competent and qualified to perform the tasks required in that position. ... It is not an embellishment, for to have worthwhile significance a title must be earned.'

Terry (1977)

Terry's statement that the 'title must be earned' is substantiated by the earlier reference to the almost universal acceptance of the title 'safety officer'. In addition, many SP respondents made direct reference to occupational and organizational problems directly related to job-titles. In the case of the SP, history shows that job-titles (as with role content, function and responsibilities) always have been primarily determined by the employer (cf Ch. 4, 5 and 7). By reference to primary sources, the process was that the employer determined role, function, responsibilities and the way they wished those responsibilities are carried out, which in turn had the prime influence on job title (Atkinson, 1936; Personal correspondence, 1980-1981).

Within the occupation, there always has been considerable debate over the most suitable job-title for SPs and their professional institutions (cf Section 6.4.5; 6.4.8 and Ch. 7). During the period of Robens, the following typified the tone of the debate;

'The name Safety Officer must go! Call us what you will, but not 'officer'. Maybe adviser or engineer or accident prevention manager ... This would make our work easier when we are trying to talk safety with this type of person who knows we are BELOW him (by reference to job-title).'

(Original emphasis) Industrial Safety (1973b)

Nearly a decade later, respondents to the IOSH survey recorded similar comments. The degree of emphasis varied, but the link between occupational acceptance and status, role content and job-title received continual reference. The comments included;

'As soon as I got my feet under the table I changed my job title (from safety officer) to Safety Manager. I knew from my experience as a manager that managers will only listen to other managers.'

'OHS activity in this multi-national is formulated from policies devised in the U.S.A. ... Since OHS is

considered an important part of the management function, then 'manager' is necessarily part of the job-title.'

'If I stick to engineering I'm O.K. If I start talking about changing behaviour, the reaction from line managers is one of disbelief, scepticism or rejection. I wish I had been called 'Occupational Health and Safety Manager' (instead of OHS Officer).

Not all respondents were concerned or recognised any constraints on occupational acceptance or role performance from job-title. A contrary view from a respondent (whose title did not include the word 'officer') was the following;

'Safety Manager is no good to me as a title. The stupid bastards would think that I managed safety, so they would not have to be concerned or involved. They are mainly engineers, so my title (Safety Engineer) makes me an equal, without any problems as to who is responsible for safety. I think we should follow the American pattern, and all be called Safety Engineers.'

Many respondents identified the need for a universally applied job-title for all members of the occupation, providing reasons usually associated with the citation from Terry. It was considered that a universally applied job-title would improve occupational group identity and recognition of SP role (cf Anderson, 1987).

However, although two proposed job-titles received majority mention - Safety Engineer and Safety Manager - there was found to be no general agreement among IOSH respondents about job-titles (or role content). This was in contrast to the general agreement found among respondent SPs regarding the OHS disciplines which were considered essential for SP training, education and use (cf Ch. 7).

6.2.4 The pressure for the appointment of an OHS specialist

Although technology, processes of work and industry changes with increasing rapidity, the development of the occupation of SP is slow and reactive, rather than proactive. The principal concern for the employer in the early 19th century was protection of plant and equipment, increasing production, with human beings the more easily replaced (cf Hobsbawm, 1976; Thompson, 1968).

Some authorities claim a similar situation exists today (Kinnersley, 1973; Nichols and Armstrong, 1973). In essence, the biggest OHS problems for a contemporary employer largely remain those found during the early years of the industrial revolution. The prevention of damage to plant, equipment, human beings and lost production. However, to these problems have been added others; the threat of litigation and any damages awarded by the courts following loss of life and injury to the workforce and those who live around the factory, with Flixborough, 1974, providing a relatively recent example (King and Magid, 1979).

Indeed, proof of these assertions can be found in that the 1834 Factories Act was introduced following the report from a Parliamentary Commission as a result of public concern and outcry over the danger to persons and property from the consequences of industrial activity (i.e., boiler explosions and the rising toll of industrial injuries and ill-health due to poor working conditions). More recently the appointment of the Robens Committee in 1968 and the HASAWA 1974 was the consequence of a disaster (Dungeons Wharf) and expressions of public concern (Robens, 1972a). These factors in turn have important influences on the occupation of SP.

In each case the publicly stated reason for introducing the OHS legislation was to improve safety standards; the inevitable consequence of the legislation was a reduction in financial and production loss. A by-product of the legislation and the increasing activity in OHS was the demand for more information and hence the rise in occupational opportunity for the OHS specialist.

The citation by Atherley (1987) at the commencement of this chapter underlines the key role information plays in OHS, and the importance of 'OHS professionals' as providers of information. In an article based upon the report of the World Occupational Health and Safety Organization (WOHSO), the whole theme is on information, as identified in the title, *The Triumph of Information in Occupational Health and Safety*. He stated;

'Information will triumph because it is the chief instrument of law enforcement. It is an instrument which effects change, and identifies and delineates problems. It exposes solutions to problems and it delivers satisfaction by creating a sense of progress. It

supports education by providing insight and understanding. It opens new frontiers for research and, above all, it tunes into the times.'

Atherley (1987)

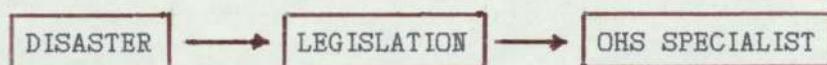
However, while Atherley and the WOHSO accept and advocate the importance of information, the thesis is only tenable if employers and their managers recognise the demand or pressure for information. The pressure for information must be effective and the most effective pressure (as shown in this study) is enforced legislation. In OHS legislation is most frequently enacted either after a disaster, or to prevent a disaster. Nevertheless, as Hale (1987) observed, although;

'... pressure from the public can be a major determinant of policy ... (following a disaster) ... The public can scream and shout, but nothing will be changed unless someone else makes the decision to respond.'

Hale (1987)

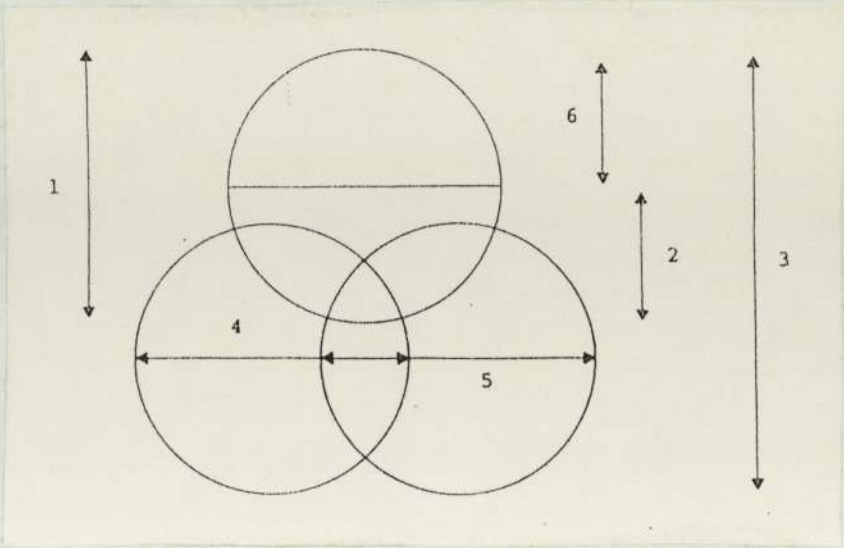
Hales caveat is useful, Figure 6 (i) provides a simple systems model of the process;

FIGURE 6 (i) PRESSURE FOR THE APPOINTMENT OF AN OHS SPECIALIST



Although the concern of this study is the SP, the the demand for OHS specialists of various kinds, led to competition between the many occupational groups concerned with OHS. Atherley and Kolozyn (1976) present an analysis of the scope and interaction of occupational health and safety services (cf Figure 6 [ii]).

FIGURE 6 (ii): SCOPE AND INTERACTION OF OCCUPATIONAL HEALTH AND SAFETY SERVICES



- 1 Occupational health services
- 2 Occupational health nursing and occupational medicine
- 3 Occupational health and safety service
- 4 Occupational hygiene
- 5 Occupational safety
- 4 & 5 Safety and hygiene service
- 6 Occupational medicine

Source: Atherley and Kolozyn (1976)

The overlapping areas of OHS shown in Figure 6 (ii) are useful in illustrating the areas of competition between specialists (cf Section 6.4). However, there are two groups omitted from Atherley and Kolozon's diagram, both of whom have responsibility in OHS; employers and management (effectively one group) and the HSE and Factory Inspectorate. Both these groups compete in the OHS arena - the one having ultimate responsibility for OHS and the other responsibility for enforcement of the OHS legislation - but with reference to the SP, this competition has different levels of influence and consequences (cf Sections 6.2.7 and 6.2.8).

The 'need' for an SP has been discussed in section 5.3. It was the type of OHS and other legislation introduced that inevitably created a greater demand or pressure for the appointment of an SP than for any other OHS specialist (cf Figure (iii) and accompanying discussion). The demand did *not* primarily come from OHS legislation that afforded protection, requiring inspection, evaluation and monitoring. Those requirements can be met by many OHS specialists as shown in Figure 6 (ii). It was the *legislative demand (not need) for information which effectively created the occupation of SP.*

The appointment of an SP was required because the legislation made a very heavy demand for information and, most importantly, the provision of OHS information of various kinds to the many authorities concerned (such as in the early days, the Workmen's Compensation Boards and the Factory Inspectorate, later the Department of Health and Social Security [DHSS] and the Health and Safety Executive [HSE]). Therefore the demand for SPs largely came from two sources of pressure.

First, the legislative requirement *and perceived need by employers* to investigate and report accidents and dangerous occurrences to the Factory Inspectorate. Second, the pressure for information from legislation which, by reference to the source material, has been overlooked by the authorities on OHS - the legislation on Industrial Injury Compensation.

At various periods over the past 150 years the majority pressure for information came from one or other of these legislative sources, seldom were the pressures equal (cf Figure 6 (iv)). Further research would be useful - it is beyond the scope of this study to provide more than a limited review of the evidence. Figure 6 (iv) displays the changes, alterations and increasing legislation, which contributed to making the occupation of SP so important and useful to employers.

It is hypothesised that subject to the existence of certain criteria, there is a likelihood of an SP (rather than any other OHS specialist) being appointed by employers. The main criteria are;

1. A comparatively large number of persons likely to be killed or injured should a disaster occur,
2. These persons are likely to be killed or injured under circumstances which the mass of the public would consider 'frightening',
3. The accidents are likely to (or actually do) happen to people considered in need of protection,
4. The potential financial loss following a disaster or non-compliance is likely to be considerable,
5. Circumstances 1 - 4 are recognised to exist by employers, managers, legislators or effective pressure groups in society.

To fully test the hypothesis first would require a frequency count of the number of SPs employed throughout industry. This probably does not exist. Rumour has it that such a list may have been completed by the HSE but, if it has, access to the information has been denied to non-HSE employees (personal communication, 1982).

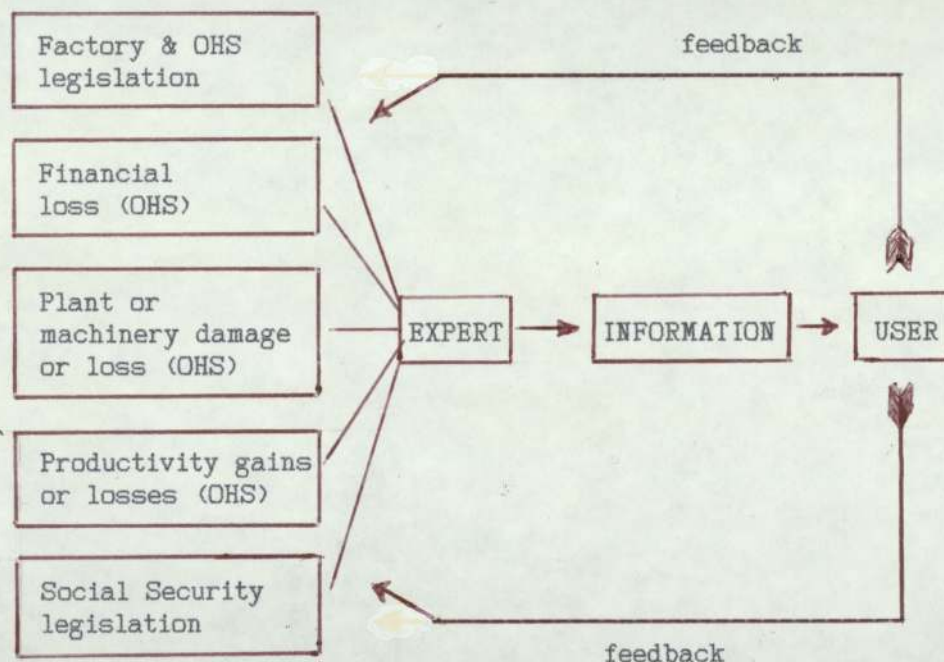
However, there is inferential support for the validity of criteria and hypothesis, for example the employment of safety managers in Mining, safety personnel in Construction and particularly the concentration on Nuclear Safety in the nuclear industry, while exhibiting far less concern for non-nuclear OHS (personal experience (1978) British Nuclear Fuels plant, Preston, Lancashire).

Developing the mining example against the criteria, although it must stressed this test was applicable in times past - the 19th century. First, a mining disaster (by definition) would probably kill or injure a large number of people. Second, the public had empathy with miners at work, in that they recognised miners worked in confined spaces deep in the earth, in conditions assumed to be dirty and dangerous; third, the public and the workers recognised the need for 'safety in the mines', i.e. the need for protection; fourth, the loss of a seam or pit was costly and fifth, 1 - 4 were recognised to exist by employers, managers and legislators. Furthermore, it

was only when *all* these criteria came together that safety managers were appointed in the mining industry.

Figure 6 (iii) presents an open systems model of the information flows identified in this section. In Figure 6 (iii) the throughput or converter is the 'expert'. The expert is the *gatekeeper* to the information and the *translator* of inputs. The expert is not merely a consequence of the pressures, the expert is the *essential* component in the sequence. However, the essence of the problem is who is best fitted to act as this gatekeeper, this converter in the identification and processing of the necessary elements.

FIGURE 6 (iii) THE DEMANDS FOR THE APPOINTMENT OF AN OHS EXPERT



The narrow specialists, such as the OHS physician or occupational hygienist is ill-suited to the task of *gatekeeper*. It has been shown that employers and managers, are ill-equipped to carry out the function of either OHS expert or gatekeeper (cf Section 5.4). The employer and manager concentrate on the middle three items in Figure 6 (iii). The narrow specialists, understandably in view of their unique skills, concentrate on their professional specialism and are also unsuitable as 'gatekeepers' in OHS.

The discussion in chapter 7, following the arguments throughout this study, will suggest that the *only* occupational group whose training, skills and knowledge spans all of the items noted is the occupation of SP (cf Figure 7 [1]).

6.2.6 The legislative pressure on employers for information

The legislative pressure or demand for information comes from two sources: first, the demand arising from the Factory Acts and OHS legislation; second, the demand to satisfy the requirements of the DHSS. In some periods (and cases) the two are inter-related and interdependent, with NADO being the prime example (cf Occupational Health, Editorial, 1985). However, the relatively frequent changes in both types of legislation mean a state of uncertainty (before the legislation is introduced) and newness (following the introduction of the legislation) keeps the pressures fairly constant. Little research has been conducted in this area, so it is only possible (and useful) to speculate, with supporting evidence wherever feasible.

The *amount* of pressure placed upon employers for information and hence the perceived need for the appointment of an 'expert' depends on the period, the type of legislation and the extent it is known to exist, proportional to (a) the newness of the legislation with familiarity reducing pressure (as more staff become familiar with the necessary procedures); (b) the complexity of the legislation (with reaction from affected groups often reducing complexity, vide the changes in the HASAWA in 1985); (c) the *known fact* that punitive measures *will be* applied in the event of non-compliance.

The relevance of (c) may appear obvious, but two research findings demonstrate that current OHS legislation is being selectively enforced by the Factory Inspectorate. Therefore the fact that legislation *per se* exists is insufficient, for unless it is enforced and punitive measures taken, then the pressure for information *does not exist in the mind of employers or management*. The consequence is a lessening of pressure for information from OHS legislative

sources and it is less likely that OHS specialists will be appointed.

Two examples supporting the hypothesis were found during the A/WM survey and a field survey conducted in Lancashire. It was found during the A/WM survey (1982) that five employers who should have had safety policies did not do so; upon checking, two of them said they 'did not know the legislation required them to have a safety policy.' In addition, a field survey conducted by Grayham (1981) in Chorley, Lancashire found that out of 247 subject companies who should have issued and possessed a safety policy, 43 claimed that they had a safety policy, on inspection 32 were found to be insurance or similar policies, only 11 were actually safety policies within the meaning of the HASAWA 1974, S.2 (3).

It is extremely pertinent to add that the Regional HSE Office at Preston was contacted and, without identifying the companies involved or the town, the situation was detailed. The reaction of the Factory Inspector was illuminating, he said 'We are aware this may be the case regarding safety policies, but we do not have sufficient staff or financial resources to pursue the matter.' Therefore, in this case there was no pressure placed upon employers or managers to comply with S. 2 (3) of the HASAWA and no 'demand' for the appointment of an OHS specialist or SP from that source.

It is useful to speculate that the situation applicable to Chorley was not exceptional and possibly, in view of resource problems continuing with the HSE, likely to exist in 1987. It is also likely, since a spokesperson (off the record) at the HSE Accident Prevention Advisory Unit (APAU), also located in Preston, confirmed the HSE Regional Office staff comments - adding that they would be 'most interested' to have a report of the Chorley findings - that this situation existed nationally. Incidentally, when the APAU unofficial spokesperson was asked (a) if the situation existed nationally and (b) if they would pressurise the local Factory Inspectorate to take action, he became extremely evasive and courteously terminated the conversation.

The extent of demand or effective pressure for the appointment of an SP which arises from the enactment of OHS legislation is easier

to measure than that from Social Security legislation. It was found that 45% of IOSH respondents were appointed following the enactment of the introduction of the HASAWA 1974. If the sample is restricted to the IMSO survey ($n = 141$) the number of respondents appointed as Local Government SPs following the enactment of the 1974 HASAWA was 79% (cf Section 6.3). The evidence may not be conclusive, but is supported by the evidence provided in Section 6, it does suggest that there is a relationship between the introduction of the HASAWA and the appointment of an SP.

The extent of demand or pressure placed upon employers to obtain information due to the requirements of Social Security legislation is very difficult to measure. Nevertheless, confirmation that the pressure does exist was found during the participant observation studies (cf Section 5.8).

Figure 6 (iv) displays the principal Factory Act, OHS and Industrial Injury Compensation legislation enacted over the period 1896 - 1974, together with other influences in OHS and relates those details with recorded details in the occupation of SP.

It is hypothesised that the Acts and influences displayed in Figure 6 (iv) combined to put pressure on the employer and manager for information in areas about which the employer and manager had little knowledge or understanding (cf Atherley, 1987). The consequence was an increase in the size of the occupational group and numbers of SPs.

An example of the connection between the appointment of an SP and the need for the employer to both obtain further information and protect themselves from the effects of *social security* legislation came in an article by Atkinson (1936). Atkinson was appointed 'safety inspector' for Lever Bros. at Port Sunlight in 1916, a post he held until his retirement in 1934.

FIGURE 6 (iv) SELECTED FACTORY AND SOCIAL SECURITY LEGISLATION AND OTHER INFLUENCES AFFECTING DEMAND FOR INFORMATION AND POSSIBLY THE APPOINTMENT OF A SAFETY PRACTITIONER

Factory Acts (Date)	Social Security (Date)	Other influences in OHS	Recorded details of SP (or similar) appointments
1896	1897 WCA	Rise in importance of TUC	1898 (see text)
1901	1906 WCA	1916 Safety First Council (London) fore-runner of RoSPA	1913 (Atkinson, 1936)
	1923 WCA's	1920's saw the rise of the 'Safety First' movements, principally in London	Post World War I saw the first recorded use of the term 'Safety Officer' (Johnson, Personal Correspondence)
		1920's Formulation of legislation to demand formation of Works Safety Com't's (Never enacted)	1930's - the Midlands Industrial Group of RoSPA formed (Holt, 1984)
	1934 WCA	Industrially injured employee no longer had to choose between action against employer at 'common law' OR claiming under WCA.	
1937	1948 Industrial Injuries Act	1948 Crown Proceedings Act (Crown employees could sue their employer)	1945 Industrial Safety Officers' Section of RoSPA formed (Later IOSH)
1961			1953 Institution of Industrial Safety Officers formed (from ISOS)
1961			1957 British Safety Council formed
		1972 Robens Report published	1961 Institute of Municipal Safety Officers (IMSO) formed following breakaway from IISO
1974 HASAWA		1975 Social Security Act	1981 IISO became Institution of Occupational Safety and Health (IOSH)
		1980 - 1983 Changes made in DHSS and FA reporting procedures	1981 IMSO and IOSH merged
			Claimed reduction in number of SPs appointed and fewer retiring SPs replaced (see text).

During his period of tenure the Workman's Compensation Act (WCA) was in force (the fore-runner of the various Industrial Injury Acts brought in with the postwar Social Security system). Under all these systems the employer had and still has to provide sometimes quite extensive information to the relevant authorities, currently the DHSS. Atkinson made special mention of the fact that he had to check claims under the WCA. He added that following his appointment there was a reduction;

1. In claims made under the WCA provision,
2. In the length of time injured persons who were receiving payment under the WCA stayed away from work
3. In the amount of money his employers paid out under the WCA (Employers made part payment of the WCA awards to the industrially injured worker).

These reductions were attributed by Atkinson to the effectiveness of the *safety* inspector role (SP) and recommended to employers the universal appointment of safety inspectors to enable them to obtain the same benefits as Lever Brothers. There appeared to be at Lever Bros. a relationship not merely between safety inspectors and accident prevention, but between safety inspectors and employer protection.

The extent of information required by the DHSS (or equivalent) from an employer has considerably exceeded that demanded by the Factory Inspectorate ever since the introduction of the WCA in 1896. Furthermore, the degree of *compulsion* to satisfy the demands of the DHSS has also exceeded that of the Factory Inspectorate. It is pure speculation, but it could be that this was because the Social Security processes were more remote than Factory Legislation from the control of employers and managers. These processes, in turn, created considerable pressure for the appointment of a specialist within companies to gather essential information. Since, in the mind of the employer and manager the link was between Industrial Injury, Social Security legislation and OHS, the specialist appointment was often that of an SP.

The speculation receives some support on inspection of the dates of both types of legislation (cf Figure 6 [iv]). Almost invariably the introduction of various major changes to Factory Acts preceded or were closely followed by major changes in Social Security legislation. The correspondence from retired SPs provided dates and information concerning occupational changes, such as an increase in numbers of SPs appointed, and these largely coincide with the periods when social security legislation and information demands increased. This possible connection between Social Security legislation and an increase in SP appointments deserves further research.

The 1974 HASAWA was closely associated with the important 1975 Social Security Act. Although it is impossible to ascertain the influence of the latter Act on the appointment of SPs, because no authorities were found which referred to the connection, it is possible to offer a case study on the nationwide effects of the HASAWA on very large group of employers: local authorities or local government (cf Section 6.3).

6.2.7 The occupation of safety practitioner and the Factory Inspectorate

The authorities which the occupation of SP comes most into contact with, outside members of their own organization, and which have a significant influence on the activities of the occupation of SPs, are the HSE and the Inspectorate. Throughout this study any reference to the Factory Inspectorate and their employers is inclusive of predecessors, whatever its name or title - i.e. prior to 1974 the HSE did not exist, the Department of Employment (DoE) was generally equivalent (subject to specific contextual reference).

By reference to the IOSH survey responses it was found that the HSE and Factory Inspectorate present a 'janus face' to the occupation of SP. There was an almost equal split in the views of the IOSH respondents on the Factory Inspectorate.

This was reflected in the fact that 45% of IOSH respondents recorded the HSE as their prime source of OHS information. Their views on the Factory Inspectorate at local and regional level included the following;

'I find the Factory Inspectors generally abrupt and unhelpful ... '

'The Factory Inspectorate? They are most helpful, if I want any advice, I always telephone the regional office and they go out of their way to help.'

The interviews took place with Local Government SPs at the IMSO conference at the University of Keele (1980). It is relevant to add that the first comment was from an elderly SP, with few qualifications; the second was from a highly qualified SP aged about 40, with a first degree in Engineering.

It was noticeable during interviews with SPs that their perception of the attitude of the Factory Inspectorate to them seemed to vary according to a combination of their accent, education and age. The higher the age, the stronger the accent and the lower the level of education, the more did respondents tend to report 'problems' with the Factory Inspectorate. It would be useful to conduct research in this area of interaction, since it has an important bearing on the development and future of the occupation of SP and OHS (cf Ch. 7).

However, there was universal agreement among SPs about the perceived differences in the relationship between members of the occupational group and the HSE and Factory Inspectorate at local, regional and national level. The respondents agreed that generally speaking the higher the level, the worse the perceived relationship.

Hale (1986) succinctly summarised the position in a personal communication;

' ... (the) competition of Factory Inspectorate and SP is at policy making national level. That at local level can be more collaborative but jealousy can result if the SP really knows his industry and the Factory Inspector knows it less.'

There is evidence that at national level the HSE and the Factory Inspectorate has sometimes expressed views or taken action which was clearly against the interests of the occupation of SP. This is demonstrated by reference to the submission of the Department of Employment (the employers of the Factory Inspectorate) to the Robens Committee (1972b), in HSE (1976), and other publications and statements of the HSE. The inferential evidence in this study suggests that the attitude of the Factory Inspectorate exposed in these sources are possibly due to a perceived threat from occupation of SP to the Inspectorate (cf Appendix F).

In fact, the HSE often denigrates or plays down the value of many groups in OHS. These comments are rarely made openly in public, they are generally quite subtle. Reference has already been made to the disparaging comments regarding SPs in the HSE (1976) discussion document on 'safety officer role and functions. A further example is the HSE (1981) booklet on 'Managing Safety' with a target readership of employers and managers in which, either through commission or omission, it was not possible to find any reference to SPs (or safety officers). It is suggested in Appendix I that because of the perpetual inability of the HSE to obtain sufficient funds or staff, the IOSH SP could assume certain functions of the Factory Inspectorate and recognition of this possibility may influence the attitude of the HSE to the SP.

An opportunity was found during the research to test the reaction of a senior member of the Factory Inspectorate to the concept of members of the occupation of SP taking over responsibility for certain functions now fulfilled by the Factory Inspectorate. In July 1980 a lengthy, informal discussion was held with a Principal Inspector of Factories (during a long train journey). He stated that it was 'unfortunate' that the Factory Inspectorate were understaffed and under-resourced, adding that 'If only we had sufficient staff, we could do much more'. He also commented on SPs, declaring;

'Safety officers vary in quality between the abysmally bad and the absolutely brilliant. The majority are so-so, O.K. for what they have to do. But the few really good SPs are as good as some Factory Inspectors - which is what the best safety officers often had been.'

Upon hearing his comments regarding the high quality of 'some' SPs, many apparently ex-Factory Inspectors, I suggested that it would alleviate the problem for the Factory Inspectorate if some SPs, after careful screening, training (where necessary) and selection, were appointed as some kind of 'support inspectors' (cf Appendix I).

These support inspectors could carry out some of the functions of the Factory Inspector, relieving the pressure placed on the understaffed and under-resourced Factory Inspectorate and they were (by his own statement) 'as good as some Factory Inspectors' - indeed, some were ex-Factory Inspectors. His reaction was immediate and emphatic. He was strongly against the suggestion, he claimed 'It had no merit at all'.

6.2.8 The occupation of safety practitioner and the medical profession

The medical professional has been described by Safety Representatives as attempting to be the specialist group 'in charge' of OHS (Grayham, 1984). In this claim they have had some support from the HSE (1983), who suggested that where an OHS physician is on the 'OHS team' the physician is placed in the position of co-ordinator. However, there is evidence that even where OHS physicians are appointed or placed in charge of the 'OHS team', they often have little, if any, knowledge or understanding of OHS (Grayham, 1984).

In fact, the House of Lords Report (1983) found that 'very few firms' employed full time medical staff (doctors and nurses) 'only 3.2% of the total'. It was found that 'small firms with under 250 employees usually had no medical or nursing service'. The Report continued;

'A high proportion of British workers work in small firms and so the absence of occupational health services is all the more serious.'

House of Lords Report (1983)

In a *Times* special supplement on OHS, Dr. Dale Archer, a Field Officer with the HSE declared;

'Today I am advising a general practitioner who has been taken on by a firm which wants to have its employees looked after. ... The GP doesn't know anything about occupational health, the firm doesn't know what it wants ... '

Cited by Toomey (September 18th. 1985)

The situation described by Archer usefully provides a succinct summary of a major problem in OHS, a theme made throughout this study. The selection and appointment of an OHS 'specialist' is frequently by employers and management who 'don't know what it wants'. In Archer's example, concerned with OHS, it was an OH physician, but as has been shown in this study, it could be any OHS specialist, including an SP.

The following section continues the theme of Archer's statement, employers who found difficulty in selecting and appointing suitable members of the occupation of SP, but who took effective action to overcome their problems.

6.3 A case study: The local government reaction to legislative pressure and the local government SP

6.3.1 Introduction

This section provides a description and some analysis of the reaction of local government employers following the enactment of the HASAWA, 1974. It offers comments on the recruitment, appointment, role, function, responsibilities and training requirements of the local government SP and provides background information concerning the influx of SPs (79%) into local authority employment over the period 1974-1981. The period cited is important, since the majority of the description concerns the period post 1976 and the sources cited place emphasis on the HASAWA 1974. It is useful to consider the possible influence of the Social Security Act 1975 which was introduced only one year later.

Throughout this section, the terms 'local government' (LG) and 'local authority' (LA) are used interchangeably, as they were in the report and discussions with LG employees. The description includes

limited references to the previous work experience of LG SPs and the manner in which some local authority management reacted to OHS legislative pressure.

The prime source of much of the background information detailed in this section was a member of the working party who provided, in strict confidence, full transcripts of proceedings, research and findings, together with documentation. He is always referred to as the 'informant', all other sources are cited by name.

Another important source of information was the confidential report of a study conducted by the Local Government Training Board (LGTB), headquartered at Luton (over the period 1977-1980) into the role, function, responsibilities and training requirements of LG safety officers. The copy of the LGTB Report (SO4/77) was provided by Jim Gregory of the LGTB and the recommendations it contained led to the production of the LGTB Training Recommendation No. 23 (1980).

6.3.2 The background

Following the introduction of the 1974 HASAWA some LAs claimed exemption from the Act and consulted legal advisers to establish their position. Following extensive inquiries it was established that the HASAWA did apply to LAs (Waring, 1979). This led to what was described as 'a scramble by local authorities to appoint safety officers' (in confidence).

Initially a sweep was made of existing LG employees in an attempt to find suitable recruits to the post of SP. Local government, being a civil service organization, is used to appointing staff with qualifications and more pertinently, expects to support the training of staff (Mylod, 1981).

The result of the sweep was that LAs found that very few of their staff had suitable experience or qualifications to carry out the functions of an SP (Gregory, 1981). As a consequence, LG employers commenced advertising and recruiting from industry experienced SPs. The LAs soon found that although the SPs they recruited proved generally satisfactory in OHS terms, they had little knowledge of LG

organizational structure and procedures, conversely LA staff recruited as SPs had little knowledge of OHS.

In 1976 the Local Government Training Board (LGTB) based at Luton was asked to assist in resolving the ensuing problems from the mismatch of staff and required skills and understanding (from the perspective of the LG employers). A working party was established to consider all aspects concerning the selection, appointment and especially the training requirements for SPs. The working party comprised personnel officers, lecturers from various institutions, training officers, trade union officials and administrative staff from local authorities.

6.3.3 Discussion

The first step of the LGTB working party was to establish a sub-committee commissioned to investigate in-post LG SPs, paying particular attention 'to the path by which they were appointed.' The exact sample size was unknown (the informant could not remember), 'approximately 130' was the estimate. The subcommittee reported;

'There appeared to be two paths into the post (of LG SP):

1. Industrial Safety Officers, often with IISO qualifications, but with little local authority knowledge.
2. Local authority personnel translated into safety, but with little health and safety knowledge.

In addition two further subgroups emerged:

- (a) Assistant Safety Officer - Young, highly technically qualified, with a small amount of work experience - put into safety as a means of gaining work experience,
- (b) Departmental Safety Officer - Elderly, often in ill health. Appointed by management as a long stop/buck stopper, without knowledge/enthusiasm/interest (in their role as SP).'

The informant declared that only items (1) and (2) were circulated within the working party group, because the sub-committee considered the comments were too revealing and critical of LG recruitment policy and would create problems and embarrassment - although he

added that it was 'only what is found in many cases in British industry'. A few members of the sub-committee had dissented, declaring it confirmed 'obviously' some LG SPs had been appointed to fill a post to 'look good' and less to effectively fulfil the role of SP and the working party should consider all the facts.

After considering items (1) and (2) the consensus opinion of the working party was that SPs in each of the above groups proved less than satisfactory. The report of the sub-committee showed that same LG SPs came from work backgrounds totally different from the wide range of workplaces covered by local authorities, and were 'appointed by people ill-equipped to select' SPs. The informant stated this was because the sub-committee actually found that those concerned with selection and appointment of SPs were 'abstracted from OHS and the OHS needs of local authorities.' He added that the original working party reflected this abstraction from OHS, for it was only after considerable pressure and lengthy discussion that an in-post SP was included.

The findings from the initial research identified considerable deficiencies in the methods used by LG employers to select, appoint and particularly to train SPs. It was decided to conduct a comprehensive survey of LG SPs to establish;

1. A breakdown of skills and knowledge possessed by SPs in-post with local authorities, and
2. From that breakdown establish a core of skills and knowledge to assist in designing a training recommendation for SPs in the employment of local authorities.

The working party appointed Jim Gregory, Senior Training Adviser for the LGTB, to devise an appropriate questionnaire and to conduct a comprehensive survey into the role, function and responsibilities of LG SPs, to assist in the development of a training recommendation.

The questionnaire was completed and distributed in January 1977. The number distributed varies according to source, it ranges from 450 (Waring, 1980) to 200 (Health and safety at Work, 1980). At the commencement of an extremely wordy introduction, an important caveat was offered. It stated;

'No part of this questionnaire is intended to represent a Job Description for a safety officer or to indicate what duties or responsibilities should or should not be undertaken by a safety officer.'

Introduction to Survey Questionnaire (1977)

According to Gregory this caveat was vitally important. Without it some LAs may have used the questionnaire itself for a purpose for which it was not intended, a job description in its own right. In addition, LG SPs in-post may have used it as a tool for negotiation, for salary, course demands or to some other purpose.

The questionnaire was divided into three sections. The introductory notes to the questionnaire stated that it was designed to determine the following;

- '(i) The experience and qualifications of (LG) safety officers,
- (ii) The activities they undertake,
- (iii) The level of responsibility they have for their actions.'

ibid

A report (LGTB SO4/77), based on a preliminary analysis of the data was presented to the working party on the 25th. March, 1977. Gregory claimed that 62% (250) local authorities responded. The analysis in the report was divided into two components; *knowledge*

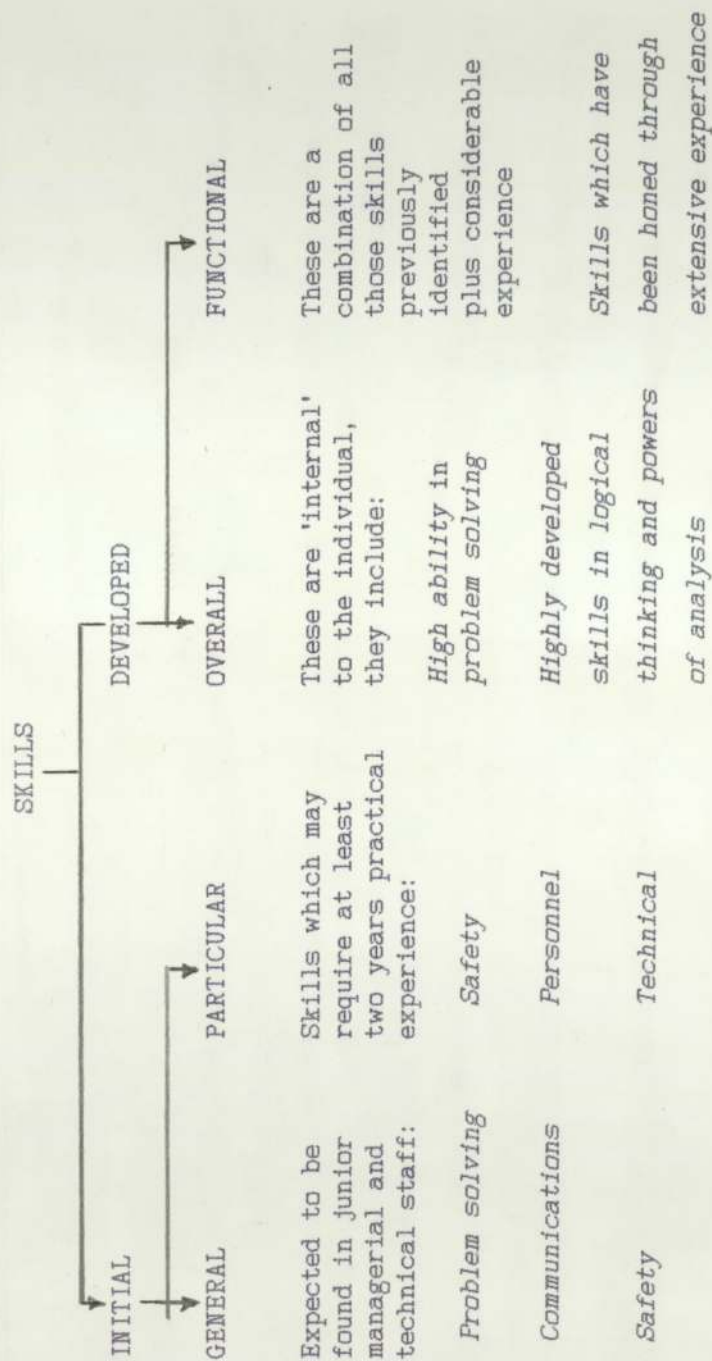
and *skills*. The basic categorizations and details are presented in Figures 6 (v) and 6 (vi).

The local government *employers* were responsible for the completion of the survey questionnaires (sent to the Chief Executive of each local authority in the sample), identifying the knowledge and skill requirements for LG SPs and the completion of the survey questionnaires. In an indeterminate number of cases the LG SP (where one was employed) either completed the questionnaire or assisted in its completion. However, the informant stated that it was found that in many cases the in-post SP was *not* consulted and in such cases the survey questionnaire was most frequently completed by the local authorities personnel department staff.

Reference to Table 6 (v) shows that *knowledge requirements* for LG safety practitioners were placed in two categories; *common core*, which applied to all LG SPs, and *specific*, which were related to the requirements of the SPs in each local authority. The common core knowledge was further subdivided into *general* and *specialist* elements; the specific knowledge into *general* and *particular*. Common core elements of knowledge were those considered to be common to all SPs, irrespective of where they may be employed.

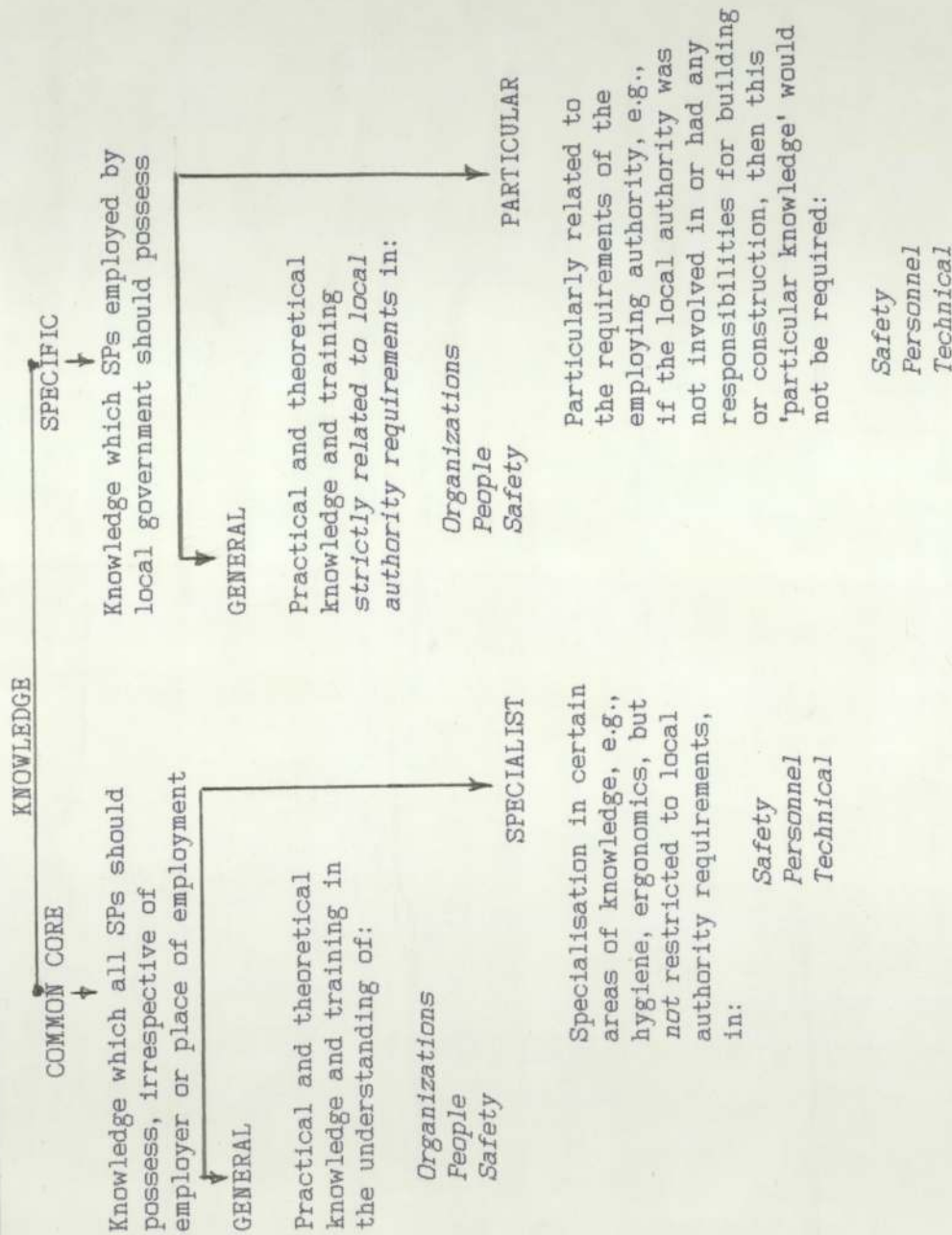
The comprehensive text of SO4/77 referred to the dangers of 'LG interpretation' of *specialist* common core knowledge. The informant stated at the time there was considerable concern that LG bodies were still attempting (1977) to use their legal departments to literally re-interpret sections of the OHS legislation, to avoid compliance and minimise administrative problems and expenditure.

FIGURE 6 (v) KNOWLEDGE REQUIREMENTS FOR LOCAL AUTHORITY SAFETY PRACTITIONERS



Adapted from: SO4/77 (1977)

FIGURE 6 (vi) SKILL REQUIREMENTS FOR LOCAL AUTHORITY SAFETY PRACTITIONERS



Adapted from SO4/77 (1977)

It is highly relevant that the report emphasised that the *specific* knowledge elements were those specific to the LG SPs and *not* those of the local authority, i.e. elements of specific knowledge necessary for the SP to carry out their specific occupational functions taking account of local conditions, and not local conditions determining the scope of the SPs functions - as had happened in the past.

Figure 6 (vi) outlines the *skills* which the survey found that *employers* or their representatives considered essential to the LG SP. However, examples were not provided in the report of the survey. It was considered that each local authority would have to decide these for themselves.

The working party considered the report and after extensive discussion agreed six skills or area of knowledge were essential for the LG SP. These were;

1. Advising management
2. Identification of risk situations
3. Protection of assets
4. Emergency procedures
5. Communications
6. Management of health and safety function.

6.3.6 Action taken by the working party

The working party decided to submit a proposed LG SP training programme to the LGTB governing committee to assist them in constructing a LG Training Recommendation.

The proposals from the working party were divided into two: (i) those which applied to 'outside' appointees, experienced SPs but with no local authority experience and (ii) the local government

employee, with no experience of OHS. The proposals are detailed in Figure 6 (vii).

FIGURE 6 (vii) LOCAL GOVERNMENT SAFETY PRACTITIONERS:
PROPOSED COURSES

Employment background of entrant to local government	Total recommended training period - 132 days			
	2 week basic course ¹	104 days (Spread over two years)	Full time continuous	
			1 week	1 week
Experienced SPs entering LG from NON-local authority employment	Intro. to local authorities	Block release		
		Training in health and safety with emphasis on local authority requirements ²	Industrial Relations	Techniques of Instruction
Experienced local authority employees, entering the safety occupation for the first time	Intro. to OHS			

Adapted from text of SO4/77

1. Actual period of training left to discretion of local authority, 2 weeks recommended minimum.
2. Emphasis added

Three years after the working party had completed their report, LGTB Training Recommendation No. 23 'Training of Safety Officers' was issued. The Training Recommendation made reference to the six points on *knowledge and skills* (cf Figures 6 (v), 6 (vi) and 6 (viii)). However, the Training Recommendations did not offer any firm recommendations, giving only guidance.

A principal recommendation was to suggest that attendance 'at courses run for IMSO or IISO (IOSH) membership' was useful, although

it did not suggest that those who held IMSO or IISO membership (whether obtained by examination or not) would be better equipped than those who did not.

6.3.7 Case study: Conclusion

The process of constructing and distributing the survey questionnaire and analysing data had taken approximately 12 months. According to the informant, much of the evidence considered by the working party was thought to be 'too sensitive and unsuitable for onward discussion or distribution.' The majority of this type of information was highly critical of some local authorities' approach and action towards OHS and referred to 'the poor quality of some LG SPs'.

The working party considered that some local authorities saw the role of SP to be 'a dumping ground, where old employees were put out to pasture, getting ready for retirement' (cf CBI evidence, Robens 1972b). To publicise such a finding would have caused a backlash, possibly against the LGTB, which would have served no useful purpose for any of the parties involved.

Three years after the working party had submitted their report, Training Recommendation No. 23, *Training of Safety Officers*, was issued by the LGTB. Included in the recommendation were all six points shown in Figures 6 (v) and 6 (vi).

However, the Training Recommendation only provided guidance for local authorities, suggesting that training should be devised to meet the requirements of each local authority and individual concerned. In the opinion of Gregory and the confidential informant the Training Recommendation went a long way to resolve many of the problems associated with LG SPs, but the recommendation was necessarily a compromise to satisfy the pressures and interests of those involved.

Although references were made in the recommendations from the working party and in Training Recommendation No. 23 to the courses leading to IMSO or IISO membership examinations, no reference was

found identifying courses run by the British Safety Council (for example as a suitable or useful alternative). The recommendation *did not* suggest that those who held IISO or IMSO membership would be better equipped than those who did not.

The principal value of the local authority case study is in demonstrating how the local authority employers reacted to OHS legislative changes and pressure. However, because it has never knowingly been considered, the effect of *Social Security* legislation on influencing the information demanded from employers, and hence increasing the demand for OHS specialists (who may be members of the SP occupation) remains unknown. The inferential evidence is inconclusive but sufficient to indicate that the area deserves further research.

It is useful to offer a general review of the reaction of the LAs to the legislation in stages. Reference to the comments of IOSH respondents suggests that their employers either have gone through similar stages or have reached one of the stages reviewed. Consideration of the case study could benefit those groups and researchers. The stages the employers went through included;

First, some (not all) local authorities attempted to find their legal standing in relation to the HASAWA, a few even arguing that they were or should be exempt. The purpose of this exercise was because LAs wished to avoid complying with the OHS legislation.

Second, when the employers realised or learnt that the HASAWA did in fact apply to them, some LAs 'panicked' and (according to the informant) appointed SPs with little regard to their knowledge or understanding of OHS; others appointed SPs from outside industry, with little knowledge of local government procedures. This demonstrated that (LA) employers had an inadequate knowledge and understanding of OHS, even insufficient to appoint SPs or possibly other OHS specialists (cf Toomey, 1985).

Third, there was a reaction from various sectors of management (and staff) over the qualities of the LG SPs appointed. The

consequence of (2) was a negative reaction from their workforce and, according to the informant, occasionally industrial relations problems (cf Grayham, 1986).

Fourth, a large number of LAs contacted the LGTB for advice. The employers consulted an expert, not in OHS, but one who acted as a gatekeeper.

Fifth, the LGTB assisted the LAs to resolve the problem through conducting and analysing a survey questionnaire. The true problem was carefully identified and analysed, a range of solutions postulated (Atherley, 1987; Grayham, 1987).

Finally, homeostasis was restored following publication of the LGTB Training Recommendation No. 23. The consultant (LGTB) assisted the employers to a satisfactory resolution to the problem of selecting, appointing and training SPs (Grayham, 1987).

The consequence was not only that standards of OHS in local government improved, but there was an increase in the numbers of SPs and the membership of the SP professional associations (Gregory, 1981; Waring, 1980).

6.4 The principal U.K. safety practitioner professional institutions

6.4.1 Introduction

This section discusses the activities of the three principal professional associations concerned with the occupation of SP. These are the Institution of Occupational Safety and Health (IOSH), the British Safety Council (BSC) and the Royal Society for the Prevention of Accidents (RoSPA). Each is involved in the training and education of SPs and in various ways, represents the views of the occupation of SP at national level.

An important factor in the development of an occupation into a professional occupation is the existence of an effective (in all senses of the term) and powerful professional institution. There is a symbiotic relationship between members of the professional occupational group, the quality of services offered, the clients and the professional institution (Holt, 1984).

However, in the case of the occupation of SP, it is found that there are problems in the identity of the client (cf Sections 5.3, 7.3.16 and 7.3.17; Appendix G), variations in the quality of services offered (cf Ch. 4, 5, 7, 8 and Appendix G) and (sometimes serious) divisions between the professional associations (cf Section 3.3.2; Appendices F and H).

Medicine and the law are authoritatively recognised as 'true professions' and it is no coincidence that both these professions possess very powerful professional institutions (for example, the British Medical Association and the Law Society). These factors indicate the relevance and importance of the professional associations to the occupation of SP.

6.4.2 The cycle of activity in professional institutions

The formation of a professional association is the consequence or coming together of a number of factors. First, the need for a professional association is identified and translated into reality. Second, there is a sense of identity among the members of a particular occupation. Third, there is a will among the members to unite in furthering status of the occupation. Finally there is a charismatic person who acts as a catalyst or leader.

An example of this process was the formation of IMSO. Local government SPs were dissatisfied with the treatment of their occupational group by IISO (Institution of Industrial Safety Officers). Following a meeting in a public house, several dissatisfied members came together and decided to form the Institute of Municipal Safety Officers (IMSO). They considered that the existence of a professional organization solely concerned with local authority SPs would improve their status with their

employers. The charismatic person who instigated and led the movement was Earl St. John St. John (and the person who described the formation of IMSO).

IISO went through a similar process, although it was a steady development rather than a quick, at times acrimonious formation - such as was the case with IMSO. IISO came about because some industrial safety officers who were members of RoSPA recognised the need for an organization in which to exchange information and to represent their views to employers and the authorities. As a consequence, the Midlands Industrial Group of RoSPA was formed in the 1930s, leading in 1945 to the Industrial Safety Officers Section of RoSPA, separating from RoSPA to become the Institution of Industrial Safety Officers and later IOSH (cf Section 6.2.2 and Figure 6 [iv]).

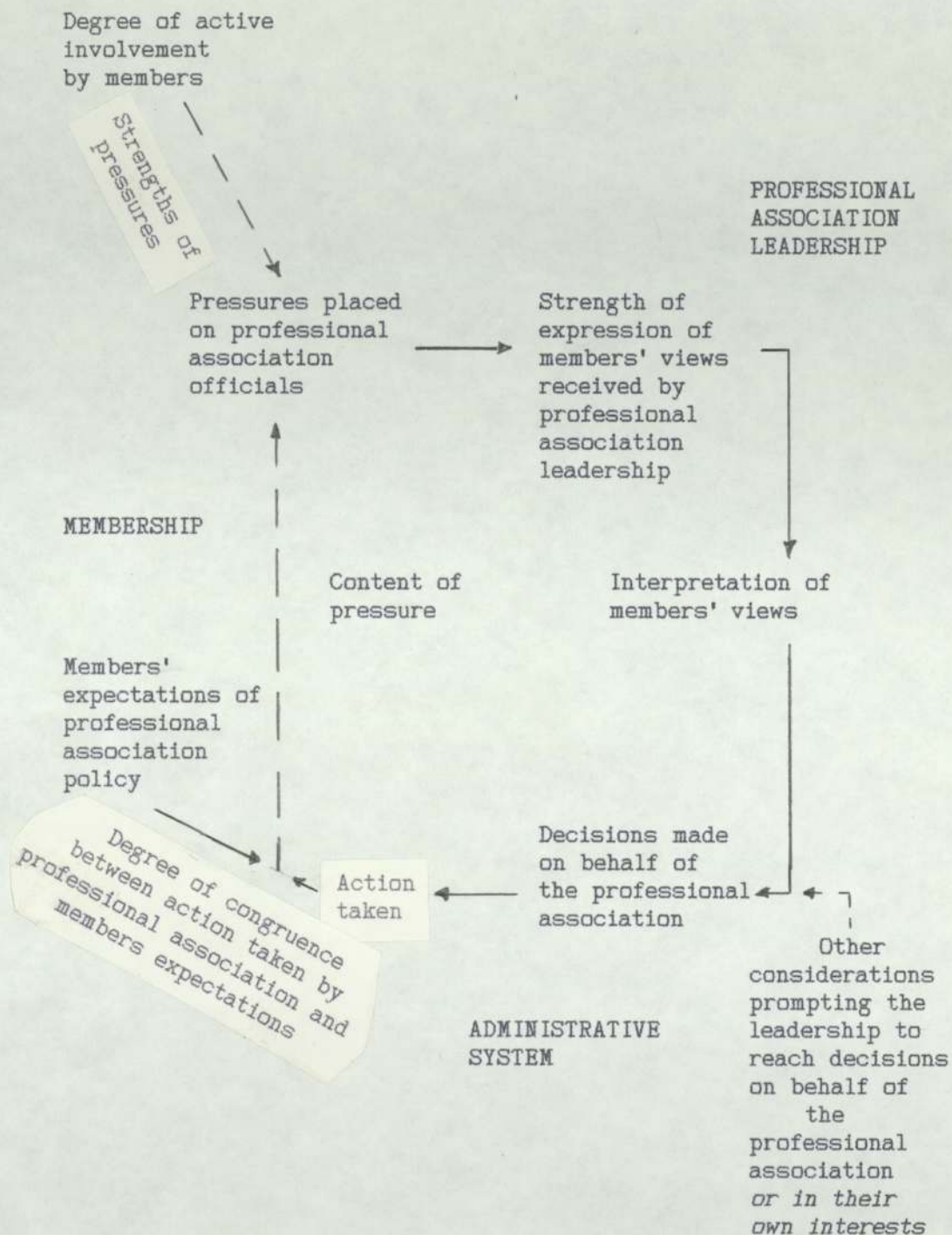
Once formed, the growth and success of a professional association is dependent on several factors occurring in a cycle of activity. Of prime importance is the strength of membership involvement and commitment.

Figure 6 (viii) was adapted from an original by Child et al. (1973) concerned with the central cycle of trade union activity. The adaptation allows consideration of the cycle of activity within a professional association.

The figure is divided into three components on the horizontal axis; membership, administration and leadership. The difference between active and passive membership is taken account of, by the reference to 'degree of active involvement by members' having an influence on 'strength of pressure'. In addition, account is taken of the personal interest of leaders (i.e., members of IOSH executive) to take decisions in their own interests, as well as the expected decision taking on behalf of the interests of the professional association.

The model was validated by Childs et al. with reference to trades unions. It requires validation by reference to other professional associations, although the model does appear to provide explanation for the breakaway and formation of IMSO.

FIGURE 6 (viii) THE CENTRAL CYCLE OF ACTIVITY WITHIN A PROFESSIONAL ASSOCIATION



Adapted from Child et al. (1973)

A problem within IOSH - particularly in the past but still receiving reference over the period 1981-1983 - commented on by several respondents, was the slow reaction by the administration at IOSH HQ

to members' inquiries, ranging from those concerning membership applications, to requests for OHS information.

As associations grow larger, *unless the professional association maintains excellent communication with its membership and provides a wide range of services (recognised as valuable by the membership)*, thus satisfying membership expectations, membership involvement and commitment can lessen. Once that occurs, then problems are created for the professional association.

Using IOSH as an example, reduction of pressure on officials (i.e., IOSH Branch Chairmen) leads to a weakening of strength and extent of members' views received by the IOSH executive. The Executive then may not perceive an accurate representation of members' views (view mismatch), leading to poor decisions by the Executive and wrong action taken (or no action) and the deterioration cycle accelerates. The process noted can be placed in the context of the cycle of activity shown in Figure 6 (viii).

Anticipating future discussion, according to St. John St. John (1980) these mismatches may have happened leading to the breakaway of members to form IMSO.

Among the ways the deterioration process can be stopped or reversed is through the rise of charismatic leaders, or ambitious leaders who are good decision takers, or if the Executive make changes in policy and services, which are recognised as valuable by the membership. These events usually occur in combination.

The recognition by the membership of the value of a policy or of changes is crucial to maintain a positive cycle of activity, and thereby maintains the continued expansion of the professional association - expansion in numbers of members and recognition of its authority in the occupational area.

Once a professional association is recognised as being an authority in the area of operations of its membership, then the way is open for the occupation to move towards becoming a profession, *provided its membership recognises the need to professionalise* (cf Figure 6 [viii]).

The Royal Society for the Prevention of Accidents (RoSPA) was established in 1916, being formed from the members of the Safety First Council (cf Table 6 [v]). In 1941 RoSPA received the royal accolade and in 1976 it moved to its current Birmingham headquarters.

RoSPA's association with the occupation of SP not only comes from its wide range of training courses offered to industry, many of which are completed by SPs. The close connection comes from the fact that RoSPA was the 'father' of IOSH (Palmer, 1957).

For a fee, RoSPA provides a comprehensive service covering all aspects of OHS. This service ranges from pamphlets to training, from advice to a wide range of magazines and journals. On an 'ad hoc' basis RoSPA advises employers on suitable recruits as SPs (Chapman, 1982). However, the activities of RoSPA are not restricted to OHS, but are concerned with safety in the widest sense, e.g. 'home safety' and 'road safety'.

The 'safety groups', associated with and often formed under the auspices of RoSPA, are found throughout the U.K. They act as a forum for many SPs who are not members of any other professional SP associations and others concerned with OHS, to meet and exchange views and information on the subject.

As the prefix 'Royal' suggests, RoSPA has achieved respect and has power. In the development of the SP occupational group RoSPA has played and continues to play a very important role, through training, representation and discussion.

The Institution of Occupational Safety and Health (IOSH) can trace its ancestry, through RoSPA, back to 1916. IOSH is the only one of the three professional OHS organizations discussed in this chapter whose commitment is centred on the SP and the occupation.

Effectively, it was formed in the 1930s in the Midlands region; as a *national* body, it dates back to the 1940s and it became an independent organization in 1953 (cf Table 6 [v]). However, ever since the occupation of SP was formed there always has been much discussion over titles (cf Section 6.2.3). This concern over job-title by members of the occupation caused considerable delay in deciding an institution title for the forerunner of IOSH (Journal, 1958). In 1943 at Birmingham there was a proposal to form the 'Institution of Safety Engineers' as a section within RoSPA., and a committee was formed to consider the proposal.

The committee concerned had a difficult and at times lively two year debate over the subject, eventually deciding to discard the 'Engineer' component of the proposed title, and call the emergent organization the Institution of Safety Officers Section (ISOS) of RoSPA (ISOS Committee Report, 1943).

This lively debate was repeated at the 1980 A.G.M., where the membership agreed the change of institution title from IISO to IOSH. The reasons for this change of title included a recognition of the need to broaden the institution's appeal to non-industrial potential members, in particular (at the time) to facilitate the incorporation of the Institute of Municipal Safety Officers (IMSO) into the newly titled institution.

The reason why IMSO was important to IOSH was not merely to increase the numbers and therefore strength of the newly named institution. A confidential informant declared that an important advantage accruing to IOSH following merger was access to the not inconsiderable funds and other financial resources of IMSO, 'carefully built up over the years through prudent financial management (of IMSO).' The debate which accompanied the merger, effectively agitated by the anti-merger lobby, created considerable pressure from the membership on the IMSO and IOSH Executive (both of whom generally supported the merger) for a fair disposition of the IMSO funds. The pressure and debate reached such proportions that the merger was threatened. As a consequence, it was agreed that the proposed Municipal and Public Services Division (MAPS) of IOSH, formerly IMSO, should retain control over the IMSO funds for several years after the merger.

Aside from the general membership, there are two divisions in IOSH: MAPS and the Construction Division. These divisions provide specialist service and IOSH accountability to each of the major industrial sectors. The operation of these divisions serves the very important purpose of providing autonomy to large industrially based groups in IOSH. This organizational feature is a means to prevent or avoid member dissatisfaction and a split in IOSH, similar to that which led to the formation of IMSO in the 1960s (cf 6.4.2). However, the same feature could also facilitate a split within IOSH, unless the institution provides the services the members of each division demand (Poole, 1981). Nevertheless, the major forum, service and centre for information exchange for the membership remains the numerous Branch Meetings of IOSH, distributed throughout the U.K. (cf Section 5.9 and Ch. 7).

The services which IOSH provides for its 2,500 membership (1981) are of two kinds, the visible and the invisible. Similar to RoSPA and, to a lesser extent, the BSC, much of IOSH's work on the development of the occupation of SP is not widely publicised or recognised by its membership. For example, particularly during the Presidency of St. John Holt, extensive contacts and associations were formed with various overseas IOSH membership groups (e.g., Hong Kong 1984). However, reference to the submissions to various committees and bodies, show that IOSH is considered to be an important professional SP and OHS institution (e.g. Robens, 1972b).

The National Examinations Board in Occupational Safety and Health (NEBOSH) receives mention, but no further discussion in this section, since officially it is not part of IOSH (cf Section 6.4.8; Appendices G and H; Holt, 1984).

6.4.5 The British Safety Council

The British Safety Council (BSC) is the youngest of the three professional associations discussed in this chapter. The BSC was formed in 1957 as a registered charity and, like RoSPA, is involved in all aspects of safety, not being restricted to OHS. In fact the similarity of function between RoSPA and BSC is quite considerable

(cf Section 6.4.6). Therefore, the functions and activities of RoSPA described in section 6.4.3 also apply to the BSC.

However, there are significant differences between the BSC and RoSPA. Unlike RoSPA, the BSC has associated with it an organization, the International Institute of Risk and Safety Management (IIRSM) offering a range of grades of membership, which the BSC states is open to all suitably qualified SPs. The BSC would not disclose the exact membership of the IIRSM, but an ex-employee placed the figure at 'around 2,000' in 1981, with a considerable number of overseas members (cf Section 6.4.7).

Another difference from RoSPA is that the BSC is publicity-seeking and propounds the cause of safety most vociferously, often with good effect but, by as found during interviews with all concerned with OHS (not only IOSH respondents), frequently causing irritation and a rejection of otherwise valid arguments and points.

In the development of the professionally trained and qualified SP (full-time and part-time) and the occupation of SP, *the BSC reports* that they play a very important role (e.g. Robens, 1972b).

6.4.6 The professionalization of the occupation of safety practitioner

In any discussion on the professionalization of the occupation of SP the work of Atherley and Hale (1975) is of seminal importance. In their paper, *Pre-requisites for a profession in Occupational Safety and Hygiene*, Atherley and Hale noted that occupations aspiring to become a profession had to achieve control over the occupation (i.e., control over entrants and qualification). They considered a serious obstacle to the professionalization of the occupation of SP was the absence of an institution with sufficient power to achieve control over the occupation.

Since Atherley and Hale published their paper, important changes have been made in one of the three professional institutions. IOSH has developed and increased involvement in affairs which affect the occupation of SP, particularly in the education and training of SPs,

and in representing the occupation on various key national bodies concerned with OHS.

The National Examinations Board in Occupational Safety and Health (NEBOSH) has been established under the auspices of IOSH, on which all the leading OHS authorities sit, except the BSC who have always maintained their distance from involvement in NEBOSH. (James Tye, Director of BSC, made one visit to a meeting of NEBOSH in 1981, but - up to 1987 - has never returned.) These changes were among those identified by Atherley and Hale (1975) as 'pre-requisites for a profession.'

It is beyond the range and scope of this work to discuss professions and professionalization in depth (to do so would take a full scale study). However it is necessary to offer a short discussion on the definition of the term 'profession' to provide a background to the discussion. It is useful to commence by providing the conditions by which an occupation is considered a profession, synthesising the definitions of the term profession given by Hall (1975), Johnson (1972), Millerson (1964) and Wilensky (1964). The principal conditions in the synthesis are numbered;

'A profession is an occupation which demands that those who are engaged in it (1) have undertaken a long period of study, in a specific body of knowledge, following which they (2) qualify through examination and are (3) the only persons who are allowed to practice their chosen profession. The profession is (4) controlled by a body, (5) granted by statute (6) the privilege of restricting entry, (7) establishing educational standards, (8) conducting examinations, (9) maintaining high standards of ethics and morality of its members and the profession.

Inspection of the above definition shows that by reference to the findings of this study, derived from inferential evidence or recorded responses, none of the above items (1-9) refer to the occupational group of SPs. It is true that certain items, notably (1) and (2), apply to some members of the occupational group but at the time of the IOSH survey (1981), the evidence was that they were in the minority (cf Ch. 4, 5 and Section 6.4.9). The occupation of SP has to satisfy all of these conditions before it can be included among the professional occupations.

One part of the discussion which is either ignored or fudged by those who support the concept of professionalization of the occupation of SP is the reasons *why* it is desirable to become a profession. A review of the two schools of thought concerning professions provide the background to the debate.

There are basically two schools of thought in social science concerning professions. The first considers and presents professions as providers of high quality services and guardians of a range of skills in the interests of a client, who may be an individual (fee paying) or an organization (salary paying). The strongest advocates of this perspective are the professional bodies and associations who control the entrance and qualifications of those who would enter 'their' professions, such as the British Medical Association and the Law Society.

The opposing view is propounded by some authorities from academe and consumer pressure groups. The critics of professions state that they are overly protective of the profession and professional, concerned with advancing the interests of the profession rather than the interests of the client, surrounding themselves with unnecessary mystique and controlling entry to the profession so that its members can inflate their fees and maintain their position of privilege. The pressure groups that express this view of professions include the British Society for the Social Responsibility in Science, with academe represented by Illich (1975).

However, there is a significant difference between the social science and academic definition of a professional occupation and that held by those employed in the occupation of SP. The following is a definition of professional occupation collectively *provided by the SPs* interviewed during the course of this study;

A profession consists of a group of individuals who possess specialised expert knowledge and will assist by providing that knowledge on demand, following payment of a fee or salary. The expert knowledge or services are provided to satisfy the best interests of the client or employer.

Therefore, by the standard of measurement applied by the practitioners, the occupation of SP is a profession. The difference between what can be described as 'two realities': the 'real' definition of the profession, carefully constructed by social scientists after analysis of research findings and the definition of the profession as seen by those who practice an occupation, is 'real' because they believe it to be true. These different realities create tremendous problems for the SP professional organizations.

A short philosophical discussion on the term 'definition' makes the distinction clearer and provides reasons why the differences between the realities (for both are 'real' in the common usage of language) create problems for the SP professional organizations.

By reference to Speake (1984) the SP definition of profession would be termed as a 'nominal', i.e., when the term profession is used it can be understood by anyone with a knowledge of the language (similar to 'God', which is 'understood' by every English person and even though people have their own definition, it hardly matters in conversation). Continuing Speake's exposition, the synthesis of social scientists of definition of profession is the 'real' definition, for it 'characterizes a structure common to all the objects to which that term should be applied.'

To conclude this analysis, Stevenson (1944) stated that 'Since people accept what they consider true, 'true' comes to have the persuasive force of 'to be accepted''. That is the core of the discussion, time after time SPs interviewed presented 'their' definition of profession as a truth. That finding identifies a major problem for the SP professional associations.

The problem arises because any discussion within the SP professional associations about 'the need to strive towards becoming a profession' is ignored or misunderstood by a large proportion of the membership because, the inferential evidence shows that in the minds of many of the members, they *already are professionals* and automatically members of a profession. Thus any discussion on SP professionalization by the professional associations is considered unnecessary by many of the membership and tends to be disregarded (cf Section 7.3.17).

An example of the reasoning of the membership concerning their interpretation of the term 'professional' is summarised in the following extract from a critical letter, received following publication of an article entitled *The Safety Officer today: Professionals or amateurs?* (Grayham, 1982b). The conclusion of the article was that SPs were not yet members of a profession but were members of an occupation. The correspondent who disagreed with the conclusion stated;

I pride myself that I always conduct myself professionally and am proud to be a member of the profession of safety officer.'

The above statement also provides an answer to the rhetorical question of Atherley and Hale;

'... we need an understanding of the difference between a professional and a non-professional occupation, if indeed such a difference exists.'

(Emphasis added) Atherley and Hale (1975)

There is a need for the members of an occupation to understand 'the difference between a professional and non-professional occupation. There is a difference existing in the minds of many IOSH respondents, but it is a self-defined difference. They 'know' the true difference between a profession, professional, and a skilled tradesman and an occupation, and will defend their definition quite strongly. They refer to themselves as 'professionals', because they 'conduct' themselves 'professionally' they think they are *automatically* members of a profession.

However, it is the reasons why IOSH and some of its members want the occupation of SP wish to be acknowledged as a profession is of prime importance. Members of IOSH, who thought they were not professionals (and members of a profession), gave the following as reasons why the occupation should become a profession, stated in rank order;

1. Status.
2. Salary

30 IOSH members were asked during general conversation at conferences and Branch Meetings, 'Why should the occupation of SP become a profession?' No further explanation was given. 23 stated it was a profession, 4 said it would improve their status, so that they could obtain a higher salary, 3 declared they would then get more pay and added that it would improve their status at their place of employment. NONE referred to 'an improved service to the client', which the defenders of professions often state and claim as the philosophy behind professionalism and the professions.

In any discussion on professionalism, the professional associations tend to lessen or play down references to the financial advantage, other than for membership consumption, the improvement in status professionalization can give (members making their own links to the benefits to improvement in status). The professional institutions prefer to emphasise publicly the advantages that professionalization of an occupation gives to the client/customer - service to the client/customer and improvements in the standards of OHS (Millerson, 1964; Elliott, 1972).

However, the key element is whether the professional SP associations are assisting the occupation of SP to move towards professionalization, or are primarily interested in running a profitable business.

6.4.7 The philosophy of the institutions towards the occupation of safety practitioner

The main theme of the previous section was to demonstrate that the bulk of the the membership view the possibility of becoming a profession with little interest, because either they think they are a profession already or see the advantages of being a profession directly or indirectly largely in monetary or career terms. Since the impetus towards professionalization appears (at the time of the study) unlikely to come from the membership, it is necessary to consider the commitment and involvement of the professional OHS institutions towards professionalization of the SP.

When considering the level of involvement or commitment of the three institutions to the concept of professionalization of the occupation it is difficult to identify or establish a standard of measurement that is valid and sufficiently accurate to make an assessment. It was decided that one method may be to consider the activities of the professional institutions in terms of level of involvement with and for the occupation of SP.

However, it is not a satisfactory standard, merely an approach to partially resolve the problem of comparison. A problem is exacerbated because much of the most important work the professional institutions carry out on behalf of OHS and the occupation is necessarily invisible and unpublicised, such as meetings and discussions with the HSE and government.

A review of the principal institutions concerned with the occupation of SP shows that each has a different level of involvement. It ranges from the lowest level, RoSPA, with its interest in the occupation largely restricted to providing training courses and publishing journals (e.g. *Occupational Safety and Health*) with its content and advertising directed at those involved in OHS. At the highest level of involvement in the occupation of SP is IOSH which is principally concerned with its membership, through training and representation. However, IOSH has an involvement in general OHS and it issues (as part of membership benefits) the monthly journal *The Safety Practitioner*, which also has the commercial interest in selling advertising space.

In between RoSPA and IOSH comes the BSC, which is heavily involved in safety and OHS training of all kinds, including overseas safety personnel and has several other areas of involvement with SPs, such as the publication of a safety newspaper and OHS journals. Like IOSH the BSC has a more direct interest in the SP, with its IIRSM.

The similarities are perhaps greater between RoSPA and the BSC, than between the BSC and IOSH - despite both the latter having membership organizations. In fact, partly because of its parentage history and SP membership rivalry with the BSC, the IOSH has closer relationship and affinity with RoSPA than with the BSC.

Both RoSPA and the BSC are registered charities, but they are charities with a considerable emphasis on making money. An interest that at times appears to transcend any interest in advancing the occupation of SP. Indeed, both RoSPA and the BSC are only too aware that the purse strings are held by employers and management - and it is to the employer and management, rather than SPs, that their publicity and appeal is largely directed.

The support for these assertions was found during the period of research for this study. An article for the RoSPA magazine *Occupational Safety and Health* had to be rewritten prior to publication. During discussions with the editor, she remarked 'It is not our policy to stimulate debate, to do so would create ripples'. Another example was given by a former researcher with IOSH, who declared that he left because of RoSPA's policy of never criticising employers or employers' associations beyond a certain level. He declared that he had been told to follow this policy because to criticise them 'would antagonise those who paid the bills'. The same informant stated that 'unquestionably RoSPA sees the employer, the manager and the SP as a target for advertising, and advertisers are potentially a far more profitable customer for RoSPA'. However, he did say several times that 'RoSPA does a lot of good work'.

The BSC, by reference to their activities, adopts a similar attitude to business as RoSPA. The advertising literature of the BSC shows the principal thrust to be directed at the employer and manager. Of course, the BSC currently (1987) is heavily committed to Risk Management and Loss Control methods of OHS. However, their advertising heavily emphasises that a benefit of Risk Management to the manager and employer is improvement in standards of safety and productivity - completion of the BSC course in OHS assists in increasing productivity and a cut in unnecessary OHS expenditure. Extracts from BSC advertising literature are provided in Section 6.4.8.

The language that IOSH (and RoSPA) uses, by comparison with that of the BSC, is extremely restrained. Reference to the submission of each of the three institutions to the Robens Committee illustrates

the differences in approach, style and thrust, and more particularly, their respective OHS philosophy.

The BSC eleven-page comprehensive submission was informal, extolling its own importance and virtues, above other OHS institutions. Their submission included references to the BSC (some quite extensive) on seven of the eleven pages, not including the publicity blurb for a book on Total Loss Control written by James Tye (the Director General of the BSC) and sold by the BSC. RoSPA presented a balanced four-page submission on methods for improving OHS, while including a large section (almost equal in length to their OHS submission) on the activities of RoSPA. The submission from IOSH (then IISO) presented a six-page analysis of OHS problems and proposed solutions, and restricted mention of the activities of IOSH to one paragraph.

It could be considered useful if the BSC and RoSPA cooperated in those areas of operation, which are dissimilar from those of IOSH, but contribute to the improvement of safety generally and OHS (treating the latter as applicable to work). This appears most unlikely. In their submission to Robens the BSC made reference to the 'two main parties' who were professional safety organizations - without specifying to whom they were referring. In the same arena RoSPA made specific reference to the BSC, but their reference indicated deep divisions between the BSC and themselves, declaring;

'In examining the current position of having two voluntary safety bodies in the UK (RoSPA and BSC), one starts from the premise that their common aim is the prevention of accidents. ... If policies and methods are similar, then collaboration is easy and amalgamation possible. If policies and methods are not the same, then clearly each is seeking to justify its own methods. As this is the present situation between the two bodies, collaboration is difficult. However, communication is maintained between the two bodies at Director General level.'

RoSPA submission in Robens (1972b)

However, both RoSPA and the BSC do exhibit certain similarities, especially when selling their OHS courses. An example of their policy comes from a source which must remain confidential and it concerns the military and the BSC and RoSPA (IOSH was not

involved). BSC and RoSPA were requested to submit to the military authorities a *specialised* training programme for SPs, tailored to the needs of the military. The military authorities wished to professionalise their SP staff. A specification was provided and submissions awaited.

The response from the BSC and RoSPA was to provide training programmes which had the introductory notes 'militarised' but the actual programmes were the standard ones, used on their normal courses. This was not a case of providing a core element course for SPs, the specification was too specific to allow a misunderstanding to occur. The OHS specialists in the military arm recognised the course content and neither BSC or RoSPA received the contract they could have achieved.

The purely inferential conclusion must be that the BSC and RoSPA are in the business of selling the product of safety, on their terms, one component of which is OHS. The occupation of SP (and the discipline of OHS) to BSC and RoSPA is a market, in which they can sell their wares, be it training courses or advertising. IOSH is far less OHS business orientated and demonstrated that they were primarily concerned for their membership, the occupation in which their members are employed, and with OHS.

The two examples provided support for the assertions made in the preceding paragraph. The first contrasted the attitude and commitment of the three institutions towards OHS in 1972, which also indicated their attitude to the occupation - the submissions to the Robens Committee. The second example offered inferential evidence from 1986 that the prime purpose of RoSPA and the BSC - profit - had not changed. Both do extremely valuable work in OHS and safety, but their prime motive is the profit motive, further confirmed by statements from their current and past employees. Finally, it was shown that the BSC and RoSPA were unlikely to cooperate.

However, there remains the 'invisible' work that the institutions are involved in, out of the public gaze - the work in committees and discussions with various authorities. It is rare that an opportunity is found to inspect and compare the work of the three

institutions in furthering the occupation or OHS in the 'invisible' area, such as committees.

Robens is a visible example of what is often invisible. Arguably the most important work that the institutions conduct, which may be on behalf of the occupation, i.e., unpublicised work in committee, is usually impossible to assess. That is why the Robens' evidence was valuable, it gave an opportunity to consider the evidence, which suggests that such work is not necessarily primarily concerned with furthering the occupation of SP, but is more concerned with the commercial activities of some of the institutions.

6.4.8 The involvement of the three institutions in training safety practitioners

An interview was (exceptionally) granted by the BSC in 1980 with their training officer, Mike Kinshott. Following the interview, a transcript of the discussion was submitted to Mr Kinshott for approval, to ensure that the BSC were not misrepresented (similar to the procedure adopted following all interviews with spokespersons for organizations).

Mr Kinshott's principal points regarding the BSC's SP training programme included: a declaration that an objective of the BSC was to train *managers who were also SPs*; to the BSC the Risk Manager was of considerably higher status than the SP; OHS decisions had to be realistic and take account of the aims of the *organization*; the SP had to possess 'power' and 'authority' (no definition offered).

Little credence was given by Mr Kinshott to the possibility that full- or part-time SPs (or Risk Managers) may suffer 'role conflict'. It is possible that the reason why the BSC trained SP is claimed to have little role conflict is the emphasis of their training courses, by reference to BSC advertising literature.

The following extracts illustrate the trend of BSC OHS philosophy;

'The world wide depression has forced senior and middle managers to ... learn the best (and most inexpensive) method of dealing with risk.'

'Practical solutions ... offered.'

'Increased profits ... Operating costs cut.'

This approach was described by a UK manager respondent as 'talking the language that we understand.' However, many of the persons who attend the BSC courses come from overseas.

Inspection of the lists of 'joining members' of the BSC sponsored IIRSM, published in the newsletter circulated to members, consistently indicated that around two thirds of new members were from overseas. The majority of overseas members had completed BSC courses, which were found to have a high status in Africa and Asia.

In fact, whenever the name 'British Safety Council' was raised during discussions with Asian and African OHS practitioners either in their own countries or at international conventions in South East Asia, *without exception* they all thought the BSC was an organization allied with the British Council, a government funded organization. Several Asian delegates to the Asian Occupational Health Convention, Manila (1985) stated that when the Director General of the BSC visited their country, he was received by government officials, because they assumed 'the BSC was a British government organization.'

It was found that approximately 80% of those interviewed who had completed BSC courses were part-time SPs, with a managerial function forming the other component (cf Section 5.2 and 5.4). However, similar to RoSPA, the BSC organises and runs large numbers of specialist courses (cf Section 6.4.7).

In fact it was found that RoSPA and BSC compete for broadly the same market. A major difference is the emphasis on Total Loss Control by the BSC, or as the 1980s progressed, a switch by BSC into Risk Management. Although a respondent who had completed a BSC course in 1981 and late 1986 stated he could discern little difference in thrust and content which had occurred over the years, he continued 'only the names had changed'.

There was a difference in the examination system operated by the BSC, compared with RoSPA, and IOSH. BSC utilised a 400 question alternative answer examination; RoSPA used written examinations. A written examination is necessary for qualifying for IOSH membership - the course content is the responsibility of NEBOSH. The current syllabus used by NEBOSH is provided in Appendix E, BSC and RoSPA have different syllabi for each course (cf Appendix F and G).

Those interviewed who had completed BSC OHS courses generally expressed high satisfaction with the course tuition and content. A typical remark was 'BSC OHS courses combine practicality with a good grounding in theory'. However, the multiple choice answer system used by the BSC was heavily criticised, particularly by those who had not completed BSC courses.

Comments made by respondents about RoSPA courses included they were 'leisurely', 'some tutors were of poor quality' (particularly on the behavioural science element) and 'badly organized', comments that were *not* made about the BSC courses.

The comments from respondents regarding the NEBOSH syllabus courses had similarities with those made about RoSPA. Long after the establishment of NEBOSH, 'founded in 1979', who assumed responsibility for 'running professional health and safety examinations' (Holt, 1984) IOSH respondents still referred to courses using the NEBOSH syllabus as the IOSH course (cf Appendix H).

Reference to survey interviews and my experience as a member of NEBOSH and co-ordinator of the Behavioural Science Group, the IOSH members offered general, minor criticism of the syllabus, more extensive criticism of the style and type of teaching and the attitude of the teaching institutions.

Concentrating on the behavioural science component, the small number of criticisms fell into two categories: first, the members considered this component was woolly, often badly taught (especially in the failure of lecturers to provide OHS linked examples of application); second, a considerable number of those interviewed stated that they

failed to see need to teach behavioural science or include the discipline in the syllabus. The consensus opinion of those who expressed the latter view can be summarised in the following comment;

'Why bother taking up valuable course time with behavioural science? After all, it is only common sense.'

The majority of IOSH respondents felt that the NEBOSH syllabus content was 'there', i.e., it was little to do with them and there was nothing they could do about it. NEBOSH (and IOSH) were remote, they were 'merely a member' as more than one respondent stated in discussion. They considered they had to complete the course to obtain the membership qualifications and that was that.

However, it was found that many of those who held membership in either of the SP professional institutions had not qualified by examination. The following section continues the discussion on this subject.

6.4.9 Method of entry to SP professional institution membership: BSC and IOSH

The discussion in this section on the method of entry to the professional institutions is largely restricted to BSC and IOSH. However, since several respondents in the 'write in' section of the IOSH survey questionnaire (and during interview) declared that they also held 'RoSPA membership', using the term as though they had *qualified* for membership, limited references are made to RoSPA.

Table 6 (1) provides details of a small sample ($n = 50$) survey conducted among those who applied for membership of the three professional OHS and SP associations. The reason for the survey was because it was found that employers viewed membership of a professional SP association to be one form of qualification demonstrating that the holder had achieved a certain level of OHS training and skills which would assist in staff selection.

TABLE 6 (1) RESULTS OF APPLICATION FOR CORPORATE MEMBERSHIP OF PROFESSIONAL OHS AND SP ASSOCIATIONS

Number of applications accepted (in percentages)				
Name of SP association	Applicants with 'A' level GCE passes or above ¹	Grade	Applicants with 'O' level GCE passes or above ¹	Grade
Royal Society for the Prevention of Accidents	100	N/A	100	N/A
British Safety Council ²	90	Member	70	Member
	10	Assoc.	30	Assoc.
Institute of Municipal Safety Officers ³	30	Member	10	Member
	30	Assoc.	30	Assoc.
Institution of Occupational Safety and Health ³	20	Member	10	Member
	40	Assoc.	10	Assoc.

1 = 6 respondents had achieved GCE 'A' level standard, 2 held degrees (1 Social science, 1 Chemical Engineering), 42 held GCE 'O' levels.

2 = The membership title varied between International Institution of Safety Management and later, the International Institution of Risk and Safety Management (no holders of the BSC Diploma were included - see text).

3 = All grades were those received or offered the respondent on joining. The merger did not affect this analysis.

There were 6 respondents in the RoSPA sample; 14 IIRSM members; 16 IMSO members and 25 IOSH members, with the difference to the sample size explained by respondents holding joint membership. The

purpose of the survey was to establish the reaction of the institutions to applications from individuals - with one exception - who satisfied the following criteria;

1. the respondents *had applied in writing for membership*, and
2. at the time of the application they had not completed any *formal* OHS training courses (which includes membership qualifying courses).

The BSC publicity material provided examples of this link between qualification and OHS training. In one of their *IIRSM* publicity leaflets the BSC declared;

'Employers who are members of the British Safety Council in the U.K. and overseas are demanding proof of *meaningful* qualifications - which means proper training and passing of an examination - before appointing Safety Managers.

In the light of this and other factors, the *IIRSM* was founded in 1975.'

(Emphasis added) BSC publicity material (undated)

In view of the statement in the publicity leaflet by the BSC, linking training, examination and meaningful qualifications, with implicit connection with the *IIRSM*, and the results of the small scale survey, further research was conducted. Every SP who was interviewed and stated they held *IIRSM* membership were asked how they achieved their membership, i.e., by examination or by other means. The recorded results are shown in Table 6 (2).

TABLE 6 (2) METHOD OF ACHIEVING *IIRSM* MEMBERSHIP (n = 107)¹

Method	Whole number
Completing DipSM course	5
Letter of application from respondent	81
Letter of invitation from BSC	21
Total	107

1 = Including respondents (10) from the sample displayed in Table 6 (1).

In fact, no one who had applied to the BSC for membership were found to have been refused. Three of those in the BSC sample had been employed in OHS for one week or less, one actually applied before commencing employment as a 'safety man' (his term) in construction. None of the respondents found that the BSC had checked their stated qualifications or with their place of employment. These factors raise serious questions concerning the interpretation of the term used by BSC, 'meaningful qualifications'.

The one exception noted above was myself, who had attended - and taught - formal OHS courses, in addition to the research project conducted in the Department of Environmental and Occupational Health at Aston, but I had not completed any membership qualifying course.

In 1981 I made a speech at the IMSO conference at Keele, the Director of BSC, James Tye was in the audience. Following the conference, a letter of invitation from BSC to make an application for membership of the IISM arrived at the University of Aston, I applied. There was no request for proof of qualifications, nor (to my knowledge) were any checks made of my work experience or activities. I was 'awarded' full membership of the IISM on receipt of my cheque.

I also applied - without invitation - for membership of IMSO and IISO. Following my application for membership to IMSO, for whom I had conducted some research, after a short delay I was awarded full corporate membership. In the case of my application to IOSH, after considerable delay I was awarded Associate Membership (a corporate grade). In both cases there was no request for confirmation of qualifications or OHS experience, however I was known to some members of the IMSO and IISO Executive. On the merger of IMSO and IISO I was made a full corporate member, the higher grade taking precedence.

However, unlike with the IIRSM, reference to Table 6 (1) shows that not all of those who applied for corporate membership of IMSO and IOSH were accepted and offered corporate membership. The safety man referred to earlier had also written for membership of IOSH, but had been refused. All the evidence derived from Table 6 (1) is purely inferential, suggesting areas for further research.

Discussions with IOSH (and IMSO) respondents found that many of those who had applied in writing for membership considered that the result of their application depended on two factors: who you knew and the company for whom you worked. The right people were cited as being members of the Executive of IOSH and, to a lesser extent, support for application from Fellows of IOSH. The right companies (and professional institutions) were felt to be ICI (IOSH), CEGB (IOSH and IMSO), the big London Boroughs (IMSO).

During the course of research for this study an opportunity was offered by IOSH to inspect the membership files at their Headquarters covering the period from 1961 to 1980. The research was conducted in 1985 and prior to the computerization of membership records. 100 files were inspected, taken at random from the filing cabinets at IOSH Headquarters, Leicester. The selection of these files was therefore useful as an indication of the sample's progress from their application to membership grade at the time the survey was conducted. Table (3) displays the data.

TABLE 6 (3) RESULTS OF APPLICATION FOR MEMBERSHIP OF IOSH AND METHOD OF ACHIEVING GRADE AT THE TIME OF SURVEY (n = 100)

Method of achieving grade	Grade of membership			
	Non-corporate		Corporate	
	Student	Affiliate	Student	Affiliate
Initial application	40	38	17	5
Achieved grade following initial application and time pre-requirement ¹	-	-	24	10
Achieved grade following IOSH examination	-	-	31	13
Totals	40	38	72	28

1 = Only corporate grades have full membership

The membership files were in a generally confused state and it was necessary to search through the files to obtain the required information.

The IOSH staff stated that many of the files were 'dead', people had left the Institution for various reasons

(i.e., resignation or retirement), although none of those inspected appeared to hold resignations or even membership in abeyance.

It was not possible to check the assertion of some respondents that personal intervention by members of IOSH influenced decision taking on membership applications, nor were the possible links between source of application and level or grade of membership offered investigated in depth. Assuming this to be possible, to investigate this assertion would have meant contacting those involved, this was considered unethical.

The average time between receipt of application and reply was three months. There did appear to be a relationship between style of application, including the quality of the paper, layout and construction of the letter and the level of grade awarded following application. This could have been due to the level of qualifications and type of employment.

However, three applications were found where respondents with broadly similar levels of qualifications and experience, but totally dissimilar letters of application (ranging from the handwritten, poorly constructed, to the typewritten on expensive looking quality company notepaper) received or awarded different membership grades by the membership committee.

The applicant who forwarded a handwritten letter, on company stationery, was awarded an affiliate grade; a typewritten letter on paper without a company heading was awarded the student grade of membership; the highest quality of application, typewritten on company headed notepaper, complete with photo-copies of qualifications and a supporting letter from his employer was awarded full membership grade.

It is possible there were other influencing factors which could not be established by reference to the records. For example, there may have been details known only to the IOSH membership committee at the time of the application.

However, reference to the data displayed in Table 6 (3) suggests that if membership of IOSH, in itself, is considered by employers and managers as a *qualification* then there may be problems. The problems arise from the fact that for many members of IOSH, the grade of membership may not be an indication as to whether or not the member has taken an examination - the generally accepted meaning of the term 'qualification' (OED, 1979) and secondly, there have been tremendous changes in the IOSH syllabus and examination system since their establishment in 1960 (cf Appendix E).

Finally, if it is argued that the prime basis for decisions concerning grade of IOSH membership awarded should be experience, when all else is equal, then the evidence suggests that this was applied unevenly. It was found that these criteria were not applied even when all of the factors were broadly similar (cf Journal, 1958). Further research would be useful.

This is a very sensitive and personal area of research. Those applicants who fail to be accepted for membership (or who fail to achieve the grade of membership anticipated) tend to become accusatory, or try to find reasons to satisfy their wounded pride (cf Festinger, 1957). Nevertheless, it is part of the cycle of activity to maintain good communications and lessen unfounded rumours circulating which could affect the membership attitudes and expectations (cf Figure [v]) and the expectations of employers.

It has been shown that some employers depend on reference to experience as an SP and qualifications obtained from the professional associations - meaning in employers terms, usually simply asking for 'corporate membership', seldom asking if the membership was obtained through qualification (cf Section 6.3). Under these conditions - and according to respondents, they are not unique - it is suggested that the professional associations have a responsibility to ensure that membership is achieved by qualifications or at the very least, certain grades reserved for admission solely by examination (cf Appendix F, especially discussion on Chartered Member of IOSH [Section F.3]). This subject should receive further research when conducting an in-depth analysis of professional associations.

The previous sections have included comments from respondents specific to the subject under discussion, this section offers a summary of the more general comments from the same source on the activities of the three professional associations.

Some of the criticisms of the professional associations may have been ill-founded but the fact that they were made (many were widely circulated) is much more important. The members who made the criticisms *believed them to be true*, therefore, *effectively they were true within the professional association*. This factor could cause the criticisms to create considerable damage - both internally and externally - to the credibility of the professional association.

If their critical assessment was questioned, there was very strong resistance to any suggestion that they may have misunderstood or misinterpreted the situation. For example, those respondents who accused the IOSH membership committee of bias or prejudice in the allocation of membership grades were emphatic about the validity of their assessment. Another example was when it was suggested that possibly the reason why certain SPs in certain companies appeared to be awarded higher grades of membership was because the SPs may be better qualified or have greater experience than SPs in smaller companies, these possibilities were invariably discounted.

Occasionally criticisms were counterbalanced by opposing criticisms that questioned their basis. The general view of the IOSH respondents was that RoSPA and IOSH were staid or too conventional in their approach and activity. On the other hand, there was much criticism of the BSC for its brashness, many adding that the activities of James Tye of the BSC were purely publicity seeking and even counter-productive to OHS and the occupation of SP (it was noticeable that the majority of those who expressed this view were over 50 years of age, many of those 40 years of age and under praised the publicity machine of the BSC). If pressed on what they considered to be the correct level and type of activity, respondents offered a plethora of answers that were impossible to identify in quantifiable terms.

Nevertheless, IOSH respondents saw advantages in the commercialism of the BSC and RoSPA. They considered that IOSH should adopt a more commercial approach, marketing a range of services to industry and its membership. They considered a commercial attitude and approach by IOSH would allow membership fees to be reduced and possibly enable IOSH to be even better financed, allowing considerably improved services to be offered to the membership (cf Appendix F and H).

The services and communication channels offered by IOSH to its membership was a subject of much criticism and *constructive comment* (cf Section 6.5). There was a considerable body of opinion among the membership that they could not effectively articulate their ideas and comments to the Executive of IOSH, or influence policy. There was general agreement that IOSH did not offer the services to its membership which they thought it could and should do.

It is useful to conclude with a succinct exposition of the problems within the three professional OHS organizations, from the perspective of one of its senior members (of IOSH and IMSO). The comment was made during a very late night 'session' held at the IMSO 1980 conference, where a major talking point was the possibility of IMSO merging with IOSH. The discussion at the session had broadened into general comments on the professional associations and the lack of 'enterprising individuals' in IMSO and IOSH (cf Section 7.3.15; Atherley and Hale, 1975). A (now deceased) Fellow and former member of the IMSO Executive said;

'Just look at the ones we have. The British Safety Council is like a ship with no crew; RoSPA is like the *Mary Deare*, a ghost ship with no one on board; IMSO is a sinking ship, with everyone scrambling for the lifeboats or the shore; IISO (now IOSH) is like the *Bounty*, full of first lieutenants scrambling to be Captain. What is required is a Nelson and a *Victory*.

6.5 Concluding discussion

The preliminary paragraphs of this section present a summary discussion on the subject of the first part of this chapter, the development and history of the occupation of the safety

practitioner. The remainder of this section is largely concerned with considering the three professional institutions through the perspective of the membership (not the Executive) of IOSH. The discussion throughout concentrates on IOSH, using the BSC and RoSPA as a reference.

This study is largely concerned with IOSH. IOSH members formed the sample for the research survey and, with notable exceptions, the follow up investigation and interviews (cf Ch. 1). Therefore the inferential findings in the study, having been derived from the membership of IOSH, can only be applied to the membership of RoSPA, the BSC, or the occupation in general, with great caution.

It was found that the occupation of SP was the result of pressure for information. Atherley (1987) reviewed the pressures for an OHS specialist, largely restricting his comments on legislative pressures to that from OHS legislation. The discussion in this study placed considerably greater emphasis on the importance of Social Security legislation.

Enforcement of OHS legislation is largely dependent on resource availability (staffing and financial) and government policy, and is in the public eye; Social Security legislation while still dependent on government policy and resources for distribution, and because the process of claims being hard to understand or largely unknown, places greater demands on employers (particularly for information) than previously recognised in studies concerned with the occupation of SP.

'Enforcement' in social security is automatic and self-generating (the claimant initiates the process, not the employer, HSE or DHSS). This is the crucial point in the process, no teams of Inspectorate are required, the process is an automatic stimulus-response situation - once the claimant initiates the process, although not all those entitled necessarily claim (cf Hazards Bulletin, 1979). Furthermore, with regard to social security industrial injury compensation, the demand for information can be quite considerable (cf Ch. 5 and Section 6.2.6).

Therefore pressure for the appointment of a person to deal with OHS is not really the key issue. The pressure is for an information seeker and processor, a gatekeeper to a range of OHS and, less easily identified other skills (cf Sections 5.2, 6.3 and 6.2.5; Figure 6 [ii]). It is suggested that it was pressure for this type of employee that led to the perceived need for the SP and the rise of the occupation (cf Section 5.2, 5.3, 6.2.2 and 6.2.6; Atkinson, 1936).

The case study of local authority reaction to *perceived* legislative pressure illustrates employer and managerial responses to OHS legislation and a need to select, train and appoint SPs (cf Section 6.3). In addition, the discussion in that section suggests that at certain periods, there may have been a very rapid increase in the numbers of the occupation.

Once the occupation came into being, the numbers of SPs increased as legislation became more and more complex (cf Sections 6.2.2 6.2.5 and 6.2.6). However, the parameters of operation for the occupation were closely confined by the most powerful interest groups in OHS, the Factory Inspectorate and the medical profession - despite the fact that the latter has very little knowledge and understanding of OHS - and the most powerful groups in the workplace, the employer and manager (cf Ch.'s 4 and 5; Sections 6.2.7; 6.2.8).

As the numbers of SPs increased the formation of interest groups, the professional SP associations, were inevitable. The inferential evidence suggests that among the most important factors which accelerated the process of development were: a genuine concern for OHS and the need to raise standards of OHS in industry; common interest; the need to escape from occupational isolation; the need for information exchange; pressure from other bodies, best dealt with by an organization, and by no means unimportant, the opportunity to enter a market-place (OHS) and to make money.

It was found that the rise of the professional associations was associated with their purpose and objective, *initially not function*. Former members of staff stated that the objective of RoSPA for many years was to improve safety, in all its facets. As RoSPA grew in organizational size, while safety remained an important

objective, the interests of those employed in RoSPA appeared to assume priority over those of the founders (cf Handy, 1981). Former and existing staff stated RoSPA is now a business organization, whose product is safety - the occupation of SP to RoSPA was of importance largely (but not wholly) in providing a source for further business.

Similar to RoSPA, the BSC (despite being a registered charity) was considered by IOSH respondents to be a business organization dominated by James Tye, which happens to be involved in safety. The charismatic leader of the BSC, James Tye, raised tremendous feeling amongst the membership of IOSH - in the vernacular, IOSH members either loved him or loathed him. Many IOSH members asked, 'What will happen to the BSC when James Tye retires?'

Several respondents were concerned that IOSH was growing so large, the purpose and objectives of the institution have changed, 'not necessarily for the better'. The Executive and administration were becoming too remote from the membership. Some members added that it appeared that the Executive were so involved in power struggles and in furthering their individual concept of the purpose of IOSH, that they felt these activities were detrimental to both the organization and the occupation (cf concluding paragraph Section 6.4.10).

IOSH members considered that SPs effectively have only two professional associations with an involvement in the occupation, the BSC and IOSH. Although officials of both associations state in public and in publicity material that they are truly concerned to move the occupation towards professionalism, but, in the opinion of respondents, with significantly different emphasis and purpose. The inferential evidence confirmed their opinion. The BSC appeared to be overly concerned with the commercial advantage which could be gained by advancing the occupation towards professionalization (cf Ch. 5; Sections 6.4.2, 6.4.6, 6.4.7 and 6.4.8). In contrast, by reference to the comments and observations of its membership, IOSH overlooked the advantage of commercial involvement and activities, which the respondents felt would provide funds and better publicise the professional Institution.

It was found that the membership of IOSH failed to appreciate the distinction between 'occupation' and 'profession'. In the opinion of the majority of the members, the occupation of SP is a profession, because they act professionally (cf Section 6.4.6). Moreover, the general consensus of the membership was that IOSH was a 'professional institution', while offering certain criticisms of its operations (cf Ch. 5; Sections 6.4.8; 6.4.9 and 6.4.10). The constructive comments most mentioned by respondents included the following, identifying what they would like IOSH to establish or offer;

1. An OHS information service, which would respond *quickly* and *effectively* to members' inquiries.
2. A system whereby questions raised by members would be recorded, quantified and analysed,
3. A professional system of public relations, largely concerned with promoting the occupation and IOSH, but also concerned with OHS matters in general,
4. A designated member of staff at IOSH HQ to compose speeches made at public functions by representatives of IOSH, not restricted to members of the Executive,
5. A research department to service (1), (2), (3) and (4).

Some of the above comments will be reviewed in the following chapter, concerned with the future of the occupation. In addition, many of the points raised by IOSH respondents concerning the operation of IOSH form the basis of recommendations presented in Section 8.3 and the proposals in Appendices F, G and H (Volume 2).

6.6 Conclusion

The development of the occupation of SP has been shown to be the result of pressure. Not pressure to comply with legislation, nor moral pressure to self-regulate OHS within the workplace. The

major pressure has been the demand to provide information to the HSE and the DHSS on behalf of the employer.

The influences contributing to the foundation and development of the professional SP institutions has been found to be a mixture of charismatic opportunism, the need of isolated individuals to form groups, obtain and exchange information, for protection, a wish to advance the occupation and take advantage of a perceived opportunity to make money.

According to IOSH respondents, the major obstacles to the development of the SP occupation were found to include: those concerned with self-interest or self-advancement; those groups who fear that part of their own occupation may be subsumed in or taken over by the members of the occupation of SP; an inability or reluctance of members to become involved in the process of occupational development.

* * * * *

'Would fewer be alive and well today if nothing had changed? What has changed in fifteen years - or fifty, for that matter? What will the future bring? Everyone has an opinion, but rarely the opportunity to set it down.'

Holt (1987)

CHAPTER 7 STRATEGIES FOR THE FUTURE OF THE OCCUPATION AT LOCAL AND NATIONAL LEVEL

7.1 Introduction

This chapter proposes strategies for the future of the occupation and for the individual SP. Since the respondents were principally from IOSH, particular emphasis is placed on IOSH and the IOSH membership.

The chapter is divided into three main sections: the key elements in safety practitioner occupation, role and professionalization (Section 7.3); legislation and its implications for the future of the occupation of SP (Section 7.4); and strategies for the future, the importance of research (Section 7.5).

The discussion separates the local from the national level. However, in many cases the separation is made as an aid to discussion, rather than in reality. For example, it is extremely difficult to actually separate legislation into national and local

levels, when nationally decided legislation affects events at workplace level - and quite possibly it was pressure from local level that identified the need for national government to take legislative action. Indeed, the relationship between those engaged in any aspect of OHS is symbiotic - reflected in analysis and discussion.

7.2 Problems in analysis and description

The introduction shows how, when discussing legislation, the professional associations and the individual SP, the analysis and discussion cannot always be neatly categorised into separate boxes of 'national' and 'local' level. In OHS there inevitably is an interaction between all those areas. This is because it is very difficult and at times impossible to separate OHS activities at local and national level and their implications or influence on the occupation and the role of individual SPs in the workplace.

For example, the consequences of a national decision to implement OHS or Social Security Industrial Injury legislation directly affect the workplace, subject to variations in employer, manager and particularly HSE or Factory Inspectorate (FI) activity at local level (cf Section 6.2.6). Indeed, the decision to enact legislation or to intensify or relax enforcement of a particular section of an Act, is sometimes a consequence of pressure from professional associations, generated in the first instance by their membership.

An example of this is seen in the way pressure from the small business sector, largely through their employers associations, successfully caused the government to establish an enquiry;

'... into the load imposed by health and safety legislation on small firms, and the question of exempting them from some of its so called burdens. Yet these are the firms in which accident and disease rates tend to be the highest, because safety rules are not followed'.

(Hale, 1987)

If the enquiry decides to relax the regulations, then the occupation could be concerned with two different levels of legislation (cf Section 5.4). This is relevant, for while it was found that nationally the demand was for an occupation to fulfil certain duties, often the consequence of pressures from legislation, locally the SP role was actually determined by individual employers (cf Ch.s 4 and 5; Section 7.4). At national level the influences on the occupation and the SP role were found to be far more complex (cf Ch.'s 4, 5 and 6).

Duties carried out by SPs were found to vary widely from workplace to workplace, depending partly on the industry, task and legislation but most of all, employers' perceived requirements (cf Section 6.2; Dawson et al., 1984; CBI, 1980; Robens, 1972a; Shipp et al., 1972a; Woodward, 1965). Moreover, there were found to be two other powerful influencing variables on the role, function and performance of the SP.

First, since employer perceived requirements vary within industry, let alone across industries, the dissimilarities in SP role, function and responsibilities are invariably compounded. Second, the dissimilarities of management style led to different concepts of SP role, even within companies in the same group or industry (cf Ch. 6, Sections 5.3, 5.4 and 7.3; Dawson et al., 1984; Handy, 1981; Drucker, 1980; Woodward, 1970, 1965; Shipp et al., 1965a).

A visible indicator of the wide range of dissimilarities in SP role, function and responsibility, and perception of SP role by employers and managers, was the wide range of job-titles found during the study (cf Section 6.2.2; Booth, 1987; Terry, 1972). Similarly, the findings of this study support those of Shipp et al. (1965a). In their review of SPs in the steel industry, Shipp et al. noted that differences between SP role were partly due to differences in the attitude of managers and their perception of OHS - even when steelworks of a similar size (by number of employees) were engaged in similar manufacturing processes - because it was management who controlled the role of the SP (cf Section 5.3, 6.3).

The consequence was a failure to be able to identify the or even a role of the SP that was universally applicable. Nevertheless, there

were found to be several areas of activity, knowledge and skill common to all SPs. These included information gatherer and disseminator, advisor and the very important role of 'gatekeeper' to other OHS specialists and services - a role never identified in specific terms by the IOSH respondents - all based on the academic and technical knowledge and skills shown in Figure 7 (i) (cf Section 6.2.5 and 8.2). However, this failure to identify a nationally applicable specific role for the SP is not unusual, many other authorities have found the same problem (e.g. HSE, 1976; Shipp et al., 1965a; Harper, 1980).

There has been in the study some discussion on the merits (and little on the demerits) of the occupation becoming a profession (cf Atherley and Hale, 1976). Section 6.4.6 introduced the question of why the occupation of SP should be recognised as a profession and provided IOSH respondents' reactions. The principal reasons or advantages, according to the respondents, were improved status and salary. The concluding discussion in that section referred to inferential evidence from a small sample ($n = 30$) and other sources, showing that many members consider that they are a profession, therefore they considered the process of professionalization unnecessary. Some IOSH members questioned the need and motives of the professional SP associations in promoting the concept of professionalization of the occupation (cf Section 7.3).

By reference to IOSH respondents' comments, the motives often ascribed to RoSPA and the BSC in the drive for professionalization of the occupation were 'business opportunism'. The IOSH respondents' own institution received limited criticism for its lack of business acumen, but was generally praised for its sincere commitment to furthering both OHS and the occupation (Section 6.4.7). This perception of IOSH possibly reflected respondents' own attitudes, for almost without exception IOSH respondents expressed (and during periods of personal observation displayed) their commitment to the improvement of standards of OHS and IOSH.

Several respondents reported they had found that the principal and most successful motivating force on management leading to an improvement in OHS standards in the workplace unquestionably was

OHS legislation (cf Ch. 5). The inferential evidence from this study suggests that the principal reason why the occupation was formed and SPs employed was due to legislation (cf Section 6.2.4 and 6.2.5). Public opinion and outcry, often excited following disasters, sometimes played a significant role (Cf Section 6.2.4; Hale [1987]). However, it was found that the SP was not usually appointed as a direct consequence of OHS legislation, but that there were other, often very extensive (*unacknowledged*) demands placed upon the employer for information from Social Security legislation (cf Section 6.2.6; Atkinson, 1936).

7.3 Safety practitioner occupation, role and professionalization

7.3.1 Introduction

The generally accepted most promising route for SP role and occupational development is to increase their advisory, problem solving, change agent and information seeking and processing components of role (Dawson et al., 1984; HSE, 1976; Hale, 1976; Atherley, 1975; Atherley and Hale, 1975; Shipp et al., 1965a).

However, the economic and political climate has an influence on role development and future. These influences find expression within organizations and the attitude of employers, making a contribution, in Dawson et al.'s (1984) phraseology, to the 'variety of individual and organizational factors which can either block or facilitate' role development (cf Chapter 6 and Section 7.2; Hale, 1987).

The professionalization of the occupation has been seen by many of the authorities cited in this study as an important factor in determining the future, not merely for the occupation but also for OHS. However, a debate on the professionalization of the occupation cannot be conducted without considering all the factors identified in the commencing sections of this chapter and is a further demonstration of the difficulty in separating the local level from the national.

One important component in the process of professionalization is the credibility of the SP in the workplace, who represents to members of the organization, the image of the occupation and their professional ability. Atherley (1975) provided a synopsis of the links between professionalism and credibility at the commencement of his paper, *Educational and Professional needs in Occupational Health and Safety* declaring;

'The quality of advice given to management by Safety and Health Specialists settles the future credibility of safety and health as a profession. The right education plus professionalism are needed to secure the necessary expertise.'

Atherley (1975)

The link between credibility and the acceptability of advice having been given due importance by Atherley, he reviews Ackerman's (1973) report of a 'study of how American companies responded to social demands, including those of occupational health and safety'. Section 5.3 provided several references and discussion on Ackerman's contribution, during which considerable emphasis was placed on the change agent and co-ordinating components of SP role.

Atherley (1975) continued the discussion by introducing the concept of *three* forms of profession and professionalism. These were identified by Atherley as *professional*, *florid professional* and *vocational professional*.

The first, *professional*, he states is widely considered to be good and a desirable objective for many occupations, citing Wilensky (1964) as a prime source. The second, *florid professionalism*, Atherley declares to be a combination of the 'not so good aspects of professionalism', including:

- the 'taste for medieval clothing and archaic ritual',
- the distortion of 'the service ideal into restrictive practices - resulting in the client paying heavily for the service',

- 'sometimes there is exclusion of liability for failure',
- 'Restriction of entry is practiced' to such an extent that 'sometimes the jurisdiction is extended to the point where employment opportunities are affected for people innocent of formal connection with the profession.'

Atherley then addresses the concept of the *vocational profession* which he declared;

' ... enhances the useful and outgoing aspects of professionalism, and is less restrictive in outlook (than certain other forms of professionalism).'

ibid

Atherley provides examples of vocational professionals, including teachers *in higher education*, government health and safety inspectors and research workers. He summarises the conditions which must be satisfied by an occupation to become a 'vocational profession' as follows;

In this form (of professionalism) the service ideal is well developed and there is concern for the competence of members. But the exclusive jurisdiction is not stressed too heavily and there is no hectoring of other occupational groups.'

ibid

According to the membership, by reference to their comments throughout this study, IOSH may be considered to have moved a considerable distance towards the conditions identified by Atherley. The inferential evidence suggests that IOSH (and its membership) have already satisfied the prime conditions identified by Atherley, including;

1. The service ideal which is well developed among SPs and IOSH.

Reference to Chapters 4, 5 and Section 6.4.7 offers confirmatory evidence on the highly developed service ideal of IOSH respondents and of IOSH itself.

2. There is concern within IOSH for the competence of its members.

The establishment of NEBOSH under the aegis of IOSH is demonstrably successfully raising the competence of IOSH membership. The proposed (1987) IOSH corporate plan is a further stage in the move towards professionalization of the IOSH membership (cf Ch.s 4 and 5).

3. IOSH does not stress exclusive jurisdiction in or over OHS.

It has been demonstrated that by comparison with those groups which attempt to restrain, constrain or hector other OHS occupations, IOSH does not. An example is the suggestion to the Robens Committee by IOSH, that managers should be licensed in safety (Robens 1972b).

The tone and content of the whole of the IOSH submission to Robens starkly contrasts with the statements made by many other institutions to the Committee (cf Section 6.4.6; Robens, 1972b). It confirmed that IOSH has a long-standing record as a professional body more concerned with OHS than with occupational advancement for its members. It is possible that if the concept was introduced, licensed managers could be appointed as part-time SPs and this may restrict employment opportunity to members of IOSH.

It is possibly true that some licensed managers would apply for IOSH membership and that IOSH might benefit in numbers of membership terms, but their acceptance would depend on licence and membership criteria. However, in view of the degree of uncertainty in losses and gains, in respect of SP credibility, it is offered as evidence of the concern of IOSH for OHS and an institution less concerned with exclusive jurisdiction in or over OHS.

4. IOSH does not hector other occupational groups and takes account of the need for a real team effort in OHS.

The statement following item (3) by IOSH may also be included in connection with item (4) as an example of showing that IOSH does not hector other occupational groups and takes account of the need for team effort. There is also the co-operative ventures of IOSH with the British Occupational Hygiene Society and the Institution of

Chemical Engineers, all of which combine to offer further evidence of IOSH's desire to ensure OHS is a team effort.

Therefore IOSH and its membership appear to satisfy the conditions of Atherley's concept of vocational professionalism. A concept propounded in 1975 but one which has seldom been discussed. A possible reason for the lack of debate found in source material on the subject of SP may be the manner in which Atherley developed the concept.

Atherley separated plant safety advisers from safety and health specialists, describing the former as a *practitioner-tactician* and the latter as a *theorist-strategist*. Atherley provided examples of each, first describing his assessment of the safety adviser;

' ... the safety adviser whose work is largely within one plant ... He is an expert on tactics, especially on tactics for his own plant. He understands the idiosyncracies of the management, the workers, and the plant. He can foresee the local difficulties which are likely to block the incorporation of safety into routine operating procedures.'

ibid

The reference to 'local difficulties which are likely to block the incorporation of safety into routine operating procedures' was not expanded by Atherley. However, the subject has been a continual theme of IOSH respondents' comments in this study, and received extensive discussion by Dawson et al. (1984). In the majority of cases it was related to the management attitudes and a direct consequence of what was seen as the conflicting demands of production and safety. It is worth mentioning that the CBI spokesperson did *not* consider that either managerial or employer attitude or activity 'would interfere with reasonable OHS requirements' - no definition was provided for the term 'reasonable' (CBI, 1980).

Atherley then evaluated the role of the health and safety specialist, declaring;

(The) health and safety specialist(s) ... are concerned essentially with strategic matters (and) are often multi-purpose change agents ... depending heavily on theoretical knowledge.

ibid

On the basis of considering the report of a study by Luecke (1973) into professionals, who were 'ministers of religion in the U.S.A.' Atherley concluded that;

'... vocational professionalism is relatively unimportant to theorist-strategists. (health and safety specialists)'

ibid

A contributing factor to Atherley's evaluation was his view of recognised safety and health *specialist*, who he considered were members of 'several learned societies and professional associations.' Atherley declared;

'The multiple membership as well as the diversity of backgrounds of the present generation of health and safety specialists suggests that a claim to exclusive jurisdiction by any one professional organization in the health and safety field is unlikely to meet with much success.'

ibid

The question of multiple membership appeared relevant, but possibly mistaken. Aside from the findings from this study and that by Waterhouse et al. (1984), no studies were found which identified the level of multiple membership of OHS specialists in other professional bodies.

In this study, 15% of respondents recorded membership of more than one 'professional' association, the Waterhouse et al. (1984) survey, found that 19% of their (IOSH) respondents held membership of more than one OHS professional institution. However, this study requested the respondent to 'write-in' the title of their self-defined 'OHS professional association'. It was found that what the

respondent considered to be a professional OHS association included several that would not normally be considered to have a *prime* involvement in OHS (i.e., trades unions)

Possibly even more pertinently, no study was found which investigated the consequences of multiple membership of OHS professional associations on the behaviour and attitude of the individual concerned, i.e., which assumed priority or held most influence (cf Section 6.4.8).

It must be stated that although Atherley did not provide any proof or examples in support of his observations concerning multiple membership, or in respect of his analysis concerning the U.K. safety adviser and 'health and safety specialist', he did declare that he could 'only draw on his personal knowledge of the situation', concluding;

'I should emphasise the non-relation between theorist-strategists and vocational professionalization is speculation on my part and requires verification by research.'

ibid

The inferential findings of this study suggest that SPs who are current members of IOSH are more generally acting as both theorist-strategists and practitioner-tacticians. Findings from this study further suggest that the connection with vocational professionalism as detailed by Atherley is very appropriate for contemporary SPs.

This is because increasingly the theory-strategist and practitioner-tacticians components have merged, making the distinction unnecessary rather than invalid (cf Hale, 1976). In contrast, the OHS specialist's role has stayed as it was at the time of Atherley's paper, and his comments regarding the specialist therefore remain valid.

In summary, since the component of role identified by Atherley as missing from the OHS specialists activities (practitioner-tactician) is combined with theory-strategist in the case of the contemporary SP, the reference to Atherley's prime definition of vocational

professional shows that the concept of vocational professional has become very useful when considering the professionalization of the occupation of SP. Atherley's comment that his speculation was open to change, subject to the findings from future research has been justified.

7.3.3 Obstacles to professionalization of the occupation of SP

The remainder of the discussion in this section makes extensive reference to the seminal paper by Atherley and Hale (1975), *Prerequisites for a profession in occupational safety and hygiene*. It is useful to review the background to the paper and of those who produced it. This is necessary because in social science, as in history, it is essential to know provenance of papers, to assess its value and credibility and often this establishes the *reason* why it was written (Marwick, 1982; Bailey, 1978; Bogdan and Taylor, 1975).

At the time of publication Atherley and Hale were located in the (then) Department of Safety and Hygiene, Professor Atherley was Head of Department and Hale, at the time, lecturer. The Department reflected the multi-disciplinary nature of the OHS, a feature of the occupation of SP. This multi-disciplinary content of OHS creates confusion in the minds of those who have little knowledge or understanding of the discipline. Indeed, according to Hale (1987) the Department was 'destroyed by higher education cuts and the counter attack of the single discipline, fragmented view of the subject'.

Dr Atherley moved on and is currently (1987) First President and Chief Executive Officer of the Canadian Centre for Occupational Health and Safety, Toronto; Dr Hale is now Professor of General Safety Science at Delft University of Technology, Netherlands.

Atherley and Hale's seminal paper reflects their professional knowledge and understanding of OHS. The subject of their paper remains relevant and applicable even twelve years after its publication. Their discussion serves as a framework for this

section, therefore it is necessary to provide extensive quotations from the text of Atherley and Hale's paper.

7.3.4 Prerequisites for professionalization of the occupation of SP

In an introduction to the paper which underlined an aspect of the key importance of OHS legislation to the occupation of SP less often debated, Atherley and Hale identified what they considered to be a part of the HASAWA which, if applied, could aid in the professionalization of the SP. Within the Act;

'Section 19 provides for the appointment of government health and safety inspectors from persons *having suitable qualifications*, but there is no specific provision for other skilled and knowledgeable personnel outside government service. Neither are there specific provisions which would automatically cause the development of a professional occupation for those people employed in health and safety outside government. But there are enablements which could be used to achieve advancement if (a) the legislators could be persuaded that a professional occupation is desirable and (b) a suitable scheme could be devised.'

Atherley and Hale (1975)

The paper by Atherley and Hale presented 'an analysis of (the) two pre-requisites.' (The great majority of the following citations were from Atherley and Hale (1975), therefore *unless otherwise noted*, no further reference will be cited in this section). They considered 'the difference between a professional and a non-professional occupation', stating that they had been 'strongly influenced' by the work of Johnson (1972) Millerson (1964) and Wilensky (1964).

However, it is useful to note that Atherley and Hale made no mention of the concept of vocational professional, suggesting that Atherley's (1975) paper was published after the paper written by Atherley and Hale. Atherley and Hale presented their concept of a professional occupation as one;

'... where there is a service of some kind based on knowledge and given to a client, and control is exercised over the occupation.'

Atherley and Hale continued;

'In Johnson's analysis the essential factor is occupational control. In his words "A profession is not ... an occupation but a means of controlling an occupation."'

Atherley and Hale compiled a list of 29 traits which they found common to the views of the professional associations and their members as to what constituted a profession. These were summarised into six groups;

1. Power
2. Competence
3. Moral precepts
4. Voice
5. Advancement of vocation
6. Services to individual practitioner

It is pertinent to note that it is difficult to conceive of a situation where a profession that had power would not also have a voice. However, they continued by citing from Millerson's (1964) review of;

'twenty one writers in sociology who had offered descriptions of what they regarded as the key elements of profession ... (Millerson) had assembled twenty three elements.'

Atherley and Hale checked those twenty three elements against the 29 traits they had listed and found;

'... the agreement is good enough for us to conclude that our six groups are a reasonable summarization of the characteristics widely attributed to professional associations.'

It was concluded by Atherley and Hale that;

'the aims and traits set out in the first three groups are ones which are attractive not only to practitioners but to their clients. *They are therefore the ones which should be emphasised by any aspiring profession.* We suggest that the other three groups of traits are not so attractive and that any bodies of people who are - or seen to be - more concerned with their attainment than

with groups 1-3. may jeopardise their chances of achieving recognition.'

(Emphasis added)

The traits and factors included by Atherley and Hale in groups 1-3 were

1. Power - 'includes the traits which imply power over an occupational group. Registration ... can be a very important power over an occupational group.
2. Competence - combines all the traits which are related to ability to perform the job represented by the occupation.
3. Moral precepts - represents those general traits which imply moral standards for individual practitioners and the profession.'

Following Johnson, Atherley and Hale commented;

'The first three trait groups represent a range of control over an occupation: power and competence contain the key institutionalised controls for a professional occupation; moral precepts are informal means of control over the way in which an occupation is conducted. They rely largely on the sanction of disapproval by other members of the occupation for their imposition, unless they are backed up by a formal code of conduct with the sanction of expulsion from the group for its breach.'

The remaining three groups, 'voice, advancement of vocation and services to individual practitioners (Groups 4-6)' were identified by Atherley and Hale as sharing;

'... in common their benefits to the occupation and its growth and importance as an entity, and to its practitioners.'

Atherley and Hale observe that Millerson saw the distinction between groups 1-3 and 4-6 in that the former were aims of Qualifying Associations and the latter those of Occupational Associations (i.e. British Medical Association). They then developed the discussion on the 'question of control over an occupation ... the central issue in the development of a professional association. Atherley and Hale referred to Johnson's (1972) three types of occupational control;

Collegiate control: 'exemplified by the emergence of autonomous occupational associations, generated from

within the occupation, for example the Inns of Court and the Institution of Civil Engineers.'

Patronage: 'the form of control where the consumer or client defines his own needs and the manner in which they are best met and imposes these on the occupation,' for example by a corporate body (accountancy) 'and the large corporate organizations.

Mediative control: is the 'situation in which the producer-client relationship is mediated by the state. ... two common factors emerge: (a) an independent statutory body which (b) holds a register of people qualified in the occupation' (e.g. Pharmacists) ... 'However, mediative control is not antagonistic towards collegiate control, indeed it may effectively be a statutory recognition of collegiate control, as in the case of the Law Society.'

Atherley and Hale offered comments on the position of the occupation of SP and the activities of the professional SP associations in relation to the types of occupational control. They stated that OHS was in the state of *patronage*, with individual firms defining;

'the job of their safety officer or hygienist and his qualifications, accountability and remuneration ... From this arises the great variety in level and type of job found in industry.'

They observed that the;

'Attempts by bodies such as the British Occupational Hygiene Society and the Institution of Industrial Safety Officers to standardise qualifications and secure recognition of firms of these as prerequisites for appointment to jobs are attempts to weaken this stranglehold of patronage and replace it with collegiate control.'

They contrasted this approach with that by the proponents of Loss Control who emphasising 'the economic aspects' of OHS are allying themselves with insurance companies and 'opening the way to the development of a profession similar to accountancy and its reliance on corporate patronage.' Comparisons can be made with Risk Management, although since it has been a relatively recent development, Atherley and Hale did not refer to it in their discussion.

They concluded that;

'Mediative control of occupational health and safety seems possible under the various enablements of the *Health and Safety at Work etc. Act*, but the question remains whether the occupation is sufficiently crucial to health and safety at work to warrant or necessitate State mediation.'

Atherley and Hale then listed Millerson's (1964) eight obstacles to professionalization. These eight 'obstacles', with one addition, are used as a framework for the following section because in discussing them the important strategies for the future of the occupation of SP are also identified. The discussion is largely concerned with the national situation, but inevitably contains reference to local pressures and activity.

7.3.5 Insufficient internal pressures to form a profession

Atherley and Hale identified internal pressures as being within the area of OHS, making reference to the formation and activities of the British Occupational Hygiene Society and the Institution of Industrial Safety Officers. However, they stated that neither body (up to 1975) 'apparently felt strong enough to press its claims in their evidence to Robens' (cf Section 6.4.6).

That situation has begun to change, *vis-a-vis* the contents of the HSE (1983) Discussion Paper *Professional training and qualifications in occupational health and safety*. If the consequence of the Discussion Document was that certain OHS qualifications were identified as being definitive, it would benefit the professional associations concerned.

Part of the problem regarding insufficient internal pressure within the discipline (OHS) for professionalization is the division and competition between the major groups in OHS (cf Figure 6 [ii]). However, the prime internal pressure within an association for professionalisation comes from its membership. By reference to the findings from the IOSH research, this is quite a serious problem which demands separate analysis and discussion. The subject is treated as a separate obstacle to professionalization in Section 7.3.16 and 7.3.17).

The prime external pressure to form a profession comes from legislation. Atherley and Hale declared that;

'In seeking to divine the attitudes of the legislators we need to look at what has been said by the Robens Committee, by the inspectorates as forerunners of the Health and Safety Executive and by the CBI and TUC as major controlling voices on the Health and Safety Commission.'

By reference to the citations by Atherley and Hale, the Robens Report was not promising for the professionalization of the occupation of SP.

'The general tenor of the Robens Committee's report (Robens 1972) is lukewarm towards the specialist health and safety adviser in industry. The subject receives scant attention in contrast to the detailed discussion on such matters such as the involvement of employees, responsibility of management, and on the framework of legislation and enforcement control.'

They found a striking contrast between the Robens Committee's high opinion of the Factory Inspector and its lukewarm view of the SP. Atherley and Hale cited from the Report the following comments concerning the Factory Inspectorate;

'The respect that the inspector commands depends ... upon technical competence'

'employers made it clear that they wanted to discuss safety problems with someone who is really familiar with the problems of their particular industry.'

The second citation referring to the employers' view of the *Factory Inspectorate* is interesting in view of the comments about SPs made by a representative of the CBI in an interview held in 1980. He declared the statements made by the CBI and the employers to Robens in 1972 were still valid in 1980. He strongly emphasised that employers must retain control and responsibility for OHS in the workplace and the appointment of SPs *to ensure the person appointed is really familiar with the problems of their particular industry*. Atherley and Hale also added emphasis to their citations, declaring (in case the reader was confused) that both of the immediate above

referred 'not to advisers employed by those industries but government inspectors.'

Similar to the findings discussed in Section 6.2.7, Atherley and Hale commented on the fact that 'the Factory Inspectorate has never provided wholehearted support to the idea of health and safety advisers.' They refer to the Department of Employment submission to Robens, which was against any statutory requirement for SPs and unimpressed with experiments in various industries, such as potteries and construction where competent safety persons have been a statutory provision for some years.

Atherley and Hale referred to the demands by employers and management for 'responsibility' for OHS in the workplace, as failing to make the crucial distinction between responsibility and duty. On the other hand, they identified the employee representatives, the TUC, as;

'... the only body which asks for anything resembling a safety profession although in their evidence the plea is embedded in the much more urgent plea for joint consultation in safety.'

Atherley and Hale stated;

'By and large the conclusion from our brief review of external pressures is depressing. No influential group appears to give priority to the development of a professional occupation based on health and safety for any occupation other than the government health and safety inspection.'

There have been some changes since Atherley and Hale wrote their conclusion, depressing for members of the occupation of SP. Through IOSH and other professional OHS associations, there has been greater representation and discussion with the HSE and other government bodies. However, the CBI and BSC representatives both stated during interviews in 1980 (the second year of the research) that 'nothing had made them change the views expressed to Robens'.

Reference to BSC advertisements and statements in Section 6.4 (and elsewhere) has indicated that there are questions concerning the priority of the BSC in OHS - business or OHS? Furthermore, despite changes in industrial technology and activity, despite

mounting evidence that managers and employers have little knowledge or understanding of OHS (nor propose to overcome those deficiencies) and irrespective of any changes in the training and education SPs, the CBI is intent to maintain the *status quo* - employer and managerial control over OHS and the selection, appointment and role of the SP in the workplace.

The evidence presented in Section 6.2.7 concerning the discussion with the senior member of the Factory Inspectorate, combined with informal comments from other senior (and junior) members of the Factory Inspectorate suggest that they are not likely to ever support the concept of a recognised SP profession. Nevertheless, the Factory Inspectors are quick to complain about the variable quality of SPs and the need for SPs to receive better training and to become better qualified.

By reference to IOSH respondents comments, the strategy for the future is for IOSH to continue in the manner which they have done for several years. However, the respondents considered that the major source of support for the professionalization of the occupation is most likely to come from OHS legislation. This is dealt with in a separate section of this chapter.

7.3.7 Underdevelopment of the subject matter and/or practical techniques

The identification and development of appropriate subject matter and the provision of training courses are very much inter-related. However, if strategies for the future include course (and subject) development leading to professionalization of the occupation, then the problem becomes multi-dimensional.

There are great problems in developing subject matter and/or practical techniques for the occupation because of the many factors mitigating against such a development. It has been found in this study that: employers have little knowledge or understanding of OHS and therefore have little interest in supporting the development of OHS subject matter and techniques beyond that which they perceive as essential or necessary (cf Section 5.4); while the Factory

Inspectorate at public level express concern that the SP is extremely variable in educational terms, historically they have provided little support to attempts by the professional OHS associations to standardise or legislate for universal SP minimum qualifications (cf Sections 6.2.7 and 7.4.3); the IOSH respondents showed a division between those who thought experience to be the prime qualification (even though many stated they would like to complete OHS courses) and those who considered formal OHS training and qualifications to be extremely important, in order to raise the status of the occupation as much as to improve their performance (cf Section 4.3 and 5.5); there are divisions concerning course content and qualifying standards considered appropriate by each of the professional OHS associations (cf Section 6.4.6 and 6.4.7); there is competition between many of the OHS occupational groups (cf Section 6.4).

Atherley (1975) and Atherley and Hale (1975) both made reference to another factor which prevented, or made difficult the development of appropriate subject matter and practical techniques. Atherley and Hale stated;

'No comprehensive study has been made of the range of work done by occupational health and safety advisers. The only information we have to go on is the description given by the various vocational groups of their members work. Moreover, the picture is confused by the number of diverse groups which lay claim to the same territory.'

Nevertheless, in 1975 Atherley and Hale provided a summary of SP role, and the technical and academic knowledge required. The findings from this study confirm that their analysis was accurate. Figure 7 (i) is an adaptation of their summary, taking account of the findings from this study (cf Ch.s 4, 5 and 6).

Each year since 1975 there has been a steady increase in the amount of research conducted into the role, function and responsibilities of SPs (cf Ch. 1 and bibliography). However, reference to the research studies and literature indicates that researchers have problems in obtaining details of studies completed or the wide range of research conducted - even in the age of computerised literature search.

FIGURE 7 (1) ROLE OF THE SP AND AREAS OF KNOWLEDGE DEMANDED TO
ENSURE PROFESSIONAL COMPETENCE IN THAT ROLE

ROLE OF THE SP	TECHNICAL KNOWLEDGE	ACADEMIC KNOWLEDGE
Specify degree and of risk	Measurement of danger	Statistics : Mathematics
Understand agent-response relations	Human safety	Chemistry
	Occupational hygiene	Physics
Specific control technology	Safety engineering	Engineering : Biology
		Law
Specify obligations, codes, limits and standards	Health and safety law	Accountancy
Change agent		Economics
Problem solver	Individual behaviour	Psychology
	Organizational behaviour	Sociology : Management
Stimulate compliance	Successful and unsuccessful strategies	Comparative studies
Information processor		
Benefit from previous experience		History

Source: Adapted from Atherley and Hale (1975)

In the case of this (1979-1987) research project a computer search conducted in 1986 found no mention of many of the important studies receiving reference in this work (e.g. Shipp et al., 1965a; LGTB survey, 1977). However, inspection of the report of the activities of the Local Government Training Board (LGTB) working party in Section 6.3. shows considerable similarities between the findings of the LGTB, presented in summary form in Figures 6 (v) (knowledge requirements for local government (LG) SPs) and 6 (vi) (skill requirements for LG SPs) and those presented in Figure 7 (i) (from Atherley and Hale (1975) - made even more significant by the statement made by several members of the LGTB working party that they were not aware of Atherley and Hale's 1975 paper.

Indeed, information concerning studies on the role of SP appear to depend on the group with whom the researcher associates or are discovered almost by accident (a chance lead from a chance statement).

An example is found in the work of Beaumont et al. (1982) who remarked on 'the absence of any comparable studies'. Even allowing for the time factor between composing his article and its publication, there actually were several studies available which would have allowed some comparisons to be made (e.g., Shipp et al., 1965a). Further support for this speculation may be found by the fact that all (bar one) references in Beaumont et al.'s article were restricted to papers by the author or official publications. The exception referred to power relations, a wide ranging subject, where Beaumont referred to a discussion on power in personnel management by Legge (1978), instead of SP role power relations (cf Dawson et al., 1984).

Compared with the situation in 1975 or 1982, in 1987 there is much more research evidence and findings concerning the role of the SP, but they are often difficult to find and sometimes unacceptable to those who have power - power to disseminate the findings and contribute to the development of the subject matter or practical techniques.

However, as evidenced from the findings of the research from this and many studies, OHS and the occupation of SP is a

multidisciplinary area of activity. This creates problems in the minds of those who are tuned in to the single discipline approach and understanding. Hale discussed this problem in 1985, declaring;

'There is a coherent discipline of health and safety which emerges from the analysis of existing European training and it is part of the greater discipline of the interaction of people, technology and society ... the sooner we can bend our collective mind to protecting that discipline, and those who are injured for lack of its application, against the real enemy: those who pretend to be able to do our multi-discipline work from within any one of the traditional single disciplines.'

Hale (1985)

The problem is that those who see the occupation of the SP as based upon a single discipline foundation are invariably those who possess very limited knowledge and no understanding of the occupation, but includes those who have influence in establishing or including OHS on single discipline courses, or have responsibility for the selection and appointment of SPs. It is often these persons who 'tack-on' an input on the role of the SP, or claim to include OHS training on engineering, chemistry or biology courses (for example) and dismiss the discipline in two or three sessions at centres of higher education (cf Bridden, 1981).

The consequences of attempting to restrict OHS to a single discipline, or a small input on a course with the input supplied and designed by non-OHS personnel - probably persons involved with the discipline, i.e. chemists teaching chemical safety, instead of OHS specialists who hold a chemistry qualification and have had industrial experience - inevitably lead to accidents. The roll call is endless, most recently Flixborough, Chernobyl, Seveso and Bhopal. Each of these could have been prevented if a safety specialist had been involved, or the advice of safety personnel heeded.

However, the consequences of single discipline blindness are not restricted to industry. The 'accidental' release of bacteria from a laboratory at Birmingham University and the closing of the Department at Aston can be seen as further symptoms of the ignorance of the multi-discipline content of OHS.

From a narrow single discipline perspective, the subject matter and application of OHS is largely a matter of 'common sense' (cf Section 7.3.3). The crisis in lack of understanding and knowledge of OHS and the need for expert advice, which has to be acted upon, is partly due to poor communication of what is known about OHS and an understanding of the role of the SP (cf Section 7.5).

The conclusion must be that the conduct of research or the existence of research reports, has no value for developing subject matter or practical techniques unless (1) the research findings are valid and (2) they are known to exist (3) there are applied or acted upon. However, a compounding problem is that the findings may be valid, but unacceptable to those who read them and who have the power to apply them.

The strategy for the future must be for the professional OHS associations to obtain details of research projects and published authoritative papers on the role of the SP and OHS generally. Following which, details or relevant papers should be published and circulated to interested or involved parties on a regular basis. To complete that task successfully means that the professional associations must create and maintain a research department or at least, employ a professional researcher (cf Section 6.5 and Appendix H).

A further strategy is for IOSH to ensure that syllabi and teaching of OHS and SP courses in other countries are monitored to see if anything can be learnt from them and applied in the U.K., bearing in mind the possibility of payment of royalties (cf Appendix H). This system has been extensively used by the Safety Organization of the Philippines (SOPH), the Philippine equivalent of IOSH, and has proved most successful in contributing to the raising of standards of OHS education for its wholly graduate membership, most of whom are engineers.

It has been well established, by reference to numerous sources, that the quality of service provided by members of the occupation of SP varies widely. A now classic quotation from the Robens Committee receives mention in many studies, this will prove no exception. Robens stated in the report the Committee had;

' ... received a lot of evidence about safety officers ... Undoubtedly they vary widely in qualifications, capacity and status.'

Robens Report (1972a)

The findings from this study confirm that the situation has not changed. However, the conclusion of the majority of studies follows the pattern of Robens - the reasons for this variation in quality of service are generally attributed to differences in qualifications, capacity and status.

The validity of the general conclusion is confirmed by this study, i.e., qualifications, capacity and status do vary widely. However, the prime reason for the variation in quality of service is less due to these factors (however important they are) than to the inefficiency, inadequacy or failure of the management and the employer to understand the demands of OHS and therefore to select, appoint and to often define the SP role for persons who may be inadequately trained or not qualified for either the position and the organization (cf Hale, 1985; Dawson et al., 1984; Handy, 1981; Terry, 1977; Woodward, 1965, 1970).

It is concluded that although assuming control and responsibility for OHS in the organization, many employers and managers blame others for any inadequacy in OHS provision or variation in quality of service.

This is a well known phenomenon and is often not done with intent (Hale, 1985; CBI, 1980; Nichols, 1975; Braverman, 1974; Johnson, 1972). The possibility of resolving the key problem, variations in quality of service provided primarily due to the variations in quality and demands of employer and managers, is very difficult.

Strategies for the future must include two elements. The professional OHS associations should continue their efforts (1) to pressurise for the application of existing legislation to define the competence of those appointed as OHS specialists, including SPs and (2) in the long term, despite the objections of the CBI and various government bodies, there should be a greater number of industries which are compelled to appoint OHS specialists (reference to the Annual Report of the Chief Inspector of Factories identifies the industries most in need of OHS specialists).

However, to ensure the application and success of these strategies it will be necessary to (i) stop or reduce the competition and disagreements between the professional OHS associations and in the case of the subject of this study (ii) overcome the divisions within the membership of IOSH arising from the variations in age and qualifications (cf Ch.s 4, 5 and 6; Appendices F, G and H).

7.3.9 Great variations in training received by practitioners and level of training

Similar evidence and comments to those provided in the preceeding section apply in this section. Confirmation of the variations in training and levels of training for SPs, often within and between the different professional OHS institutions, is found throughout this study. The range of options available to IOSH (the principal concern of this study) is covered in some detail in Appendix H.

The salient points which must receive consideration include, the differing philosophies on training and recruitment of members by the two professional SP institutions and the demands of employers in the selection and appointment of SPs; the legislative demands; the degree of pressure from the membership for training and education; the power of the educational institutions to dismiss or reject any criticism of teaching style or ability.

Taking the activities of NEBOSH as an example, the Board only controls examinations. All efforts of NEBOSH to control courses have been frustrated by a variety of factors, not the least of which was the strong resistance by representatives of many

institutions of learning, who are represented on the Board (personal involvement as a Board member and observation, supported by comments made in confidence).

Strategies for the future which would reduce the variations and levels of training for SPs include: the application of existing OHS legislation concerning 'competence' and the introduction of new legislation (cf Section 7.4 and 8.3); a registration procedure for approved centres of OHS education and courses (cf Appendix H); a registration procedure for recognised qualifications (cf Appendix F and H; application of the findings from research into the training needs of the SP (cf Appendix H).

7.3.10 Great variations in type of employment

The initial problem in considering this obstacle to professionalization of the occupation of SP is in the definition of the term 'type of employment.' Among the dictionary definitions of the term 'type' is *class or group sharing certain characteristics*. On that basis, the occupation of SP has few problems, since the evidence from the research conducted for this study confirms that IOSH members share the same broad range of knowledge and disciplines, and if allowed to by their employers, apply this common knowledge and disciplines in the conduct of SP role (cf Figure 7 [1]).

Therefore despite the variety in functions, work locations, industries and differing levels or standards of education, training and qualifications, the 'variations in type of employment' may not be considered to be an obstacle to the professionalization of the occupation of SP. But to offer that as a final comment is too simplistic.

It was found during the research for this study that variations in type of employment can create a hierarchy in status terms within IOSH (cf Section 6.4.8). At several Branch Meetings there appeared to be what can best be described as a 'pecking order' with employer status being one of the factors giving status to the member/employee. For example, it was observed that members

employed in certain industries shared a common style of dress, patterns of speech and *demeanor* that appeared to influence their standing in meetings and subsequently the weight given to their contribution in debate. No research studies into the role of the SP have been found which identify or discuss this particular aspect of membership behaviour. However, the evidence obtained by observation concerning the 'pecking order' between IOSH members was beyond mere speculation. The evidence suggested that further research would be useful, as it could be symptomatic of a perception of role, status of self and others, which ultimately affects the future of the Institution and occupation (Bogdan and Taylor, 1975).

The strategy for the future demands that research be conducted in the areas noted in this section, particularly on the possible influence place of employment (and the other factors noted) has on the social relations of IOSH members - however, there can be a inter-relationship between this section and that following.

7.3.11 Great variations in social origins

The importance of social origins (and incidentally, heredity) in influencing behaviour and interaction between individuals has been the subject of authoritative research and comments (e.g. Mead, 1934 (socialization); Pearson, 1969 (IQ and social class); Scarr, 1969 (heredity)). Similarly, the previous occupation or occupational career and its consequences in interaction has been the subject of research (e.g. Hirschman, 1970).

In contrast, the research evidence concerning the effect social origins may have on the professionalization of the occupation SP has been virtually non-existent. The largely inferential or anecdotal evidence uncovered during the research for this project suggests that it is an area that would reward further research (cf Ch.s 5 and 6). An associated area to social origins which has received little attention in the past, but which was investigated and discussed in this report and recently researched further, is the 'previous occupation of the SP' and the manner in which this affects role performance (cf Ch.s 4, 5 and 6; Dawson et al., 1984). The

conclusion is that the social origins of the SP, including social class and previous occupation, will have implications for those concerned with the professionalization of the occupation (Fox, 1980).

The strategy for the future for those concerned with the professionalization of the occupation must include extensive further research into the possible effects of social origins on (1) the role performance of the SP and (2) perception of the professionalization process. If research into these areas is not conducted, the consequences would include a failure of the professional associations to maximise their efforts, towards involving all SPs in the process and creating a unity of purpose (a unity which was not found to be universal during the research for this study).

7.3.12 Rivalry between occupations and organizations

There has been extensive research and discussion on the rivalry between occupations and organizations, some of which were concerned with those involved in OHS (e.g. Hale, 1987; Hale, 1985; Elliott, 1972; Millerson, 1964). The findings of this research confirmed that these rivalries existed, but that they were not a constant.

It was found that in the workplace the extent to which rivalry was perceived to affect role performance depended on the age, education or former occupation of the respondent (cf Sections 6.2.7, 6.2.8, 6.4.6 and 7 'x' above). At national level rivalry was entrenched between the traditional professional or occupational groupings (cf Hale, 1987; 1985). Competition and rivalry was found to be extensive between the professional OHS organizations concerned with SPs, at times even threatening to spill into the law courts (cf Personal communication [RoSPA v BSC; BSC v IOSH]; Robens, 1972a). Wherever the rivalry was considered by respondents to exist or actually does exist, its ultimate effect is a diminution of OHS services and standards which often depend on cooperation between members of a variety of OHS occupations and professions (cf Hale 1985; Atherley 1975; Robens, 1972a)

Atherley and Hale (1975) concluded their entry on this subject by declaring;

'We suggest that failure to resolve these rivalries will result in a lessening of chances of achieving a recognised professional status for any of the would be professional groupings.'

Atherley and Hale (1975)

Future strategies to overcome the problem of rivalry between different professions or occupations attempting to become professions, to improve their position in what they see as an occupational hierarchy or to enter into new territory, are difficult to prescribe. The fact that this rivalry is a worldwide phenomenon in OHS indicates the depth of the problem, but this recognition offers no solution (cf Chaabane, 1985; Singleton, 1983). The application of existing legislation, to establish occupational competence concerning the appointment of specialists would assist in resolving the immediate problem by outside mediation (cf Section 7.3.4). It is difficult to be other than pessimistic concerning the long term prognosis, rivalry between the OHS occupations and organizations is always likely to exist.

7.3.13 Small number of practitioners and geographic isolation

It is interesting and useful to speculate at the commencement of this section on how 'small' is 'small'? The actual number of SPs employed in the U.K. remains an unknown (cf Section 1.3 and 2.5). However, size by reference to numbers of practitioners or to members of IOSH does not necessarily reflect on the power and influence of that organization in its field of expertise. For example, Chief Constables have their own association, their numbers are few - their power and influence is great; the TUC has around 9 million members (1987), but their power at national and local level has diminished for a variety of reasons, including legislative changes, since the 1960s (cf Grayham and Wyer, 1985; Grayham, 1984).

The SP's geographic isolation and isolation within some organizations can have the effect of encouraging professionalization. In an attempt to find solace and to exchange views, solutions to common problems and to find support, SPs were found to seek out

their own kind, either within the professional associations or simply through communicating with each other informally (cf Ch.s 4 and 5).

The strategies for the future for IOSH and other professional associations who wish to professionalize their occupation must be to maintain excellent lines of *two-way* communication with their members (cf Section 6.4 and Appendix H).

7.3.14 Undeveloped governmental, industrial and commercial structure

Atherley and Hale (1975) made one short statement concerning this section. They declared;

'Millerson suggests that only complex employment structures, technologies or organizations are favourable to professionalization. We suggest the field of occupational health and safety amply satisfies these criteria.'

Atherley and Hale (1975)

There was confirmation of Millerson's diagnosis and some inferential evidence found in this study which identified a problem for those who would professionalize the occupation. This was in the link between the differing views of the SP as a career by respondents depending on age, education and size of undertaking (cf Ch.s 4 and 5).

Those respondents who saw the occupation of SP as a career, were more inclined to understand the meaning of professionalization. Conversely, those who worked in small companies and who were over 50 years of age, with low standards of education and few qualifications, were often more concerned with survival than with professionalization (cf Section 5.5).

Therefore the fact that many 'complex employment structures, technologies or organizations' exist in the U.K. - which Millerson suggested as favourable to professionalization - may be countered by other, less favourable influencing variables, even though the extent

to which they interfere with professionalization is an unknown (cf Dawson et al., 1984). The inferential evidence suggests that further research would be useful in this area.

7.3.15 Absence of enterprising individuals

Atherley and Hale (1975) declared under this heading, 'We do not presume to judge on this issue.' Their statement was understandable, in view of their position at the time (cf Section 7.3.3). Nevertheless, the evidence suggests that a key element in the professionalization of an occupation is the presence of enterprising individuals. It is useful to review the characteristics, strengths and weaknesses of Atherley and Hale, particularly since their work has been claimed in this study to be of seminal importance in OHS (cf Section 7.3.3). The comments are derived from those who have worked with Atherley and Hale and although subjective, are useful to describe the importance of enterprising individuals in the professionalization of the occupation.

The work of Atherley in the field of OHS has been exemplary and he exhibited all the traits of an enterprising individual. It was his drive and initiative that was largely responsible for the establishment of the Department of Safety and Hygiene at Aston University. By reference to those who knew and worked with him at Aston, Atherley exhibited the strengths and weaknesses of many enterprising individuals, invariably respected for his enterprise, but those who worked with him reported extreme feelings towards him. However, most of all he was a leader who had had the ability to select and appoint staff who worked with him to ensure success - but they had to acknowledge Atherley's leadership.

Hale is an entirely different type of enterprising individual, who matured considerably since Atherley left Aston. Unlike Atherley, he is not considered abrasive by those he works with, indeed he is extremely modest. Again, unlike Atherley, the work of Hale is more subtle, creating and developing ideas. Hale is the string-puller, the coordinator, the worker or 'doer' when necessary.

Unlike Atherley, Hale is a leader who leads by example and encouragement, preferring to motivate others and lets them receive the credit, while being prepared to accept blame, when on rare occasions things do not work out.

However, both Atherley and Hale share certain characteristics. Both are planners, both inspire loyalty and most significant of all, both are committed to furthering OHS. Hale has a particular commitment to the professionalization of the occupation of SP and occupational hygiene; Atherley, perhaps influenced by his medical background, is more biased towards OHS in the widest sense. Both of them have made contributions to understanding and knowledge, have negotiated and inspired the furthering of the professionalization of the occupation of SP, often without due recognition.

The presence of enterprising individuals is essential to the professionalization of the occupation of SP. There are many others who have made significant contributions to the occupation of SP. However, Atherley appeared to be universally recognised as an enterprising individual and Hale increasing so, in which way through publicity, acknowledged and respected, and their involvement and commitment in OHS training and education, they further serve the occupation.

The proof of these assertions are found in the references to their published work and their activities in the national and international arenas. This is one area where assertions are justified, since they are strongly supported by qualitative evidence, however difficult to quantify (cf Bogdan and Taylor, 1975).

No strategy for the future can be offered, except to recognise that enterprising individuals, while not essential, can provide the impetus which speeds up and smoothes the progress towards professionalization of an occupation.

This subject for discussion was added by Atherley and Hale (1975) to the list drawn from Millerson. The confusion over the identity of the client is well recognised and discussed dilemma for professionals, as well as members of those occupations who would aspire to become professionals (cf Freidson, 1970; Carlin et al., 1967). However, from the evidence in this study, the dilemma largely exists in the eyes of the observers and researchers into SP role, few IOSH respondents were found who claimed to have any dilemma in their minds as to who was the client. The majority of IOSH respondents considered that they were *professionally* carrying out their daily task, for which the employer paid them (cf Sections 5.8.4; 6.5 and 7.3.17).

Atherley and Hale contrasted the clear client identity in medicine and law, with the obscured situation in OHS. They cited as an example;

'The industrial doctor is perhaps in the clearest position with the tradition of the doctor-patient relationship and its confidentiality behind him; but even he can be placed in a situation where the interests of the firm who pays him conflict.'

Atherley and Hale (1975)

The illuminating example provided in Section 5.8.4 was similar to the situation described by Atherley and Hale, but with the added complication that the patient concerned was an employee of the company where the physician was employed as an OHS consultant and a registered NHS patient of the physician in his capacity as G.P. This may have been considered exceptional, but in those small towns where the industrial employment is largely dominated by one company (i.e., St. Helens [Pilkingtons], Preston [Courtaulds], Poulton le Fylde [ICI], Luton [General Motors]) this has been found to be a strong possibility, particularly when the company employs a part-time OHS physician, drawn from the local practitioners (cf Toomey, 1985)

Atherley and Hale provided an extensive review of the situation and options open to SPs and their professional associations to resolve

what they considered to be a dilemma over client identity. It draws together the various strands in any discussion of the dilemma (found during the research for this study), which is very important when considering the strategies for the future of the occupation (cf Ch. 4, 5 and 6). Atherley and Hale declared;

'Until the health and safety specialist makes an unequivocal stand on who his client is he will always be open to accusation and counter accusation; from trades unions of being a bosses-man, and from employers of being an unrealistic humanitarian. ...

If we accept the objective of the health and safety specialist as being to implement the *Health and Safety at Work etc. Act 1974* then the clients must be the employees and the public. In this case the future development of the profession must be aimed at weakening the patronage of the employers and strengthening the moral precepts which bolster the client relationship. We maintain that this cannot be done unaided by the practitioners in the field, but that it is possible with the aid of state mediation.'

Atherley and Hale (1975)

Before considering the strategies for the future in resolving the problem of client identity for members of the occupation, it is useful to review the situation found during this study. It has already been noted that the confusion exists in actuality, but *not identified* in the minds of the IOSH respondents (cf Ch. 5 and 6).

The consequence was that some members of the occupation were found to suffer role-conflict or role-strain, *but the majority did not*. It was not the purpose of this study to consider role-conflict and stress in SPs, but the subject is relevant in the context of this part of the discussion (cf Section 7.3.17). Harper (1980) conducted a survey into role-strain among SPs and should be consulted for details of these factors (she concluded that role strain existed in SPs).

The key factor in the discussion is the perspective of the SP - do they consider themselves to be employees or independent experts? Whichever is the answer, to plan strategies for the future of the occupation of SP an answer must be obtained to the question - why?

It became evident during the research for this study that, in theory at least, the conflict over client identity should have resulted in stress symptoms being present in SPs. However, it was found during interview that IOSH respondents were not to any great degree affected by conflict over client identity, apparently because the coping mechanism developed by SPs prevented it from becoming a problem. Although, paradoxically, in the majority of cases the SPs did not have to develop a coping mechanism, because to them, no problem existed.

The explanation for this paradox can be found by reference to Gouldner (1957). Gouldner developed the concept of Merton (1957) and Linton (1947) concerning *manifest* and *latent* roles, and Merton's concept of *cosmopolitans* and *locals*, applying them to the organizational setting instead of to communities and society. It will be seen that Gouldner's discussion on cosmopolitans and locals has a particular relevance to understanding SP role performance and behaviour, demanding extensive reference and discussion.

Gouldner stated;

'It is necessary to distinguish ... between those social identities of group members which are consensually regarded as relevant to them in a given setting and those which group members define as being irrelevant, inappropriate to consider, or illegitimate to take into account. The former can be called the *manifest* social identities, the latter, the *latent* social identities.

Gouldner (1957)

It was found in this study that many respondents either discarded consideration of client identity largely because they considered it irrelevant or the matter (not the conflict) was never thought of. Gouldner emphasised that manifest or latent 'social identities' were not synonymous with the concept of social status - describing the 'terminological disparities with respect to the definition of "status" barely fall(ing) short of appalling.' He continued;

'Social identities have to do with the way in which an individual is in fact *perceived* and classified by others

in terms of a system of culturally standardized categories.'

Gouldner (1957)

In the organizational environment, the manifest role of the SP has been defined by the employer and is perceived by those in company employ in the context of that manifest description. In short, SPs are simply fellow employees and colleagues. Currently, the SP is appointed with reference to a job description (however vague) and is a member of an occupation. This creates the conditions for the SP to accept the employee orientation, because as identified by Gouldner;

Just as others can be orientated toward an individual's latent identity, so, too, can the individual himself be orientated to his own latent identities. This is, of course, to be expected in the light of Mead's role theory, which stresses that an individual's self-perception is a function of the judgements and orientations which significant others have towards him.

Gouldner (1957)

Reviewing the approach of sociologists, Gouldner declares that the assumption is that 'latent identities and roles are as irrelevant as the people whom they are studying conventionally pretend.' He states that the facts show this to be an error.

Proof of Gouldner's assessment can be seen in the way in which IOSH respondents stated that they had little or no role conflict when their comments concerning difficulties found in role performance indicated that these arose from role conflict in the eyes of those with whom they worked (cf Ch.s 5 and 6). Gouldner asks several questions, such as 'Are "old-timers" in a group more or less friendly toward each other than with those of less tenure?' and concludes that the answers show that latent identities and roles *do* affect group behaviour. Again, the apparent division noted in the IOSH membership, based partly on age differences but also on educational differences, is supported or explained by Gouldner's analysis.

Gouldner states;

'The concept of latent roles suggests that people playing *different* manifest roles may be performing *similar* latent roles and, conversely, that those performing the *same* manifest role may be playing *different* latent roles. The concept of latent role may then aid in accounting for some of the differences (in behaviour or belief) among those in the same manifest role or for some of the similarities among those having different manifest roles.'

Gouldner (1957)

The above quotation by Gouldner provides further explanation for the great variation in quality of service and even role performance between members of an occupation who apparently have similar training and qualifications (aside from and additional to the differences between organizations, industries and employers).

Gouldner then referred to the work of Reissman (1949), who studied role conceptions of government bureaucrats, and the research paper of Bentz, concerning the role perceptions of a college faculty. Gouldner hypothesised that *two* latent organizational identities could be found. These were;

- '1. *Cosmopolitans*: those low on loyalty to the employing organization, high on commitment to specialized role skills, and likely to use an outer reference group orientation.
2. *Locals*: those high on loyalty to the employing organization, low on commitment to specialized role skills and likely to use an inner reference group orientation.'

Gouldner (1957)

It is now possible to relate Gouldner's concept of locals and cosmopolitans to the research findings from this study. By reference to IOSH respondents, the majority perceive themselves as *locals* in respect of loyalty. However, the issue is obfuscated because with respect to specialised role skills and likelihood to use an outer reference group orientation, they perceive themselves as *cosmopolitans*.

By reference to the analysis, the confusion or conflict in the IOSH respondents *conduct* of role seen by observers is due to loyalty to their employer (cf Harper, 1980). It is possible to speculate from the inferential evidence in this study that IOSH respondents did not have role conflict or confusion because the majority of the components in Gouldner's concept of *cosmopolitan* is perceived as true by the IOSH respondents - therefore, on the balance of self-perception, the majority think they are professionals.

Moreover, there is less role-stress for members of the occupation of SP from the conflict between the one-third and two-third imbalance than possibly may be expected because, even though IOSH respondents were found to be loyal to their employer, not unexpectedly, it is not to the same extent as deferential workers identified and described by Newby (1977) - therefore it can be modified further to encourage professionalization. It is hypothesised that role stress, recognised by an IOSH respondent, would develop if the cosmopolitan/local internal balance was even.

This concept deserves further research. If found to be a useful theoretical tool it would assist those who wish to professionalize the occupation. They could then concentrate their efforts on transferring the aspects of the SP loyalty from the employer to professional SP association and then on towards the 'new' profession.

7.4 Legislation and its implications for the future of the occupation of SP

7.4.1 Introduction

There have been several references to the importance of legislation in creating pressure for the appointment of an SP (cf Ch.s 5 and 6). The demand for the appointment of an SP and influence on role at local level is generally considered to come from national OHS legislation (Atherley, 1987). In recent times there has been increasing discussion and concern by those responsible for OHS, the employer and manager, and those involved in OHS, the SP professional associations, the SP and the educators, over the possible effects

and content of OHS legislation from the European Economic Community (cf Eberlie, 1987; Eves, 1987; Hale, 1987).

For the purpose of this study there can be seen to be two main types of legislation (cf Chapter 5). First, those which indirectly create pressure for the appointment of an SP. These can be divided into two broad types, OHS and Social Security legislation. Second, there are those which directly require a safety specialist, who may be an SP, to be appointed. An example of this type of legislation is the Construction Regulations (General Provisions) 1961 which requires a safety person to be appointed in the construction industry, subject to certain criteria. The objective of both kinds of legislation is directly or indirectly to improve standards of OHS, or ensure compensation for those industrially injured.

This section considers both types, with an emphasis on a discussion concerning the implementation of existing legislation to require the appointment of an SP.

7.4.2 U.K. occupational health and safety legislative philosophy

The principal factors the U.K. government and their institutions consider to be the key elements in a successful OHS programme include: the desire of the employer to comply with U.K. legislation; the requirement for employers to provide information to the HSE and the Factory Inspectorate; the moral obligation to protect all employees from ill-health and industrial accident (Atherley, 1987; CBI, 1980). This is the philosophy behind the policy of 'self-regulation' extensively used in the U.K. ever since it was advocated by Robens (1972a) and described by Hale (1987) as 'the battle cry of the period' 1970-1980s.

Under the philosophy of self-regulation it is assumed that employers and managers know (or on being told) their legal obligations by advisers, they truly have the will to comply - as opposed to employers simply stating they will comply (cf Section 1.5).

The findings from the A/WM and the IOSH surveys offer further evidence that this assumption is in error. It was found that the existence of legislation was insufficient to motivate employers to comply - a principle reason being that managers were frequently unaware of the legislation, compounded by the fact that the majority of industrial undertakings do not employ any OHS specialist (Report, 1983).

7.4.3 Current legislation and the findings from the IOSH and A/WM studies

The inferential evidence from the IOSH and A/WM respondents has shown that OHS legislation is only effective if known and enforced, or is a form of legislation that has some covert compulsion to comply, outside the control of the employer (otherwise employers' associations may successfully mitigate or remove the cover [cf Section 7.2]).

When legislation is known and known to be enforced, there has been a greater propensity to appoint an SP; if it is known and not enforced, there is a reluctance or lessening of impetus to comply (cf Ch. 4, 5 and 6). Therefore, employers and managers do not comply with legislation because of humanitarian reasons, not out of a desire to 'self-regulate', but to protect themselves from litigation and to prevent loss, financial and production, through damage to plant, equipment and human beings (cf Ch. 4, 5 and 6; Grayson, 1980; Nichols, 1975; Kinnersley, 1973; Nichols and Armstrong, 1973).

In addition, the inferential evidence found during this study suggests that a significant amount of pressure for the appointment of an SP comes covertly, in that it is not generally recognised or acknowledged (e.g., cf Anderson, 1987). The covert pressure comes from Social Security legislation, particularly (but not exclusively) Industrial Injuries legislation. The limited discussion in Chapter 5 and Section 6.2.6 introduced the concept. At this stage of the study, it is useful to provide further discussion.

An example is the Factories Act and the Social Security legislation, both of which require an employer to provide an accident book at any place where 10 or more persons are employed. However, the Factory Inspectorate (FI) only inspect the book during visits or following an accident investigation, in which the FI are involved.

It is perhaps no coincidence that the accident book is a Form BI 510, a DHSS form number. In response to an employee initiated claim for a declaration of an industrial accident (often, but not always, a preliminary to entering a claim for Industrial injury benefit), it is the DHSS who oblige the employer to inspect and provide details of the accident, *irrespective as to whether or not the claimant had any time off* and report on the entry in the accident book, in response to an employee initiated course of action following an industrial accident and injury.

Therefore, except in the case of fatalities or very serious industrial injuries, accident investigation at local level is frequently initiated by national legislation. Not solely because of the HASAWA or the Factories Acts but also to satisfy Social Security legislation and the DHSS.

This procedure still operates (1987), despite considerable changes in 'sick pay' legislation which has largely removed the distinction between 'sick pay' and 'industrial injuries benefit' - and hence further reduced the numbers of claimants entitled to claim (cf Hazards Bulletin, 1979). In the past, industrial injuries benefit was higher than DHSS sickness benefit, but there is still the obligation of the injured person to enter a claim for a declaration of an industrial accident (BI 95) *and the employer to inform the injured employee of their right to claim* declaration and benefit. In addition, there are nearly 60 'prescribed diseases' with automatic compensation, subject to claim. When an employee makes a claim for either of these benefits, there is a requirement for employers to provide sometimes quite considerable information for the DHSS authorities through Forms BI 76 or BI 76, aside from the possibility of more specific follow-up communications from the DHSS.

7.4.4 Legislation requiring appointment of a safety specialist

The arguments for and against the enactment of legislation to require the appointment of a safety specialist in industry has been continuing for many years. It has been shown that the employers are against such a proposal, although certain industries (shipbuilding, construction, potteries) have had such a provision for many years. Despite the fact that there is within the HASAWA a section that would require the appointment of a safety specialist, this section has never been fully implemented.

The professional associations approached the question of legislative support for the appointment of an SP in a style reflecting their own individual OHS philosophy (cf Section 6.4).

The BSC proposed to Robens that professional safety organizations should be 'approved' by the government, with SPs appointed from those who had qualified from courses run by the 'approved' associations; RoSPA suggested a combination of legislation and voluntary effort would be most effective; IOSH suggested that managers should be licensed in health and safety, or not allowed to practice.

The CBI declared that they were against the enactment of legislation compelling the appointment of SPs, both in their evidence to Robens (1972b) and in a 1980 interview with a CBI official spokesperson. The employers of the Factory Inspectorate in 1972 also stated that they did not support the concept of legislative demands for the appointment of SPs.

The conclusion of Atherley and Hale (1975) was that to assist in the professionalization of the occupation of SP, the most certain route was through state mediation (cf Section 7.3). However, Hale (1983) put forward a proposal which, if implemented, would lead to the appointment of SPs in many sectors of industry, and would not require the enactment of further legislation.

Hale (1984) discussed the problems in OHS resulting from the divisions among the various specialist groups and lack of

cooperation 'rather than in isolationist or elitist policies. He referred to the use of qualifications to 'provide the bedrock on which to build specialization.' Hale stated;

'This would provide the flexibility, coherence and simplification which could well gain the acceptance of employers organizations of the final stage in professionalization, the linking of qualifications to reserved tasks or occupations.'

Hale (1984)

In 1983 Hale had pointed out an anomaly in English law, declaring;

'Considering the widespread use of the "competent person"* strategy it is strange that the word has not received a satisfactory and detailed definition in English law. * '

Hale (1983)

In the * footnote, Hale stated;

'While some words used in statutory provisions in the U.K. are defined within those provisions, the majority are left to the definition of judges in particular cases who operate on a system of precedent. "Competence" is normally left to the latter.'

ibid

New draft regulations concerning Control of Substances Hazardous to Health had been introduced by 1984, requiring the use of 'competent persons'. Following Hale's comments cited earlier regarding the 'linking of qualifications to reserved tasks or occupations', Hale continued;

'The regulations governing the Control of Substances Hazardous to Health may provide the first opportunity to press such a link, with the extension of the use of the "competent person strategy" ... to new areas (of OHS).'

Hale (1984)

No such opportunity was taken, and now (1987) the Control of Pesticides Regulations 1986 are coming into effect, once again requiring the appointment of a 'competent person', but this time the person has to be certificated. In April 1987 the HSE was contacted and asked how the competent person would be assessed.

The reply was that the competent person would have to be qualified to Agricultural Training Board (ATB) 1 standards. However, following further questioning the HSE spokesperson stated that the syllabus for the course leading to the ATB 1 qualification had not been decided, since the legislation had not been fully implemented. Upon being informed that the legislation requiring persons who stored pesticides to possess certificates of competence had been in force since January 1987 the question concerning certificates was once again asked. The response was to suggest contacting the Ministry of Agriculture, Fisheries and Food (MAFF) 'since it was their legislation'. The MAFF in Birmingham and London had 'no information and did not know when they would have any information' (cf Grayham, 1987).

Therefore the possibility of using the 'competent person strategy' is fraught with difficulty. Indeed, the evidence from IOSH respondents and from all other sources suggests that while in the long term it may be possible to achieve state mediation requiring the appointment of SPs, it will indeed be very long term. The only possibility would be for all the professional OHS associations to combine and apply pressure - a most unlikely situation by reference to the evidence presented in Chapter 6. It is useful to speculate what would happen if an individual or body, such as IOSH or the T.U.C., made the question of 'competent person' a test case and proceeded through the courts. It would appear that this may be the only way to resolve the question of competence.

7.4.5 Radical legislative strategies for the future

More radical proposals are detailed in Appendix H.3, which would require enactment of new legislation. The first is for IOSH and the BSC (if they wished to join the scheme) to create a Chartered Member. This member would combine considerable experience as an SP, a higher degree in any discipline and degree level OHS qualifications. The role of the Chartered Member would be to carry out inspections, in any company other than their own, with a considerable fee paid by any employer found in breach of the regulations, a lesser fee paid by those with no breach. The

employer of the Chartered Member would be paid the majority of the fee as compensation for loss of services.

It is also proposed in Appendix H.3 that there should be formed Group Safety Practitioners, who would be Chartered Members and full Members of IOSH. Their role in the capacity of Group Safety Practitioner would not be to enforce the OHS legislation, but to 'offer advice and organize OHS' in small businesses (under 200 employees is suggested in the Appendix) which are members of the group.

All establishments should be compelled to register with the local authority, detailing their operations, number of employees etc. They would then be graded and inspected according to the disposition of the Factory Inspectorate, a Group Safety Practitioner or other appropriate body, or be placed on the list of members in the Group Safety practice.

The need for new OHS legislation is likely to receive considerable opposition from entrenched pressure groups. The above proposals are offered for discussion and it is considered that if implemented as part of the strategies for the future they will contribute to the professionalization of the occupation. However, if all or any of them are implemented, it is suggested that they would improve standards of OHS nationally and in the workplace.

As stated, the above proposals and all those offered in Appendices F, G and H are offered for consideration and constructive debate. Many of the proposals demand research as an ongoing component of the debate. The following section considers the role of research in designing strategies for the future of the occupation and individual SP.

7.5 Strategies for the future: The importance of research

7.5.1 Introduction

An important, crucially important component when designing strategies for the future is effective research and research reports. Unless research is conducted, findings analysed, compared, criticised and evaluated, policy decisions can be made abstracted from facts and hence can be erroneous or even disastrous for the occupation and OHS.

This section considers the role of research in assisting the design of strategies for the future, reviews some of the problems found with existing research into the occupation and SP role and identifies areas deserving further research, based on the findings from this study.

7.5.2 Professional associations, government bodies and academic institutions

This section reviews not only the OHS research activities of the three groups noted above, but also the activities of individuals who are located in or associated with them, and most importantly the dissemination of - or failure to disseminate - research findings.

Each of the professional associations were found to have a different attitude to research. The uses and need for research has been long recognised by IOSH, although not to the extent that the Institution has its own research staff or department (cf Section 5.3; Appendix H). The position at the BSC is not clear, since they conduct their internal operations with secrecy and discourage outside inquiries (cf Section 6.4). RoSPA does employ research staff, but according to an informant it is reactive research, not initiative research, i.e., it does not identify areas of concern before they become problems nor postulate alternatives rather than solutions (cf Section 6.4.).

However, the most prolific initiators and user of research but also the most secretive is the HSE. The HSE holds useful and vital information on the activities of SPs and other OHS professionals, which they use as a basis for the many reports and discussion papers which they publish. The HSE Head of Library and Information Services, Sheila Pantry, (1987) declared;

'Now it could be argued that there is too much health and safety organization in the world, but the big question is 'who is able to use it?' During a lifetime spent in information work one of my constant worries has been to get the right information to the right person at the right time (if not before!).'

Pantry (1987)

The problem for researchers into the role of the SP and the occupation is that the HSE have their own, unknown and unpublicised rules for deciding the 'right person' (or 'right institution'). For example, it was reliably reported that the HSE held considerable information in their computer files on the numbers and activities of SPs throughout the U.K. - it was not possible to obtain access to the data, even on a strictly confidential basis. The wealth of data which is held by the HSE, providing it was released to reputable institutions, would greatly assist research and thereby improve standards of OHS. Such an action would also save duplication of research and waste of resources.

Inquiries to other reputable institutions found that the HSE rarely release their data on the activities of OHS specialists; not to individuals or academic institutions (even those involved in training of the Factory Inspectorate) unless the individuals are conducting contract research work for the HSE. Since the computer print-out of the data could be provided without reference to identity or source and the HSE cannot analyse or effectively use much of the data they have accumulated (through shortage of resources), the decision of the HSE not to release more of their data to accredited institutions and researchers is regretted.

This policy by the HSE could lead to the accusation that in those areas where the HSE see conflict of interests (i.e., between Factory Inspectors and SPs) they are more concerned with protecting their own interests than in improving standards of OHS. Support for

this assertion comes from the comments of SPs concerning the thrust of the HSE (1976) Discussion Document: Sample survey of Safety Officer role and function.

Many of the professional OHS specialists are either involved in personal research, or indirectly through contributing to research conducted by their professional association. The results of their research is published in the professional journals, ranging from *The Lancet* to *Occupational Health*.

The research design is often quite simple - but effective in developing role of the occupational or professional group, the public image of the occupation and in improving standards of OHS. For example, *Prescription for Health* 'a special research based study (by an OH Nurse) of hospital pharmacies in Plymouth' concluded that there was much common ground between the pharmacist and OH nurse' and described how cooperation between them could improve safety and working conditions - for the pharmacist (Stitson, 1985).

Reference to Stitson's research and findings was made in the Plymouth local press - further good publicity for the 'caring OH nurse' - it was not restricted to 'in-house' magazines. The *Safety Practitioner* is an 'in-house journal' and frequently presents articles written by IOSH members, but they are seldom based on research - even if they are, seem to fail to achieve the publicity that other research papers receive.

IOSH could follow similar examples, if they possessed a research department (or researcher). It was found that many respondents were critical of IOSH for failing to establish a research department, to answer questions from members, to provide support for IOSH officials and conduct occupational relevant research (cf Sections 6.4 and 8.4). Appendix H provides further discussion.

One area where academic research could be presented to benefit OHS, the occupation of SP and the academic institution is in the popular press. The evidence is anecdotal but illuminating.

The bibliography offers an incomplete list of the series of articles by myself, often on the role of the SP or associated matters - e.g. management - in the 'popular' OHS press. Comments from members of staff initially derided articles by myself in the *Safety Surveyor*, *Safety Representative* and other non-academic magazines and journals. They were considered simplistic and low level. However, comments concerning the articles at conferences and meetings where SPs and management attended led to increasing recognition that they were reaching an audience that was thought had been completely covered - potential students and clients for the Department. The derision lessened as new contacts (and business) were introduced to the Department as a provable consequence of the articles.

There are still some academic institutions and staff who denigrate popular articles in the popular press on their particular discipline and state that they will not 'descend to such levels' (actual comment made by a member of staff). The evidence suggests that this view is incorrect. It appears that all publicity concerning OHS and other research is useful, for the Department, the occupation and OHS. It is suggested that every avenue of publicity, subject to integrity and ethics, should be used to disseminate research evidence, not restricted to colleagues. In that way it would be exposed to the 'user' and the evidence suggests that user criticism is extremely useful.

7.5.3 Strategies for the future: Areas for further research

Throughout the study various areas which would reward further research have been identified. The areas noted have been those which have indicated questions concerning the validity of the accepted wisdom, or new areas identified during this study which have a bearing on the activities of SPs and which deserve further investigation. It is important to repeat that the study presents the perspective by the SP of their role, function and responsibilities - as far as possible, it is *not* an evaluation by the researcher of the role of the SP (cf Ch. 1).

Examples of particular note where further research is suggested include;

1. Full research into the managers' and employers' knowledge of OHS,
2. The extent that employers and managers control the role of the SP (through role definition, selection, appointment, and in the workplace through possessing ultimate responsibility for OHS),
3. Intra-organizational relationships and their effect on the role performance of the SP,
4. Differences in perception of role between SPs in the same SP Institution, and the reasons for those differences,
5. Is the IOSH SP a cosmopolitan or local and what effects would this have on the SP, occupation and the future?
6. Part-time SPs - what is the most frequent 'other role' and which role receives priority - and why?
7. Effects of previous employment/occupation on;
 - (i) professionalization of SP
 - (ii) perception of professionalization process
 - (iii) role performance
 - (iv) role perception
8. Effects of social origins on;
 - (i) professionalization of SP
 - (ii) perception of professionalization process

(iii) role performance

(iv) role perception

9. Effects of organizational climate on SP role performance
10. IOSH membership's perspective of IOSH (including suggestions for membership services, structure)

Each of the above has particular implications for the future of the occupation and have been discussed at their point of identification. However, some require further emphasis, either because they are so obvious they may have been overlooked or possibly run counter to accepted wisdom (cf Bogdan and Taylor, 1975). However, some areas found to require further research demand separate, extended discussion, including;

Possibly in the category of the obvious was the finding that survey questionnaires, even if as comprehensive as the Waterhouse et al. (1984) survey, were considered by many respondents to be unsuitable for establishing the role content of SPs (cf Section 5.3). The limited number of participant observation studies conducted for this study supported the views of the membership, that survey questionnaires were *not* the best method for obtaining information about SP role. An ancillary finding was that SPs were unreliable in reporting what they actually did, not out of intention but rather through lapses of memory, difficulties with recall or quite frequently simply considering an activity not relevant (cf Section 5.8).

It was found that participant observation studies would prove the most fruitful form of research in establishing a core role of the occupation (cf Section 5.8). The useful nature of this research even outweighs its relatively high cost, because of the accurate, reliable and valid data derived - particularly when compared with the problems in achieving those properties and unavoidable constraints often placed on responses when mailed survey questionnaires are used (cf Ch. 3).

There was one area of research, conducted in pilot form as as part of the main IOSH survey questionnaire, which offered considerable inferential evidence suggesting that further similar research would be particularly useful;

The comparison of *actual level of involvement* (ALI), with *extent of formal training* (EFT) and *extent of involvement the respondents thought they should have* (ISH) in seven areas of activity. The analysis and discussion in Sections 4.6 and 5.6 suggests that establishing the ALI in conjunction with EFT would assist in ensuring that resources of all kinds allocated to the training of SPs would reflect demand. Those areas where ALI and EFT balance may be considerably lower in priority than others where there is a recorded imbalance between ALI and EFT (e.g., Security contrasted with Employer's Liability Claims).

Another area of research connected with future training requirements which deserves follow-up is the demand recorded by IOSH respondents for OHS courses (cf Section 5.5.3);

Respondents noted that existing courses were sometimes not tailored to their needs, which has restrictions placed upon them due to work or resulting from other commitments. It was found that the demand for further training, the finance and (within limitations) the opportunity for respondents to complete suitable OHS courses all existed or were available - there appeared to be a mismatch between demand and supply.

In September 1987, it is too early to establish the extent the Open College, described by Booth and Sherwood (1987), may change the situation found during research largely conducted over the period 1980-1982 (cf Sections 4.3.4; Booth, 1987; Dabbs, 1986). It was found that had been an increase in the percentage of SP respondents who reported holding degree level qualifications in the IOSH survey (1981) compared with those in the Insaf survey (1973) - although the Insaf survey included non-affiliated SP respondents (cf Sections 5.5.3). However, there was found to be very little difference between the reported percentage of IOSH respondents who held degree and higher degree formal qualifications in the Waterhouse et al. IOSH survey (1984) and the IOSH survey (1981).

The conclusion must be that if respondents and IOSH are to improve levels - as well as standards - of OHS training and qualifications, then in the future OHS courses offered by institutions of learning and IOSH/NEBOSH must be designed in cooperation with all involved, which should then ensure they are better tailored to market demand and OHS requirements (cf Appendix H).

The links between role performance and previous occupation were not satisfactorily investigated or established in this study (cf Dawson et al., 1984). Although mentioned in 7 above, it demands separate emphasis. Sufficient data and information were derived inferentially to suggest that there may be an important connection between role performance and previous occupation (cf Ch. 4.3.4, 4.3.5 and 5.5.4). Associated with this component of the research was a strictly inferential finding that social class may also have an important influence on SP performance of role, particularly in the interaction with HSE Factory Inspectors and managers.

Similarly Gouldner's concept of cosmopolitans and locals received mention in paragraph 5 above. It is another area which would reward further research. Gouldner's (1957) concept may explain many factors in SP role, performance and perspective of the professionalization of the occupation. It was not found to have received much attention by those concerned with research into the occupation of SP. The limited application of the concept in Section 7.3.17 suggested that it may have value.

The concept of 'vocational professionalism', introduced by Atherley (1975) also would reward investigation. Initial comparison with the activities of IOSH, combined with the inferential evidence from the study, indicated that vocational professionalism may provide a path to the professionalization of the occupation best suited to the membership and IOSH .

Finally, and reserved until last to emphasise its key importance, is the question of managerial control over the role, function and performance of the SP. There are authorities (and many members of the occupation) who consider that the SP role has to be defined in relation to management views and resources. This assessment of

managerial responsibility demands extensive further research (cf Section 1.5).

The evidence presented in this study repeatedly questioned the ability of management and employers to define SP role, function and responsibilities (cf Section 5.4). However, this *should not* be taken to mean that management and employers should not *eventually* be allowed to define what they require from SPs within their organization. The evidence from this study suggests that the time when management should be allowed to define SP role is either when they have been licensed (i.e. trained in OHS to a legally defined standard) or when the professionalization - and hence autonomy - process of the occupation of SP is complete.

The distinction is between the ideal and the reality. By reference to the comments received from IOSH respondents and other sources, those who consider that management should define SP role in relation to management views and resources may be offering at worst a recipe for chaos in OHS and, at best, stagnation. It was found during this study that organizations which allowed or sometimes welcomed research and researchers were usually those who were conscious of their legal and moral responsibilities in OHS and, as one SP stated, were proud of the quality of OHS services and organization at their plant. For those reasons it is necessary to underline, as the research in the Northern town showed, that a sweep across all industry probably would confirm that the effective undertakings, in OHS terms, would be in a *minority* (cf Section 5.3).

A careful review of the research evidence, provided throughout this study, suggests that it is only when management have grasped sufficient understanding and knowledge of OHS *to appreciate the limits of their knowledge* will they be able to provide (or obtain) a definition of the role of OHS specialists. This process demands enforceable legislation requiring management to receive effective training in OHS.

However, once management and employers have rectified their failure to acknowledge their deficiencies in OHS knowledge and understanding, and have resolved the situation, then their right to define SP role would be endorsed. Extensive further authoritative

research is required into this problem, with the findings widely disseminated.

7.6 Concluding remarks

In proposing strategies for the future it was necessary to review the role of the SP, the occupation and professionalization of the occupation, through reference to findings from the study and other authoritative sources. An inter-relationship between the local and national factors is unavoidable. In the final analysis, activities and events are invariably interactive, with events at local level having an influence on decision taking and action at national level and vice versa.

For example, one of the principal points raised throughout this study has been the professionalization of the occupation of SP, the change from an occupation to a profession. It was shown that IOSH respondents, with virtually no adverse comment, consider that being a profession is (or was) necessary and desirable.

The use of the terms 'is' or 'was' is purposive and indicates there are many questions concerning the definition of professionalization in the minds of the membership. Reported statements from IOSH respondents confirmed that they thought the professional SP associations should further the status of the occupation. However, many respondents recorded little interest in professionalization - they declared they were already professionals and therefore, by their terms of reference, members of a profession.

In summary, any discussion on professionalization of the occupation was considered largely unnecessary (or the process misunderstood) by the membership.

Two points arise from this misunderstanding by the IOSH respondents. First, the membership should become aware of the meaning of professional. Second, the professional association to which they belong needs to communicate the real, not normative, meaning of the term profession and professional to their membership (cf Section 6.4).

In short, many of the IOSH membership need to appreciate that there is a distinction between profession and occupation - equally, the IOSH Executive need to communicate the distinction to the membership and the reasons why it is important for the future of the occupation. Once these two objectives have been achieved, then the progress towards professionalisation of the occupation (which all members agree is desirable) can be a united effort towards the same goal.

7.7 Conclusion

The discussion in this chapter has ranged from considering the progress of IOSH towards vocational professionalization and it appears that IOSH has achieved the majority of the criteria to satisfy Atherley's definition.

The major component of this chapter was a review of the obstacles to professionalization, which was largely related to the findings from this study. The concluding section showed how members were confused within themselves over the definition and meaning (in occupational terms) of profession. An explanation was provided for showing why many IOSH members did not suffer from role stress, despite this confusion, because their behaviour and statements showed an imbalance between a cosmopolitan and local orientation towards role (cf Section 7.3.17).

Various types of legislation were inspected in section 7.4, not restricted to OHS legislation. The legislation was evaluated in relation to its influence on the occupation of SP. Two different strategies were identified, either of which, if adopted, would assist in the professionalization of the occupation.

Section 7.5 considered the importance of research in designing strategies for the future of the occupation of SP. The activities of the professional associations, government bodies and academic institutions in research and disseminating the findings of research were considered.

A plea was made for greater opportunities in the exchange of information and research findings, which are largely restricted

within academic institutions and therefore restricted in use and application. Included in this part of the discussion was the suggestion that greater use should be made of the popular press to disseminate the findings of research.

It was suggested by the IOSH membership that the Institution should establish a research department to service members and the occupation (cf Section 7.5.2).

Section 7.5.3 provided further discussion on the contribution which research could make to the occupation of the SP. A list was provided of findings from this study, identifying areas where further research would reward those who funded the project and make a contribution to the future of the occupation of SP and OHS.

It was concluded that a key problem was not that managers and employers had little knowledge and understanding of OHS or SP role - it was that they failed to appreciate or acknowledge that they had little understanding of OHS or SP role. It was recommended that this area demanded further research, with the findings widely disseminated.

The following chapter includes conclusions and recommendations derived from the findings of the research conducted for this study.

* * * * *

'It is clear that specialist safety advisers will be required increasingly to advise and monitor safety arrangements Moreover, retrenchment in the size of the Health and Safety Executive is also bound to increase the responsibilities of safety advisers. In each company it is important that the safety adviser's role and expertise should not be specified as a separate exercise; rather it should be assessed as part of the overall review of safety expertise and duties. '

Booth (1981) in MacDonald (1981)

CHAPTER 8 CONCLUSION

8.1 Introduction

The citation from Booth is a recognition that SPs cannot be researched in isolation from their undertaking, its organization, industrial processes - or even society. The prime objective of this study has been to 'investigate the role, function and responsibilities of the safety practitioner in the U.K' However, as reference to the text and appendices shows, the assessment of SP role has included an extensive 'overall review of safety expertise and duties' (cf Appendices F, G and H).

The objective of this study has been achieved, although because of the changes in the research methodology, mode and level of analysis of data, presentation, style and type of discussion, not in the manner originally envisaged (cf Ch. 2 and 3).

During the period of distributing the survey questionnaire and initial analysis of the survey data several interesting factors

emerged. The principal one was that there appeared to be a difference in the perspective of SP role (and incidentally the concept of OHS) between that held by employers and managers compared with that held by the SP and some OHS authorities (cf Ch.s 4, 5 and 6). These factors demanded investigation.

It was less the analysis of response data to the survey questions which revealed these factors, but the pursuit of points made in the free response sections of the questionnaire and the reaction of respondents to the survey. Several times a week, immediately following distribution of the IOSH survey questionnaires, respondents telephoned the Department clarifying questions, but more usually simply discussing the purpose of the questionnaire. This contact proved valuable, in that it underlined the unsatisfactory nature of mailed survey questionnaires in ascertaining SP role.

The alternatives became clear . Either analyse the large amount of survey response data derived from respondents to the formal survey, using high levels of statistical analysis, or effectively to jettison any idea of analysing the derived data to the depth normally associated with studies of this kind. Reference to the discussion in this study provides reasons why the latter course was chosen.

The survey response data were extremely useful in providing a framework and reference point for discussion, but were unsuitable for high level statistical analysis (cf Ch.'s 3 and 4). The purpose of the surveys for this study, was changed from that of providing quantifiable data, to that of providing leads for collecting data far richer in qualitative detail, but much more difficult to quantify.

The latter course was chosen since there was every indication that it would prove the most rewarding in terms of research, and for the future of the occupation of SP and OHS in the U.K. It is considered that the gains have proved worthwhile.

8.2 Findings from the research

8.2.1 Introduction

A principal finding from the literature search has been that some earlier studies and research into the role of the SP appear to be less useful than previously supposed - aside from the fact that many of them concluded it was not possible to identify the role of the SP (e.g., cf Harper, 1980; HSE 1976). It was found that the key elements of SP role, and training requirements, have been identified many years ago (cf Sections 5.2, 5.3, 6.3, 7.3 and 7.4). The answer to this seeming paradox was found to lie in problems with communication.

There were found to be tremendous problems in communication between all those involved in OHS - ranging from users to suppliers, from practitioners to researchers - not restricted to the level of 'in-group language and terms' being incomprehensible to those outside the group. It was far more basic than that.

An example was found in the meaning and use of the term 'role of the SP'. To some it simply meant an employee given the title of SP, and to them there was no difference between an employee who was an SP or any other employee - as often is the case in organizations, actual role and function was not known outside the individual in that role (cf Section 5.8). To others, the occupation of SP meant following a vocation, a specialist role which requires a blend of extensive training and experience for it to be performed effectively.

The communication breakdown is therefore multi-layered. First, there was found to be a communication gap between researchers investigating SP role and the occupation - research has been fragmented and the reports dispersed, even hidden, across or in many institutions, that finding them is an extremely difficult task (not helped by the confidentiality of some of the projects, e.g. Shipp et al. (1965a) which was restricted to steel producers) (cf Ch. 1, Section 5.3).

Second, there was found to be a communication gap between the researchers and institutions on the one hand, and the SPs and their

professional associations on the other - it was found not only that IOSH HQ did not hold copies of research reports conducted under their auspices or in which they had offered assistance, they had no *formal* record of the research (and IOSH was not an exception) (cf Ch. 6).

Third, there was found to be a communication gap between those involved in the occupation of SP as SP or OHS professional associations, researchers or trainers, and those who 'use' SPs or are involved with OHS, i.e. employers, managers and government authorities (i.e., HSE and legislators) (CF Ch.'s 5, 6 and 7).

Fourth, there was found to be a communication gap between (and within) each of the groups mentioned. For example, the membership of IOSH could be divided between the young and highly educated and the over 50s who carried out their functions largely depending on experience; there were managers and employers who had a considerable knowledge of OHS or, conversely, recognised their lack of knowledge of OHS - there were many more managers and employers who had very little or no knowledge of OHS and did not recognise the fact (cf Ch.'s 5, 6 and 7).

Communication about SP role or OHS was extremely difficult outside a particular group (or sometimes even within the group), because they did not understand each other nor contact others involved (for example, reference to Robens demonstrates this point).

The conclusion is that the findings of relevant research were not widely distributed and therefore largely unknown or restricted in circulation rather than overlooked (cf Sections 5.2, 5.3, 6.3 and 7.5). That conclusion unlocks the paradox identified at the commencement of this section - it is not possible to define the role of the SP, but it is possible to identify core elements of role, skill and knowledge requirements of SP role.

8.2.2

Role of the safety practitioner

Following analysis of the data and review of all the evidence, it is concluded that it is not possible to identify the role of the SP.

The principal finding of the research - in respect of achieving its objective, i.e., identifying 'the' role of the SP - is far more useful and significant.

The finding of this study, concerning the role of the SP, was to confirm the findings from other sources (principally LGTB SO4/77 and Atherley and Hale, 1975) that the role of the SP included five core elements, and demanded certain general and specific knowledge and skills (cf Sections 5.2, 6.3 and 7.3.7).

The five core elements of role have been provided twice in the context of earlier discussion - because of their importance - in the main text (Sections 5.2 and 5.10). As their validity has been confirmed by the research, they are now presented as a conclusion. The core elements in SP role were found to be:

1. Advisor
2. Change agent
3. Problem solver
4. Information seeker and processor
5. Gatekeeper

Following analysis of the data from the IOSH survey, the findings of the Local Government Training Board (LGTB) concerning the knowledge and skill requirements for SPs can usefully be applied to SPs generally. The findings were introduced in Section 6.3.5 during discussion on the LGTB (1977) survey conducted to establish the training requirements of the local government SP (cf Section 6.3).

According to the findings of the LGTB survey, knowledge requirements for local government SPs were divided into *common core* and *specific* (cf Figure 6 (v)).

Common core knowledge was 'knowledge which all safety personnel should possess, irrespective of employer or place of employment' and subdivided into *general* - 'practical and theoretical knowledge and training in the understanding of organizations, people and safety' - and *specialist* - 'specialism in certain areas of knowledge,

e.g. hygiene, ergonomics, but *not* restricted to local authority requirements.'

Specific knowledge was knowledge specific to SPs employed by local authorities, subdivided into *general* and *particular* (cf Figure 6 (vi)).

General knowledge was 'practical and theoretical knowledge and training strictly related to local authority requirements in organization, people and safety'. Particular knowledge was in safety personnel and technical areas, and is related to the *requirements of the employing authority*. It was stated that elements of particular knowledge may not always be required - the example provided was that for authorities who had no construction section, then the SP employed need not have any knowledge of construction.

Skill requirements were divided into *initial* and *developed*. 'Initial' was subdivided into *general* and *particular*; 'developed' into *overall* and *functional* (cf Figure (vi)).

General skills were 'expected to be found in junior and technical staff' - problem solving, communications and safety; particular skills - safety personnel and technical' - 'required at least two years practical experience'. Overall skills were 'internal to the individual' and expressed themselves in 'high ability in problem solving, logical thinking and powers of analysis'; functional skills 'were a combination of all those previously identified' and 'demanded considerable experience'.

These knowledge and skill requirements can be related to the more detailed list of general activities and specific training requirements shown in Figure 7 (i) Section 7.3.7.

The findings of this research confirmed that the five core elements, general and specific knowledge and skills, and the areas or disciplines noted in Figure 7 (i) were applicable to the role, functions and responsibilities of all the respondents in this study.

It is important to note that these core elements, knowledge or skills were not necessarily used to the same degree by all SP respondents

or subjects (cf Ch. 5). It was found that all SPs were involved, to a greater or lesser degree, in the core elements during performance of SP role, functions and responsibilities and in doing so, used or applied the knowledge and skills identified by the LGTB research (cf Section 5.8 and 6.3).

However, it was found that the prime determining (not merely influencing) factor of SP role, a factor which transcends any other, is the control over OHS in the workplace by the manager and employer.

8.3 Summary of Conclusions

The following is a summary of the most significant conclusions in this study;

1. The role of the SP can be defined by reference to the elements, knowledge and skill requirements described in Section 8.2.2 (cf Ch. 5, 6 and 7).
2. The role and performance of the SP within the organization is *primarily* determined by employers in the general context and by managers in the specific context of the workplace (Ch.s 4, 5, 6 and 7),
3. The quality and type of OHS within the undertaking is largely determined (and restricted) by the employers' and managers' knowledge and understanding of OHS, conditioned by legislative requirements (and the probability of enforcement) (Ch.s 4, 5, 6 and 7)
4. Very frequently, employers and managers do not realise or recognise the full extent of their inadequate knowledge and understanding of OHS - this was found to be particularly true in the case of small businesses (under 200 employees) (Ch.s 4, 5, 6 and 7),
5. As a consequence of (2) (3) and (4) the full potential of the SP is not harnessed by employers, managers and government (Ch.s 5 and 6).
6. IOSH respondents considered that IOSH had some weaknesses in its structure and organization (cf Ch.s 6 and 7). The principal weaknesses were considered to be;
 - poor lines of vertical communication,
 - inadequate provision of services for the IOSH membership.

7. IOSH respondents considered that without OHS legislation, they would find carrying out their responsibilities much more difficult (i.e, employers and managers would be more likely to ignore OHS proposals).

8.4 Recommendations

This section presents a summary of the principal proposals and recommendations which, if implemented, could improve the quality of service offered by SPs, the status and professionalism of the occupation and ultimately the standards of OHS in the workplace.

The employer or their agent, the manager, must retain the right to select and appoint the SP they consider the most appropriate for the demands of their undertaking or enterprise. This right must be subject to the condition that managers and employers have sufficient knowledge and understanding of OHS to select, appoint and utilise SPs to full advantage.

However, it has been found during the study that the understanding and knowledge of OHS by management and employers can be extremely poor, exacerbated by the situation that many of them do not realise or recognise their deficiencies (Ch.'s 4, 5 and 6). *Enforced* legislation is required to overcome this problem.

RECOMMENDATION 1

The proposal by IISO (now IOSH) to the Robens Committee that managers and employers should be licenced in OHS before allowing them to practice management should be implemented.

It was found that many SPs were unable to pursue OHS courses owing to a variety of reasons, ranging from managerial reluctance to release staff, to a lack of courses in the area. While the Open Learning concept (Booth and Sherwood, 1987) is to be commended and to an extent satisfies some of the suggestions offered in Appendix H, it is too early to see if it will satisfy the demands of respondents

who find it difficult to complete further OHS courses because of pressure of work or difficulties in funding.

Based on the findings from this study the following recommendation is made.

RECOMMENDATION 2

Similar to Safety Representatives under the SRSC 1977 Regulations, SPs should be granted leave and payment for *prescribed* OHS courses they take to further their OHS education and training.

For example, in a situation similar to the recognition of problems through exposure to asbestos, prescribed courses should be established by the HSC or similar appropriate authority following recognition of new risks to health or where possible *before* the introduction of new technology deemed to present danger to workers, plant or environment. The SPs with responsibility for workers who may be at risk should attend these OHS courses on a paid time-off basis.

The appointment of SPs should be covered by the 'competent persons' provision described in Section 7.4 of this study. This would not require any fundamental change in legislation and could ensure that adequately trained and qualified persons are appointed to SP role.

RECOMMENDATION 3

The definition of competent person should be clarified and applied to cover all specialists involved in OHS.

There is and always has been a shortage of Factory Inspectors and resources for the HSE and HSC (cf Hutchins and Harrison, 1926; Hale, 1983). The proposal for Chartered Member of IOSH or Member of other suitable professional SP institutions, in respect of the proposals in Appendix F, would mitigate against the problem of insufficient numbers of Factory Inspectors.

RECOMMENDATION 4

The proposal for a Chartered Member of IOSH should be implemented to relieve the pressure on the inadequate resources of the HSE and Factory Inspectorate.

It has been reported that small businesses (those with fewer than 200 employees) are the firms in which the industrial accident and disease rates tend to be the highest (Hale, 1987). Research in this study has confirmed that small businesses are those unlikely to have safety policies and even less likely to employ a SP. There is a proposal in Section 7.4.5 for Group Safety Practitioners to be drawn from the ranks of the highest qualified SPs, to offer OHS advice and organization for the small employers through the founding of Group Safety Practices.

This suggestion is included in a range of proposals concerning membership grades and activities, and can only be considered in total with the proposals in Appendix F.

Application of the proposals in Appendix F should contribute to a significant reduction in the number of accidents and incidence of ill health amongst employees in the small business sector. The anticipated benefits from Group Safety Practices are sufficient to merit its recommendation;

RECOMMENDATION 5

Group Safety Practices should be formed, in line with the proposals presented in Section F.4, Appendix F, to primarily but not exclusively service the small business sector.

The central theme of the discussion in Section 7.3 was the professionalization of the occupation of SP. An essential component of professionalization is to ensure that those outside the occupation are aware that ethics are maintained by those within.

Appendix G proposes the formation of an IOSH Professional Affairs Committee. It was considered that this is an essential pre-requisite before professionalization to engender confidence in the

quality of the membership of IOSH. Accordingly, recommendation 6 is given;

RECOMMENDATION 6

A Professional Affairs Committee be formed by IOSH, in line with the proposals in Appendix G.

At present research into the occupation of SP and OHS is fragmented and (understandably) each of the individuals or institutions involved in research have their own particular reasons for investigating OHS or the role of the SP - the objectives of improving standards of OHS, reducing accidents and industrially induced ill-health, the ultimate goal of the SP and IOSH, may be incidental to the objective of the individual or institution (cf Ch.s 5, 6 and 7; Bell and Newby, 1977). IOSH respondents suggested that a research department should be established at IOSH HQ, to service the Institution, its membership and Executive (cf Ch.'s 5 and 6).

A finding from this study is that the Institution of Occupational Safety and Health must enter the arena of research themselves, conducting academic standard research, presenting and widely publicising the findings and reports, subject to the instructions of the Executive. The areas of research should be decided by the Executive; however, findings must not be not be controlled by the Executive (cf Ch. 3). If the findings reflect badly on the occupation or Executive, they should be noted, restricted to members of the Institution and action taken to rectify the situation.

The importance of the need for a research department at IOSH HQ is sufficient to make it the final recommendation;

RECOMMENDATION 7

The Institution of Occupational Safety and Health should establish a research department at IOSH HQ or some other suitable centre.

Appendix H discusses in depth features of the proposed IOSH research department. It is through the establishment and operation of a IOSH research department that many of the problems identified in this

study, which have a considerable detrimental influence over the role and role performance of SPs and constrain the development of the occupation, may be overcome or resolved.

8.5 Conclusion

The findings from this study have confirmed that the role, function and responsibilities of the SP vary extensively from individual to individual, undertaking to undertaking, and industry to industry. The analysis and discussion in this report has identified the principal contributing influences on SP role and its variations and shown how the problems which arise from these differences could be resolved (cf Ch 4, 5, 6, 7 and this chapter).

The variations in SP role were largely found to be due to variations in the understanding and knowledge of OHS by the manager and employer, who controls SP role in the workplace. Employers and managers who not only control the role of SP, but frequently actually define the role of SP. The employers and managers also select and appoint SPs in line with perceived requirements and who, quite properly, retain responsibility for OHS in the workplace. The core problem was found to be that not only was the knowledge and understanding of OHS by employers and managers generally very poor, many managers and employers were not (even) aware of the deficiency of their OHS knowledge (or its consequences) (cf Ch.'s 5 and 7).

The SP role could not be defined. However, it has been possible to identify common IOSH SP role components or elements (which have been reported by the IOSH respondents or recorded during the participant observation studies) which confirm earlier research findings. In that respect, an SP role has been identified.

An important finding, supported by evidence from earlier studies and authoritative works concerned with SP role, suggests that SPs are the only OHS specialist who frequently possesses, as part of their specialisation, an understanding of the many facets of OHS at a sufficient level to enable them to effectively act as a *gatekeeper* to the whole range of OHS services and OHS specialists.

Ideally the professional associations should combine to fund a central research department to conduct research into factors which have an influence on SP role or are within the functions and responsibilities of the SP. The review in Chapter 6 of the professional associations suggests that such cooperation is unlikely.

In the event that cooperation between professional OHS associations proves impossible then IOSH must establish its own research department (cf Recommendation 7; Appendix H; Ch. 5).

The SP professional associations, supported by research, have a vital part to play in advancing the occupation of SP and the continual improvement in standards of OHS. The professionalization of the SP role and occupation has been a central theme of the discussion throughout this study - it is virtually unavoidable in any comprehensive study.

Professionalization of the occupation of SP was found to be a desirable objective, not merely to further the interests of the occupation, but as a key contribution in improving and ensuring high standards of OHS in the U.K.

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