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**The Knowledge-in-Use of Expert And
Experienced Supervisors of PhD Students in the
Social Sciences**

by

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the degree of Doctor of Philosophy in Sociology

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Abstract

This thesis examines what expert and experienced PhD supervisors in the social sciences do well and how they do it. It is set in the context of the Economic and Social Research Council (ESRC) initiatives in the early 1990s to broaden the purposes of an academic research training and to promote timely PhD submissions. Many have claimed that PhD supervisors play a central role in the PhD process and this research aspired to achieve clearer understandings of the expertise involved in fulfilling that role. The research was informed by Schutz's phenomenological analysis of common sense and related concepts. It involved a student survey and six supervisor case studies. The survey aimed to determine the criteria in terms of which students judged supervision to be successful, and to identify those expert supervisors who most fully met these criteria. In going beyond criteria identified by students, the aim of the case studies was to ask how successful supervision could be achieved. 'Expert' supervisors agreeing to participate were observed over several supervision sessions and asked later in interview to talk about the various actions they took in the observed sessions. Conclusions drawn from the student survey and the case studies included a close match between student and supervisor criteria and priorities for supervision. A clear emphasis was placed by both supervisors and students on bridging gaps between student knowledge, skills and motivation at any stage and what was necessary to achieve success in their PhD studies. The distinctive nature of supervisory expertise and the willingness of supervisors to reflect usefully on their taken-for-granted expert practices were thought to have important implications for the initial and continuing education of PhD supervisors, the relationships between supervision and formal research training, ESRC research training policy, and future research on the craft of PhD supervision.

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GENERAL INTRODUCTION TO THE THESIS

The main aim of this investigation is to describe and explain the knowledge-in-use of expert and experienced supervisors in the fulfilment of their roles and their responsibilities for social science PhD students. The stimulus to conduct such a study came from the central importance accorded to supervision in policy documents, for example, issued by the ESRC, and from the limited nature of available public knowledge about the processes of PhD supervision. While conceptions of what is to be regarded as expert PhD supervision must, to some degree, depend on the resolution of major policy issues concerning, for example, the nature and purposes of the PhD, its appropriate scale and scope, the kind of contribution it should make to society and within what timescale, such conceptions also need to be informed by the nature of the problems which confront supervisors and their students in practice and by the approaches and insights which expert supervisors have developed for dealing with these problems.

This study is situated in the context of the development of higher education postgraduate policies and practices over the past decade and aspires to contribute to that development. Subsidiary aims are, first, to provide a well tested conceptual framework within which the detailed reporting of the 'knowledge-in-use' of expert supervision may be thought about and developed further in diverse contexts of use and for different purposes; and second, to identify new or unresolved issues which may lead to useful research in the future.

The PhD (or DPhil, as it is sometimes known) is the highest usual form of academic accreditation and such a qualification is normally required for entry to an academic career. To register for a PhD, a student is expected to have successfully completed an undergraduate degree with first or upper second class honours or a Master's degree in a discipline or subject area relevant to the PhD topic (Becher and Trowler, 2001). Even where these criteria have been most perfectly met and a student's resolve to succeed is exceptionally strong, they can experience difficulties with their studies as a result of such things as the length of time over which such efforts are required or pressures arising from the nature of the work (Henkel and Kogan, 1993). One thing over which there appears to be some measure of agreement amongst various protagonists is the centrality of supervisors' support for their PhD students and their students' work, and it is generally acknowledged that having an expert supervisor can make all the difference between the success and failure of the enterprise and the quality of the learning experience (Moses, 1985; Acker et al, 1994a; Pole, 1997).

The 1990s have seen increasing attention from social scientists and educationists to making more public the characteristics of good supervision (and good students) (Graves and Varma, 1997; Phillips and Pugh, 2000; Cryer, 2000). However, the emphasis in these contributions tends to be on prescriptions for what supervisors should be doing. Clearly, such perspectives provide valuable insights and are of theoretical significance but I am unaware of the existence of a distinctive phenomenological research approach addressing the practical logic underlying good practice at the level of supervisor and student interaction.

One possible reason for the apparent lack of public knowledge in this area is that the more expert and experienced supervisors become, the less likely they are to make explicit those things most taken-for-granted in their own patterns of activity. As seems to be the case with other experienced professionals, many see these activities as so routine, obvious and ordinary that they seem to merit little comment (Benner, 1984; Dreyfus and Dreyfus, 1986; Brown and McIntyre, 1993). This study is dedicated therefore to identifying what PhD supervisors in the social sciences do well, how they do it and why, and, wherever possible, identifying principles or shared logic underlying the practices of supervisors in the specific contexts in which their work is carried out.

Theoretical and conceptual frameworks

The research is disciplined by the sociological phenomenology of Alfred Schutz (1962, 1964) concerning the 'mundane reality' or the 'phenomenology of the natural attitude', and by the 'postulates' or principles set down by Schutz for the conduct of scientific enquiry. The reason for my choice was that Schutz is committed to grasping subjective meanings scientifically and to examining the question of how it is possible to do so. Many of the fundamental distinctions he makes between, for example, 'scientific' (or objective) constructs and 'common-sense' (or subjective) constructs, and between 'first and second order common-sense' constructs, have been widely ignored in educational research. Subsidiary aims of the research are: to return to the roots of phenomenological research in Schutz's writing; to inject some of the original rigour and discipline of his thinking into the research being proposed; and to test the applicability of phenomenological constructs to the phenomena being investigated.

The research used a combination of survey and case study approaches: a student survey to determine systematically students' needs and their criteria for 'expert' supervision, and six supervisor case studies to find out how expert supervisors met these needs. The survey involved a postal questionnaire which was sent to all ESRC research students who started their funding in 1990, 1991 and 1992. The six case studies of the processes of supervision were conducted through observation of, and interviews with, supervisors identified from the student survey as having outstanding expertise.

Personal involvement

My interest in supervision, and on research into supervision, stemmed from my position as a Senior Scientific Officer at the Economic and Social Research Council (ESRC) Postgraduate Training Division from 1991 to 1998. The ESRC is a semi-independent body with responsibility for distributing UK government money for research in the social sciences and for the support of postgraduate students to study at Masters and PhD level. I was appointed to the post in November 1990 to assist the ESRC's academic advisory group (the Training Board) in the development of a comprehensive research training policy. Later, I helped to implement that policy in the context of ESRC requirements and strategies for the funding of postgraduate research students and the 'recognition' of higher education departments in the social sciences for research training and supervision.

One important part of this ESRC initiative was the development of research training guidelines (The Postgraduate Training Guidelines, 1991, 1996) which made explicit ESRC criteria for good research training and supervision and informed the processes

of selecting departments which met these criteria to receive ESRC research studentships. With a commitment to a formal training as part of the education of research students, I became interested in questions about the supervision of PhD students and how it articulated with ideas about formal education and training for social science research.

The structure of the thesis

Following this introduction, Chapter 1 is devoted to an outline of the political contexts in which the supervision of postgraduate research students became a focus of government concern in the 1970s and 1980s and the role of the ESRC in dealing with these concerns. The events leading up to the ESRC research training initiative, its implementation following the publication of the Postgraduate Training Guidelines, and the problems and possibilities raised are described and linked to the roles and responsibilities of PhD supervisors. Chapter 2 explores the different conceptions of supervision in the literature and the criteria for good supervision applied by different groups with vested interests, for example, students and higher education institutions. Research into supervision is reviewed to establish a firm basis for identifying outstanding research issues and to establish gaps in research into supervision.

Chapter 3 is concerned to set out an appropriate theoretical and conceptual framework from which research questions are formulated to give direction to the research and to aid the analysis of data. These are drawn from the sociological phenomenology of Schutz and, in particular, his five postulates for the conduct of empirical phenomenological research. There is a review of more recent methodological traditions and research methods derived from Schutz so that his ideas as originally

stated can be up-dated or supplemented, and issues of the strengths and weaknesses of a phenomenological approach can be raised. The chapter concludes with some implications of these frameworks for the research questions and for the design of the empirical research (a student survey and supervisor case studies).

Chapter 4 addresses the overall design features and processes of decision-making underlying my choice of approaches, a student survey and supervisor case studies. Their relationship to the conceptual frameworks (Chapter 3) are explored, and rationales are provided, for example, for the sampling and research techniques adopted in the light of competing alternatives. Access, planning and implementation considerations for the student survey are outlined. Chapter 5 reports on the analysis, conclusions and implications of the student survey. Chapter 6 introduces the design considerations for the six supervisor case studies. I describe the research principles and methods which informed the planning and strategies adopted, some pragmatic considerations, and the criteria for success to be applied. In the concluding section, I examine the conduct of the case studies to see how far my criteria were met. Chapter 7 reports their analysis and conclusions.

In Chapter 8, I summarise the conclusions of the investigation, addressing questions of how the case study supervisors met the most frequently mentioned types of student needs arising from the student survey, and the strategies and logic they applied. Questions related to the ESRC research training policy raised in Chapter 1 are revisited to see how this research might contribute at the policy level. The implications of these conclusions for the induction of new supervisors and for future research into supervision are discussed.

CHAPTER 1 THE POLICY SETTING

The historical and policy context, within which the supervision of social science postgraduate research students needs to be considered, is outlined in this chapter for two reasons. First, it was necessary to attend to that broader context because the practices of supervisors and students, and the concerns, dilemmas and tensions which inform these practices, are likely in some measure to be directly influenced by the requirements of policy-makers and perhaps by the relatively recent developments of these requirements (Bowen and Rudenstine, 1992; Collinson and Hockey, 1995, Burgess et al, 1998). While the thesis is primarily concerned with the perspectives of supervisors and of research students, understanding these perspectives may depend on an understanding of the historical and policy context within which they are working. Given that a secondary purpose of the thesis is to contribute to policy thinking about good supervisory practice and how such practice may be fostered, it can only be served if current policy is recognised and understood.

SECTION 1 Postgraduate education, the PhD and the ESRC research training policies

In an attempt to stem economic decline in the 1990s, the government sought to adopt more interventionist policies than in previous years (Becher et al, 1994; Vroeijenstijn, 1995). One of the main reasons, it could be argued, was that universities had for too long pursued their own agendas for teaching and research, accountable only to themselves and the academic constituency. Universities seemed to have seen little need to articulate in any explicit way the nature and purposes of their own policies

and practices, nor were the complex criteria of their own academic standards explained. It seemed sufficient that these standards were implicit in the ongoing and constantly developing nature of their research and scholarship, the demands made from students and the opportunities offered to them (McNay, 1995). Macmillan (1995) commented on the dangers of allowing others to take the initiative with reference to the nature and purpose of the academic PhD:

Academics ought to be doing more to rethink the point of the PhD and to set the agenda for change themselves (Macmillan, THES, 15 September, 1995: 18).

The UK government believed that universities could and should contribute more generally to the production of a more highly trained and competent work force, providing the necessary technical know-how and the knowledge and understanding to improve UK competitiveness and raise standards of living (Henkel and Kogan, 1993). This would necessitate a closer partnership of Higher Education Institutions (HEIs) with the public and private sectors and better communications (McNay, 1995). The perceived challenge by government to academic goals, values and standards of excellence, and how these had been pursued in HEIs, also had positive outcomes. It had, for example, galvanised HEIs into greater efforts to make the nature of their policies, standards and practices more visible (Burgess, 1996) and to justify them (with a little help from the government appointed agency, the Higher Education Funding Council, HEFCE, and later, from the Quality Assurance Agency (QAA)).

Impact of postgraduate education

Connor (1994) reported an unprecedented increase of 25% in the numbers of graduates with higher degrees in the social sciences between 1986 and 1990, and steps

were taken by universities to rectify a longstanding neglect of that sector. Provision and arrangements became more systematised and open to view. In 1994, the UK Council for Graduate Education was set up (Burgess, 1996, Pole, 1998), and many universities had already instigated Graduate Schools to cater for their postgraduate populations and “to promote a distinct identity for graduate education and research” (Burgess, 1994). The development of Graduate Schools was timely as recruitment of students to Masters courses was doing well, and students with Masters degrees were doing well in the job market (Connor, 1994).

However, there were problems with the use of PhD qualifications outside the university job market. Especially in the social sciences, much less value had been attributed to the processes and outcomes of PhD study by employers outside universities (Tight, 1991; Henkel and Kogan, 1993). Tight (1991) suggested that, because of the longer timescale required to satisfy university degree regulations and meet the criteria for success, the average timescale for completion of the degree in the social sciences was regarded as inappropriate to the timescale normally driving market practices. The specialised and academically orientated focus for research was not generally regarded as a useful preparation for work outside universities (with some exceptions), although many regarded the more generic skills such as abilities to think independently, analyse and write as beneficial. The overall conclusion was that fewer employers were thought to prefer the PhD as a recruitment qualification to a Master’s degree (Bowen and Rudenstine, 1992). Connor (1994) confirmed that there was little demand for students with PhD qualifications outside academic institutions.

The nature and purposes of a social science PhD

The PhD is the highest form of formal accreditation for academic work and is normally required for entry to an academic career in teaching and research in higher education (Becher and Trowler, 2001). Typically, HEIs stress the outcome of a PhD as an original contribution to knowledge (Tinkler and Jackson, 2000). However, a number of national enquiries were set up during the 1970s and 1980s to investigate the need for change in the PhD, and to advise on the shape these changes might take. The main questions addressed by these enquiries were about how the PhD might best cater for the needs of employers outside of universities more effectively. Manpower needs and value for money for the contribution of government to PhD students through research council funding were important issues in these enquiries. The lack of clarity of the purposes of the PhD and the paucity of information and research to aid enquiries were frequently cited as making it difficult to assess the situation. The Swinnerton-Dyer Report (Advisory Board for the Research Councils (ABRC), 1982), was concerned, for example, with poor submission rates which were attributed to inadequate supervision and students' lack of knowledge of research methods and motivation. The report advocated, amongst other things, a larger component of research training in the PhD.

ESRC Research Training Policy

In the social sciences, there were even more reasons for concern. In the early 1980s, the Economic and Social Research Council (ESRC) (then the Social Science Research Council) had taken a number of ad hoc measures to increase submission rates but these remained low in comparison to those of other Research Councils. Under

increasing pressure from the UK government to improve social science submission rates, the ESRC set up a Task Force chaired by Dr Graham Winfield in July 1985 to recommend action. The focus of the Winfield task group was on PhD submission rates and on the number of students who failed to complete the degree. Thus, its starting point was the very low rates of thesis submission from ESRC funded students and drop out rates.

Table 1

The number of ESRC funded research students submitting their theses within 3,4, and 5 years of their start dates

Year	Total no of students	Less than three years (%)	Less than 4 years (%)	Less than five years (%)
1976	491	2.9	10.6	22.6
1977	589	5.6	12.6	24.8
1978	603	4.0	15.4	26.2
1979	464	3.9	17.4	29.3
1980	369	3.3	18.2	23.8

Those registered at Masters level completing or submitting at that level, or dropping out within the first year of the PhD, were excluded from this data. Source:ESRC data base, 1984

The causes of the problem of submission rates were thought to arise partly from historical factors and partly from the inherent tensions between the “training, learning and knowledge-generating elements” (Winfield, 1987: 1) (Wright and Cochrane, 2000). As experienced by other enquiries before it, the lack of literature and confusing variations in how the purposes for a PhD were defined had hampered debate and resolution of uncertainties. Winfield (1987) acknowledged the tensions between the training, learning and knowledge generating elements of the PhD and advised the ESRC that it was not its responsibility to resolve the tensions. What was needed were clear ESRC statements about the PhD having a training element as well as making a contribution to new knowledge. Concerning low submission rates, it was concluded

that no evidence had been submitted to suggest that a PhD in the social sciences could not be completed within a four year period. The Winfield Report was not without its critics amongst the academic community. Delamont (1989), for example, questioned the appointment of a task group and contributors which were almost exclusively male. She argued that “the invisibility of gender as a dimension in the debate” (Delamont, 1989: 52) was likely to lead to policies based on simplistic models of students as “young, geographically mobile [and] male” (Delamont, 1989: 51). Thus women, and especially mature women, could be disadvantaged.

Major recommendations from the task force to the ESRC were to: increase the training element of the PhD; require improvements from institutions in their arrangements for doctoral study and supervision; and develop an improved sanctions policy which would deny financial support to institutions with a low success rate. The report concluded that:

Council has a rare opportunity to influence the quality and nature of doctoral study in this country. We hope that the chance will be seized with a sense of timeliness and firmness of purpose and that this will be sustained over the several years during which change will be required (Winfield, 1987: 6).

Following the publication of the Winfield Report (1987), broad agreement was reached between the Research Councils and the then Committee of Vice Chancellors and Principals (CVCP) of universities on two general and inter-related purposes for the British PhD. They were:

1. to enable young people of high intellectual ability to develop and bring to fruition as far as possible the quality of originality, to contribute new and significant ideas, and to make a positive contribution to knowledge and creativity in their respective disciplines;

2. to provide a training in research methods which makes them capable subsequently of assuming the role of independent scholars and research workers at the highest level, capable of planning and carrying to completion a well conceived plan of research directed towards a given objective without the necessity of supervision from experienced people (CVCP, 1988: 5).

This statement was important, representing an official view on a contentious matter.

The ESRC Training Board took up the challenge, and a consultation paper (The Green Paper, 1989) was developed and distributed to academics and employers in universities and employers of social science research postgraduates outside universities. It addressed the three important issues raised by Winfield (1987), namely, research manpower; the content of research training; and the role of the PhD in research training.

With respect to research manpower, the government pressure for postgraduate training to be more closely linked to business and industry was played down in the Green paper (1989). Instead the emphasis was on social scientific manpower and replenishing the science base and the need for the ESRC to attract additional government resources for research training by demonstrating that the success rate of its PhD students was comparable to those of other Research Councils. In relation to the content of research training, it was emphasised that more could be done to improve and extend the technical competence of social scientists in the UK. In terms of the role of the PhD in research training, the tensions between the different purposes for the PhD, a contribution to knowledge and acquisition of research skills, were acknowledged:

ESRC's view is that these potentially conflicting interests can (and must) be successfully resolved. While recognising the very real contributions to academic

thought and literature through PhD research, Council support for doctoral studies is premised on the understanding that such studies provide a suitable vehicle for producing trained researchers (The Green Paper, 1989: 4).

Responses were invited on the issues presented for discussion, and the ESRC sought a clear mandate for the introduction of stronger policies and requirements for substantial, formal and broadly based research training as part of doctoral studies.

The ESRC Postgraduate Training Guidelines

Taking account of the ESRC Green Paper and the consultation responses, working groups of academic researchers were set up in different subject areas and disciplines to agree and document the research knowledge, skills and understandings they considered essential to students in becoming competent and professional researchers.

The papers produced as a result of discussions were used by the ESRC to draft a set of guidelines which was published in March 1991. These guidelines were important because they made ESRC postgraduate training policy explicit and widely available.

They were revised and re-issued in February 1996, and any references from this point are to the revised version. The ESRC Postgraduate Training Guidelines (1996) were intended to serve two main purposes:

- i) to indicate broadly the skills and competencies which postgraduate students should have acquired, and the overall context, objectives, content and amount of training which they should have achieved by the time they have completed a research degree, if they are to be accepted as professionally trained researchers in their subject/discipline areas;
- ii) to provide explicit criteria for ESRC's appraisal of outlets' doctoral provision and of Master's courses focused on research training. Fulfilment of these criteria allows successful applicants for ESRC recognition to receive ESRC studentships (Postgraduate Training Guidelines, 1996: 2).

Five general criteria were outlined including: the adequacy of provision of formal, broadly-based training; the adequacy of the arrangements for the supervision of students; the presence of an active research environment; an adequate critical mass of students; and satisfactory submission rates. As explained in the Guidelines, such emphases were expected to enhance students' future careers, inside or outside academic institutions, at the same time as meeting academic expectations for the production of a research thesis which made an original contribution to knowledge and on which the award of a research degree would be assessed.

In seeking to strengthen its quality control and monitoring procedures, the ESRC continued to implement its submission rate survey annually with a revised sanctions policy from 1990. The general idea of the sanctions policy was:

to calculate the aggregate submission rate for all ESRC research students in each institution. That figure is compared to the ESRC sanctions rate (ESRC, 1997: 3).

In 1992, the Training Board set up annual monitoring visits in order to assess the ways in which ESRC recognised departments were delivering research training in response to the *Postgraduate Training Guidelines* and to identify and disseminate good research training practices. It was thus that the ESRC developed its integrated policy and quality control mechanisms for promoting the development of substantial, formal and broadly-based research training. Related to that, the policy was also aimed at meeting both the requirements of government for a highly trained, professional work force and the needs of its academic constituency, a difficult balancing act.

One major issue arising for academic supervision from the requirements of government for a highly trained work force and the ESRC initiative, aimed to improve

and widen research training through PhD study, is that most universities, even now, continue to stress that a PhD thesis “should constitute a substantial original contribution to knowledge” (Guide to Examinations for Higher Degrees by Research, The University of Warwick Graduate School, 2001: 7). Nor have there been many policy constraints on PhD work nationally or within universities which might have brought about significant changes in university requirements. In this situation, the ESRC’s research recognition and submission rate policies, backed up by its sanctions policy and the awards of research studentships, have imposed potentially demanding new constraints on PhD supervisors which may have affected not only their priorities but also the nature of the expertise they need to take account of such demands (Collinson and Hockey, 1995). The ESRC’s requirements for a substantial, formal and broadly based training are likely to have had expected (but also, perhaps, unexpected) effects on the nature of the PhD and therefore also on supervisory tasks (Collinson and Hockey, 1995; Delamont et al, 1997b). These new demands and expectations, taken together with variations in conceptions of research and research training and differences in the ways social science departments organise and administer their arrangements for PhD studies, constitute the context for this study.

SECTION 2: Supervision

That good supervision and supervisory arrangements are central to satisfactory PhD completion is a view shared by many researchers writing about PhD supervision (Zuber-Skerritt, 1994; Burgess et al, 1994; Pole et al, 1997). Evidence suggested, however, that a significant number of academics were less than enthusiastic about the ESRC research training policy (Becher et al, 1994; Parry et al, 1994; ESRC, 1995). In the light of the warning from Winfield that change would not come overnight, such

lack of enthusiasm seemed inevitable. It would be easy to assume that the academics expressing these views represented a vocal and sometimes vociferous minority, and to discount their views. However, they seemed to be sufficiently widespread to suggest that there was an endemic problem with ESRC policy and the way formal research training was represented and implemented (O'Brien, 1995). It is therefore necessary to see its representation and implementation from a supervisor's point of view. Much of the dissatisfaction with the initiative could be seen as a rejection of an apparent ESRC view that what mattered most was formal training whereas most academic supervisors were likely to think that students' work with their supervisors was much more important (Parry et al, 1994). With specific reference to the ESRC Postgraduate Training Guidelines, such a view might be excused given their emphasis on the formal training elements and the lack of emphasis on supervision. For example, most obviously, there were sixty-six pages to the 1996 Guidelines and the requirements for supervision could all be said in two pages, despite the assertion that:

The roles and the responsibilities of supervisors and the arrangements made for supervision are central to the successful completion of high quality research and achievement of good submission rates (ESRC Postgraduate Training Guidelines, 1996: 13).

Criteria for adequacy of supervision

Nor is it a simple matter of the amount of space given to requirements for formal training relative to those for supervision. The level of coherence, detail and preparation which characterises sections of the Guidelines dealing with matters of formal training contrasts starkly with the very generalised expectations outlined for supervisors. It is also not difficult to explain the relative emphasis. The Training Board members saw the issue for the ESRC at the time as persuading institutions,

departments, supervisors and students of the benefits of formal provision and of engaging actively in more structured, systematic and explicit training, complementing but not replacing the more traditional, less formal, and responsive modes of support provided by supervisors. It seems clear in hindsight, however, that the relationships between supervision and formal training should have been considered as an essential part of a cohesive approach to the education of postgraduate research students (Bowen and Rudenstine, 1992; O'Brien, 1995; Collinson, 1998). Part of the reason for not considering the relationship, perhaps, is that supervision has in most cases remained a very private affair. If improving supervision is an important aim, a good starting point for research is establishing clearly what actually happens currently in the processes of supervision.

Accountability

The implicit and largely taken-for-granted nature of supervision has meant that the ESRC has less than it might have to say about the criteria of adequacy of supervision (Welsh, 1982). The downside for supervisors is, perhaps, a perceived devaluation by the ESRC of the supervisors' personal contribution to research training. Winfield (1987) asserted that the roles and responsibilities of supervisors play a central part in timely submissions and successful completions of students' theses. However, ESRC consultants reported difficulties in knowing whether or not a department was providing quality supervision from its responses on an ESRC recognition application form. This suggests that good supervision does not necessarily depend on departments meeting the criteria related to the management or organisation of supervision and that there is more to it than that. If the quality of supervision is to be an important consideration in awarding ESRC recognition, then it would appear that the criteria

used have to be clearer and more sophisticated. For example, how are students' responsibilities for making a creative, independent contribution to knowledge in their discipline separated out from supervisors' responsibilities for helping them to do that? A related problem for supervisors is striking the appropriate balance between giving students the independence they need to establish ownership over their own project and being directive, for example, when problems are detected (Hill et al, 1994; Burgess et al, 1994). If the ESRC were to attempt to apply criteria of adequacy in a more coherent way than happens at present, it would have to acquire a better understanding, not only of the criteria themselves, but also of the level of responsibilities that supervisors are prepared to accept for meeting these criteria.

'Informal' training

In that the ESRC makes a clear distinction between formal training, predominantly in the first or foundation year of PhD, and other kinds of training, it seems reasonable to assume that 'other training' can be categorised as 'informal' training through work with supervisors; and how supervisors conceptualise what they do will be explored in the course of the research. There are a number of problems which arise in defining the informal contribution made by supervisors to teaching and learning. Becher (1989) remarks on the way academics represent themselves:

membership of the academic profession-at least in elite departments-is defined in terms of excellence in scholarship and originality in research, and not to any significant degree in terms of teaching capability..if it is indeed the leaders in the field who set the norms, those norms do not for the most part appear to include pedagogic considerations (Becher, 1989: 3).

Whether or not supervisors would describe themselves as engaging in teaching research students, ESRC policy does assume a considerable measure of supervisory

responsibility for students achieving its research training purposes over the full three years of a research student's award. If responsibility is accepted by research trainers and/or supervisors for students' successful completion of high quality research, it is not at all clear that there is a common 'language' for communicating the distinctively educational aspects of formal or 'informal' training, or the distinctions made between them, and this has implications for what might constitute useful research into supervision

Implications

In providing a policy context for the planned investigation of the practices of expert PhD supervisors, this chapter has briefly summarised the national policy initiatives taken over the past fourteen years or so, primarily by the ESRC, to justify the use of government money for the support of social science PhDs. These initiatives are likely to have imposed a number of demands and constraints upon university social science departments, notably through its recognition and sanctions policies, which have impinged upon the work of PhD supervision (Collinson and Hockey, 1995; Delamont, 1997b). One initiative which may be especially important is the requirement, for those departments wanting ESRC recognition, that PhD students complete substantial, broadly based, formal research training programmes. Some questions about how these formal training programmes may influence supervision practices include: how do supervisors construe the relationship between what they do and formal training provision, and what are the implications for their roles and responsibilities? With reference to the emphasis of the ESRC on research training for careers, how do supervisors' construe their contributions in these or other terms? Is it possible to generalise in a subject specific way, or more widely, about what an effective

contribution or 'informal' training might look like? Given the ESRC's lack of clarity and coherence in describing its expectations for supervision in the recognition context, what are the criteria for successful supervision applied by supervisors and what levels of responsibility might they be prepared to accept for meeting them? What criteria do students apply? In view of the tensions between the two CVCP defined purposes for the PhD (1988), how do expert supervisors resolve the tensions between the need for students to take responsibility for the production of a creative and independent contribution to knowledge and their own contribution to education and training and/or the need to be directive. What implications do their resolutions have for the relative responsibilities which might be accepted by supervisors and students?

Perhaps the most striking implication for PhD supervision of the policy initiatives reviewed in this chapter relate to the relative *absence* of policy initiatives directly concerned with supervision. As yet, policy makers, aware though they clearly are of the central importance of supervision, have, nonetheless, felt unable to take steps relating to the apparently implicit, private and, perhaps, taken-for-granted processes of supervision (Welsh, 1981). By failing to provide clear criteria for supervision as an important part of the education and training of research students, the ESRC may have given the impression of downgrading the importance of supervision, and leaving departments unaccountable for what is probably the most important aspect of their PhD programmes. There seems to be a need to ask: what are the criteria for success for supervision, and what is involved for supervisors in meeting these criteria?

CHAPTER 2 THE NATURE OF SUPERVISION: A REVIEW OF THE LITERATURE

This thesis was situated in the political context of university provision for the education and training of postgraduate social science research students. ESRC initiatives to introduce formal research training were part of its requirements for the recognition of higher education institutions (HEIs) and departments to receive research studentships. The ESRC stressed that the quality and amount of supervision provided for research students was central to research training provision and an important factor in ensuring that student research was worthwhile and completed within the expected timescale. In Chapter 1 I argued that, in taking this initiative, the ESRC had neglected the issue of criteria for the adequacy of supervision, the level of responsibility supervisors might be prepared to accept for meeting these, and how the relationships between the roles and responsibilities of supervisors and the broader, more formal research training which it advocated, is conceptualised. Before proceeding further, it is necessary to understand more about how supervision is conceptualised and what criteria might be applied to 'expert' supervision.

This chapter is concerned with placing my thesis topic in its intellectual context. The aims are: to understand how those with a vested interest in expert supervision conceptualise supervision from their different positions, view points and purposes; to ascertain the extent and nature of previous research into supervision; to identify the issues which are raised; to determine where research into supervision might be most relevant and useful for understanding what expert supervisors do well, how they do it, and why; and to assess the implications.

SECTION 1 General conceptions of the craft of PhD supervision

Taken-for-granted patterns of action in professional life are often referred to in the research literature as 'craft knowledge'. An important distinction which is often made in the literature (Schön, 1983, 1987; Eraut, 1994; Parry et al, 1994; Delamont et al, 2000) between knowledge which is taught and 'craft knowledge' is that the former is 'codified' knowledge which is made explicit, open to debate, and publicly available in books and such like. This is the type of knowledge most readily available to PhD students through, for example, the literature and research training courses. Craft knowledge is normally referred to as implicit, practical knowledge which has been acquired from experience of one's day-to-day work over a considerable period of time. It is the kind of knowledge which expert and experienced supervisors as practising researchers have, and need to communicate to students (Hockey, 1997). Schön (1983) called it the "spontaneous behavior of skilful practice" (Schön, 1983: 51). In the context of research into supervision, Delamont et al (2000) used the term 'indeterminacy' (in contrast with the 'technicity' of skills which have been made explicit and can be taught). Eraut (1994) commented on the progress that has been made by researchers in recent years in codifying knowledge which previously would have been termed 'craft knowledge'.

The idea of supervision as an 'apprenticeship' reflects the nature of craft knowledge as 'caught' rather than 'taught', through close contact with, and observation of, an experienced researcher at work. But, as Brown and Atkins (1990) pointed out, supervisors need to be able to make their own normally implicit craft knowledge of research accessible to students and by the very nature of craft knowledge, this can be

a problem. The focus of this research is not, however, on supervisors' articulation for their students of their craft knowledge as researchers. *It is instead on their craft knowledge as supervisors, the knowledge embedded in their practice of supervision.*

How one conceptualises the craft of 'good' supervision is likely to depend on such things as one's particular discipline, one's view of research and the purposes of supervision in relation to that research, and the positions from which these understandings are to be applied (for example, as a manager, supervisor or research student). Supervisors may differ in their conceptions of supervision, one from another and from their students and managers, depending, amongst other things, on the research traditions and cultures with which they identify (see Parry et al, 1994, 1997; Delamont et al, 2000; Becher and Trowler, 2001). This section focuses on the conceptions that supervisors have of the craft of supervision. In the literature, at least three general conceptions of supervision can be distinguished, of which one or another is dominant in the descriptions offered. These are supervision as: a *research craft*, that is, the transmitting to students through close working contact of largely tacit knowledge and skills of doing research; a *teaching craft with the deliberate intention of managing student learning*; and the *craft of managing* students, projects and progress.

Supervision as a research craft

There is some support from commentators on supervision for viewing supervisors as 'master craftsmen or women' in research, and, following from that, supervision as 'apprenticeship' and research students as 'apprentices' (Burgess et al, 1994; Hockey, 1997; Pole, 2000). A major assumption is that students learn more about research

from experienced practitioners on the job, and through trial and error, than they do in formal teaching contexts. Formal teaching of research methods tends to be premised on the idea that there is well documented and tested knowledge about research which every research student should know (ESRC, 1996). It can be delivered in the form of lectures or classes where there may or may not be opportunities for students to explore the implications of given information for their own projects. It may be left to individual students to take the implications on board and to put the skills into practice. In contrast, learning by example or by doing takes place in the context of the ongoing work. What is learned is through direct experience, is an integral part of a whole purposeful 'real world' enterprise, and ideally involves the learner in taking responsibilities well suited to his or her stage of development (Delamont et al, 1997a).

An account of the merits of research supervision as an induction into the research craft was given, for example, by Allen (1981). He argued that

the apprenticeship model has more strengths than it is given credit: not all research aptitudes can be taught..course work can be counter-productive..less time on investigation..could lead to a..preoccupation with epistemology and methodology (Allen, 1981: 8).

Allen summed up by saying:

Doing research is a craft that cannot be proceduralised and does not have teachable rules, procedures and algorithms. A good researcher shows his craft by being able to see the relationship of his research to existing research problems and questions, the theoretical and philosophical assumptions implied by his research, the practical problems of collecting and analysing data, as well as understanding the implications of the conclusions of his results..the craft of research involves making judgements that find a way through problems in all four areas at once (Allen,1981: 11).

The way research craft knowledge is construed is taken further by research conducted by Parry et al (1994). Using the broad concept of socialisation or enculturation, they examined “how academic work is conceptualised and carried out in four different academic disciplines through the accounts given by PhD students and supervisors” (Parry et al, 1994: 34). The four different academic disciplines were: social anthropology; development studies, urban studies; and town planning. Two organising principles were adopted. The first was “the way in which informants related to, or identified with, particular bodies of disciplinary knowledge” (Parry et al, 1994: 34), and the second was “the way in which this identification..informed definitions of what constituted appropriate disciplinary work in each of the disciplines or departments visited” (Parry et al, 1994: 34). Similar to the view expressed by Allen (1981), the view of respondents in the research conducted by Parry et al (1994) was that:

qualitative methods did not readily lend themselves to formal instruction because their principles defied translation into teaching formula (Parry et al, 1994: 46).

These were views found by the researchers to be widely shared across the predominantly qualitative disciplines they had sampled and shared also by many of those in the quantitative traditions. Thus the dominant view of research craft knowledge was of tacit knowledge which is ‘caught’, and not as knowledge which is formal, explicit and capable of being taught (Delamont et al, 1994, 2000; Parry et al, 1994).

Delamont et al (1997a) described PhD supervision as “Guiding a new scholar into your specialism”, ensuring that “your own work echoes down to the next generation and beyond” (Delamont et al, 1997a: 1). They thus underlined the role of a supervisor,

not just in terms of transmitting skills, but as one charged more generally with the responsibility of preparing the next generation of scholars and researchers and of introducing students into the norms, values and traditions of a discipline's cultural heritage. Delamont et al (1994) emphasised the need to recognise the active agency of students "in negotiating their own occupational socialization; evaluating their experiences, and making strategic decisions about their careers" (Delamont et al, 1994: 148).

Hill et al (1994), complementing the work of Parry et al (1994) in other subject areas, contrasted the views of academics in the areas of Psychology and Education about the nature and purposes of a PhD in their respective disciplines, reporting that:

Psychology supervisors were closer to the orthodox view of the PhD as primarily a means of preparing the next generation of academics by giving them the research skills that an academic needs and by initiating them into the academic way of life...Education supervisors were more likely to mention a variety of purposes and less likely to stress the preparation of future academics. Education research students were often described as simply being interested in researching a particular problem, often one which arose from their work as teachers (Hill et al, 1994: 61).

So whether one subscribes to supervision as 'occupational socialisation' might depend on the nature of the discipline and its orientation to the wider world of work (Delamont et al, 2000).

Supervision as a research 'craft' has much in common with a conception of supervision as 'art' but can represent, in some commentators' accounts, the opposite poles of a dimension. Salmon (1992), for example, takes her position at the extreme 'art' end of the art-craft dimension and is a good example of a writer about supervision who emphasises the creative, independent, knowledge-generating aspects

of PhD work. As an experienced supervisor, she is concerned mainly with the *processes* of doing a PhD, and, in line with the notion of students as ‘active agents’, the concepts of student growth of creativity, independence and authorship are central to her way of thinking.

Such a view is not uncommon, especially amongst those supervisors working within qualitative research traditions. They tend to emphasise the development of the ‘whole’ student (borrowing the term often used by ‘progressive’ educators who talk about ‘the whole child’). A major aim is to meet the personal needs of their students, rejecting concerns with the development of reliable (far less broadly based) research competence for career purposes and stressing the ‘je ne sais quoi’ nature of how students acquire research knowledge (Parry et al, 1994; Leonard, 2000). Supervisors talking in this way tend to de-emphasise specification in advance of what this knowledge might look like given the transformative nature of students as active agents in their own learning.

In some respects, those who view the supervisor as master of a research craft to be learned by the student can be seen in sharp contrast with those emphasising artistry. There is less emphasis on the ineffable, on personal creativity, on uniqueness and much more on the complex craft practised largely in common by those who have gone through the demanding process of learning it. In other respects, the two views have much in common. In particular, there is much that they share in their thinking about the necessary practicality, engagement and situatedness of research expertise and of the key processes involved in its learning (Hockey, 1995b, 1997).

It can be argued that there are several educational issues arising for the research 'craft' approach to supervision. First, any one investigation is likely to involve only a limited range of research strategies, skills, problems and dilemmas. What can be directly learned from working with a master craftsman, however good, on just one investigation has to be quite limited. If learning through formal courses depends on individual students applying generalisations for themselves to their own particular investigations, learning through apprenticeship depends on their undertaking the even more difficult task of generalising appropriately, and not too widely, from the particular investigations with which the apprenticeship deals. It is perhaps qualities of judgement about, and general attitudes towards, research (Allen, 1981; Delamont et al, 2000) which can best be learned in this way. Diverse strategies and techniques and philosophical traditions can, perhaps, be most easily and effectively learned through formal courses (Becher et al, 1994; Bowen and Rudenstine, 1992).

Second, for the great majority of social science students, the relationship with supervisors is not of the traditional apprenticeship kind. Few PhD students in the social sciences conduct a thesis carved out from investigations conducted by their supervisors (Becher et al, 1994; Pole, 1997). It is usually the case rather that the supervisor takes a supportive role. So while some valuable elements of the craftsman-apprentice relation are there in the conduct of the investigation and in the research student's learning, PhD supervision in the social sciences offers on the whole a limited and reduced version of that kind of relationship (Delamont et al, 1997c; Lawton, 1997). It can therefore be argued that the conception of supervision as an apprenticeship, while having some merit, needs to be complemented by other conceptions.

Supervision as a teaching craft

For many, the suggestion that supervision involves the craft of teaching seems self-evident, and, indeed many of those who favour the apprenticeship notion would view apprenticeship as a kind of teaching. Again a spectrum of views is discernible from one extreme, where supervision is viewed as a learning process in which the master researcher is accompanied by a novice researcher to the other, where supervision is viewed as a teaching process in which the supervisor's primary concern is deliberately to promote learning (Brown and Atkins, 1990; Hockey, 1997; Lindén, 1999). For those supporting a view of supervision as deliberate teaching, it is a distinctive form of one-to-one teaching (eg Brown and Atkins, 1990; Moses, 1994; Delamont et al, 2000) and, like other forms of teaching, it requires deliberate planning and the use of a range of teaching skills. Brown and Atkins (1990) are firmly of the opinion that PhD supervision is

probably the most complex and subtle form of teaching in which we engage. It is not enough for us to be competent researchers ourselves – although this is vital. We need to be able to reflect on research practices and analyse the knowledge, techniques, and methods which make them effective. But there is a step beyond even this. We have to be skilled in enabling our research students to acquire those techniques and methods themselves without stultifying or warping their own intellectual development. In short, to be an effective research supervisor, you need to be an effective researcher and an effective supervisor (Brown and Atkins, 1990: 115).

They emphasised relevant supervisory skills of teaching, including questioning, explaining, listening and responding. Hockey (1994a) identified supervisory skills and characteristics such as organisational planning, clarity of communication, flexibility and sensitivity. Delamont et al (1997a) emphasised that “supervising is a skill, or set of skills, that can be learnt and can be improved with practice” (Delamont et al, 1997a: 5). Hill et al (1994) concluded from their research that: “The supervisory

process is best described as a form of teaching-learning. As such it is open to negotiation and change” (Hill et al, 1994: 68). Smith (2001) described supervision as a “genuinely complex teaching task” (Smith, 2001:27). He commented on the tendency of academics to frame supervision administratively, and emphasised the value of framing supervision as teaching, thus predisposing supervisors and researchers to ask “questions about curriculum method, teacher/student interaction, and educational environment” (Smith, 2001:27). A similar view was expressed by Lindén (1999).

Such emphases on supervision as a deliberate, skilled teaching craft seem close to the assumptions underlying the ESRC research training policy (Chapter 1). But this model of supervision as teaching was not made explicit in the ESRC Postgraduate Training Guidelines. In contrast to formal courses, the model is not elaborated in terms of any understandings of what can best be taught through supervision, far less of criteria concerning the kind of good teaching practices which supervision might incorporate. Nor does the literature offer significant evidence on which such practical and educative principles or criteria might be systematically based.

If there has been little research to inform supervision as teaching, there has certainly been the kind of ideological debate about supervision that generally characterises debate about school teaching. This debate has focused in particular on power relationships in supervision. Brown and Atkins (1988) present a number of analogies which they use to describe the different relationships which might exist, at any one time or stage of work, between supervisor and student. These included: “master and apprentice”; “director and follower”; “teacher and pupil”; and “expert and novice”

(Brown and Atkins, 1988: 121). It can be argued that each of these analogies implies a different kind of power relationship. Grant and Graham (1994) describe 'power' on a one-to-one basis, not as something which some people have, but "a relation which exists between two individuals..both capable of action" (Grant and Graham, 1994: 167). Some commentators have reacted to externally imposed policy recommendations by asserting the need for more democratic and developmental relationships and practices than these policies allowed (Elton and Pope, 1989; Salmon, 1992; Delamont et al, 1997c). The preference of Elton and Pope (1989) and Salmon (1992) was to conceive of supervision as a 'partnership' rather than as a 'teaching' activity characterised by inequality where one professed to know and the other was a passive learner. Consistent with this view was a relationship between supervisors and students characterised by 'friendship' and 'collegiality' and recognition of the student as actively shaping their own social realities. Salmon (1992) viewed equality in the relationship as more appropriate for students learning to *think* about research and the role of the supervisor as being to facilitate such thought processes, striking a balance between negotiation and the 'giving' of knowledge. One solution to the problem of achieving a balance between supervisory direction and student autonomy, whilst retaining equality in the relationship, was the establishment of a supervisor/student contract, a negotiated pact (Hockey, 1996c) (although some might regard a 'contract' as managerial in intent).

Several authors concerned with gender issues drew attention to differential power relations between the sexes which could lead to problems in the supervisor/student relationship (eg Lee, 1998; Leonard, 1997, 1998, 2000). They believed that the issues they identified were most pressing with regard to female overseas students, grappling

with a strange culture and language, and the exigencies of national and institutional policy demands for increased efficiency and effectiveness. Acker et al (1994b) placed supervision within an educational frame of reference, referring to issues of 'empowerment' which they described as a process aimed at increasing student capacity "to take control of shaping and directing his/her own work" (Acker et al, 1994b: 233). They identified five student styles or "ways of being a student" (Acker et al, 1994b: 235), differentiated by, among other things, confidence levels. However, as seems to be frequently the case in the supervision literature, the variations in student confidence are rarely linked to variations in what students know or can do, and are instead linked to psychological states or structural factors, for example: "the enemy of empowerment seems to be not the busy supervisor, or inadequate student style, but the very structures and cultures of British academic life" (Acker et al, 1994a: 249).

Supervision as the craft of managing students, projects and progress

Some conceptualisations of supervision, for example, those prominent in national, institutional and departmental Codes of Practice for supervisors and students, emphasise how the student's research will be managed, and such a view need not depend on conceptions of the nature of research. A major facet of such a view of supervision as management is concerned with providing structure and direction to the student's work, especially in the early stages (Wright and Lodwick, 1989, Burgess et al, 1994; Cryer, 2000). Salmon (1992) characterised typical managerial strategies in the context of supervisor/student interaction:

Supervising..means above all keeping the student up to the mark..making sure, by gentle persuasion or by tough talking that the research project gets started, is

carried through and is finally written up. In this, the meeting of deadlines is seen as crucial; it is up to the supervisor to see that time is not wasted. The supervisor's role in all this is that of constantly reminding, prompting, chasing (Salmon, 1992: 19).

The ESRC's guidance on supervision tends, in the absence of any commentary on other things, to be dominated by such managerial concerns. Salmon (1992), in rejecting the managerial strategies she describes, is far from alone. Several researchers have found resistance among supervisors to what was widely viewed as a distortion of supervisor-student relationships as a result of this kind of managerial emphasis (eg Henkel and Kogan, 1993; Delamont et al, 1994; Collinson and Hockey, 1995; Wright and Cochrane, 2000). More positively, it can be claimed that ESRC requirements in relation to submission rates and sanctions are having a beneficial impact in encouraging more careful consideration and debate about the nature of supervisory responsibilities (Hockey, 1996a).

The different conceptions of the craft of supervision portrayed here may be viewed in two ways; first, as opposing constructs, that is, as competing alternatives, and second, as mutually compatible, but different aspects of the role of the supervisor. The most useful way of thinking about them, perhaps, is to regard them *all* as essential perspectives on the craft of supervision, each with their own strengths and weaknesses in practical terms, and each contributing in their own way to a better understanding of a supervisor's complex role (Acker et al, 1994a).

SECTION 2 Good practice in supervision

The remainder of this chapter offers a review of the literature relating to social science PhD supervision with particular emphasis on the research-based literature. This

review is structured by, and integrated with, a consideration of institutional and departmental supervisory Codes of Practice and their criteria for 'good' supervision. The guidance on various relevant aspects of supervision practices is related to the literature, with consideration both of the extent to which guidance is aimed at confronting dilemmas raised in the literature and of how far the guidance offered is informed by the findings of research. In using the Codes as a framework, one concern was that there would be issues raised in the literature which were not comparably represented in the Codes. However, it was possible to address all the issues raised within the given framework. The central purpose of this section is to consider how research-based understandings of supervisory practices, and especially of what might constitute good practice, and the lack of such understandings, might contribute to the refinement of the research issues to be explored in this thesis.

Institutional and Departmental Codes of Practice

The drawing up of regulatory documents relating to the roles and responsibilities of supervisors and students has been a common response of higher education institutions (HEIs), their graduate schools, faculties and/or departments, in part to pressures from outside academia towards a greater degree of public accountability (Burgess, 1996; Pole, 1998), and in part to the expanding graduate population (Henkel and Kogan, 1993; Burgess et al, 1998; Pole, 2000). All institutions of higher education now have supervisory Codes of Practice or guidelines and many of these have incorporated external recommendations from, for example, the Harris Report (HEFCE, 1995) (Pole, 1998) as well as drawing on an expanding literature on the subject and their own needs and preferred practices (Tinkler and Jackson, 2000).

My assumption in focusing on these Codes was that they would broadly represent an agreed version of the collective experience of supervision from the point of view of academics in their capacities as employers, managers, teachers, researchers and supervisors (and, in some cases, students as well) (Pole, 1998). I assumed that the Codes of Practice would indicate a negotiated position, the responsibilities attributed being ones which supervisors were likely to accept or which, at least, would be couched in terms which would allow a measure of flexibility in their interpretation by supervisors. One Institute of Education stated, for example, that the Code was written

in consultation with the Graduate Studies Committee of the Institute of Education and the Institute's Graduate Studies Staff-Student Liaison Committee. The Code has been framed with reference to the Academic Matters section of the University's Postgraduate Student Handbook (1997). Acknowledgement is made to the Department of Sociology for permission to include extracts from its 'Agreement on the Supervision of Doctoral Students' (Warwick, Education: 1).

I assumed that the prescriptions made in these Codes would reflect common problems in PhD supervision experienced by HEIs in the past. I expected, by focusing on institutional and/or departmental Codes, also to learn something about how supervisors related to formal research training in students' first year, and, perhaps as a result, the need to pose new questions.

The ESRC requires that department applications for research recognition include copies of their institutional/departmental supervisory Codes of Practice. The ESRC made available to me a selection of thirty Codes of Practice drawn from successful applicants for Mode A recognition in 1997 (Appendix 1). The second part of my review of the literature is structured in terms of regularly recurring themes in these supervisory Codes which were found to echo common themes in the relevant literature.

Aims of the Supervisory Codes of Practice

Institutions and departments have introduced their Codes as providing a useful framework within which the quality and standards of supervision could be assessed and improved. The aims were similar across institutions, for example, to ensure:

that all research students..are closely and effectively supervised so that the full potential of their research may be achieved and their research completed within the prescribed period of study..The purpose of this Code is to establish a set of standard procedures for all departments based upon common structures and a definition of specific responsibilities on the part of all those principally concerned (UCL: 2).

In conjunction with structured monitoring arrangements and timely feedback, attention by supervisors and students to institutional and departmental Codes was expected to enhance the educational processes, minimise the risks and problems of personality clashes, inadequate supervision or unsatisfactory work, encourage constructive working relationships in an atmosphere conducive to creative research and scholarly work, and provide the kind of harmonious relationship which would lead to the timely and successful submission of the thesis. The overall function was to provide the basis for monitoring the work of supervisors and students, an *accountability* and *developmental* function.

Accountability of higher education institutions (HEIs) to their funders was one theme in my introduction to the thesis. However, in drawing up their own Codes of Practice, it would be wrong to suggest that HEIs have been passive instruments of external forces. The move towards mass postgraduate education and the need of HEIs to organise and manage expansion (Henkel and Kogan, 1993; Burgess, 1996; Pole, 2000) have also been prime factors behind the production of Codes of Practice. Just as important was that HEIs themselves were concerned to make their previous rules and

regulations more readable, more accessible, and crucially, to spell out previously taken-for-granted assumptions about standards and criteria (Chapter 1). Some would argue, however, that HEIs have not gone far enough in making the criteria and standards for the thesis examination more explicit (Johnston, 1997; Hartley and Fox, 2002).

Conceptions of the purposes for PhD study

Typically, HEIs stressed the outcome of a PhD in their Codes of Practice as: “an independent contribution to knowledge” (Cardiff 2:1). That students be, or should become, independent, that doing a PhD is an educational experience and that there should be an element of formal research training were all in evidence in the Codes of Practice surveyed. Grant and Graham (1994), describing their own institutional supervision Guidelines, commented that, after a detailed listing of supervisor and student responsibilities,

the student is told that she or he is ultimately responsible for the success or failure of the thesis..It would seem that, while it is clearly to the credit of the supervisor if a student does well, it is not clearly to their discredit if the student fails (Grant and Graham, 1994: 166).

The telling phrase in the above quotation points to two main issues which have run through debates on supervision. One is related to the degrees of responsibility supervisors might accept for the successful and timely completion of a student’s thesis (Wright and Lodwick, 1989); and the other to the tensions that supervisors have reported from time to time between their providing direction and fostering student independence (eg Ball, 1984; Burgess at al, 1994; Hockey, 1996a; Delamont et al, 1998).

There was considerable support in the literature for the claim that students come differentially equipped for the task of completing a PhD (Welsh, 1978; Delamont and Eggleston, 1983; Hockey, 1996a) and that how much responsibility supervisors accept for helping and guiding students towards a successful end to their studies depended on their assessment of student and project needs, early on and at successive stages throughout the process (McAleese and Welsh, 1983; Hockey, 1996a; Pole et al, 1997). Nevertheless, some researchers claimed that supervisors and students experienced pressures from external sources, notably the ESRC, which emphasised the PhD as a research and time management training for future career purposes rather than as a creative and independent contribution to knowledge and a socialisation into the norms and culture of a discipline (Becher et al, 1994; O'Brien, 1995; Delamont et al, 2000). Their research suggested that supervisors are being pressurised into accepting more responsibility and into adopting more interventionist policies than previously for ensuring that students complete their projects within 3 or 4 years, a more regulatory role than is seen as appropriate for promoting student independence and creativity. These issues underline the endemic tension between different purposes for the PhD (Chapter 1), and a question which remains for exploration in this thesis is about what expert supervisors do to deal with such tensions.

Appointment of supervisors

The Codes of Practice generally stated that supervisors should be allocated on the basis of subject specialisation, aiming to achieve a match between the subject area of the supervisor's expertise and experience and the area in which the student aimed to pursue research. In addition, supervisors were expected to actively pursue their own

interests in research and to have an established research track record. Frequently mentioned criteria for appointment were: “a clearly established international reputation” (Economics, Aberdeen: 3); “an academic qualification at least on an equivalent to that for which the student [being supervised] is registered” (Lancaster, History: 1); and “teachers who have passed their departmental review” (LSE, Sociology: 2). Thus, ideally, supervisors should be reputable researchers with a formal qualification in addition to being a teacher of proven acceptability. Another aim was “to provide adequate supervision in view of available resources and other demands on staff time” (Leicester: 3). So, it was widely recognised that supervisors needed, not only the necessary research and teaching expertise, but also *time* for adequate supervision.

Many researchers have focused their enquiries on reasons for poor submission rates in the social sciences (eg Welsh, 1979; Phillips, 1983; Rudd, 1985) and their relationship to the appropriateness of the match between student and supervisor (Burgess, 1994). For example, Phillips (1983) drew attention to problems arising from mismatches between students who needed constant feed-back and encouragement with supervisors who held deep beliefs about student independence. Several studies have reported on the degrees of satisfaction experienced by students with their supervisors and the nature of their dissatisfactions (Welsh, 1978; McAleese and Welsh, 1983; Becher, 1993; Parry, 1997). McAleese and Welsh (1983) and Rudd (1985) claimed that students in their first year were more likely to emphasise personal relationships with their supervisors as the most important quality. Welsh (1979) found that students in their first year preferred supervisors closer to their own age (with or without supervisory experience) who were also keen teachers and active in research in the area of the students' theses (although reporting later on student preferences in the

third year, she found a change of emphasis to supervisor contact and expertise). With reference to Welsh's earlier findings, Rudd (1985) raised the issue of whether or not *novice* researchers could be aware of the criteria which might inform future satisfaction. He saw conflict between the felt satisfactions of first year students "with a supervisor who is closer to him in age and his longer term satisfaction with a supervisor who can give him adequate supervision" (Rudd, 1985:124). Rudd's response to Welsh's findings suggested that the initial matching of students with supervisors could be a hit or miss affair. As Hockey (1994a) pointed out, the adequacy of the initial match might depend primarily on the supervisors' "qualities of flexibility and sensitivity to student needs" (Hockey, 1994a:186), qualities that the supervisors described by Phillips (1983) seemed to lack.

In summary, the task of supervising PhD students is likely to vary substantially in accordance with the care and effectiveness with which students are selected and matched with their supervisors. Supervision will, no doubt, be most demanding where the skills and motivation of students are least appropriate and where the supervisor-student match least satisfactory. However, whatever the situation, successful matching of inexperienced students with supervisors might depend more on the skills and qualities of the supervisor in the short and long term. For the purposes of this thesis, the question is one of *how* expert and experienced supervisors apply their skills and qualities in promoting and maintaining stable, satisfactory and productive relationships.

Number of students supervised

In the light of other teaching and administrative demands on staff time, most institutions set limits to the numbers of research students supervised by individual members of staff, (as originally suggested in the Reynolds Report (CVCP,1986). The Codes of Practice specified an acceptable maximum of between six to eight full-time PhD supervisees to one supervisor, for example, “Supervisors will not normally have more than the equivalent of eight active full-time research students at any one time” (LSE: 2). There were also concerns: “to ensure that all teaching members..have opportunities to direct postgraduate research” (History, Lancaster: 1). Not only then were institutions and departments concerned with limiting the number of students supervised by any one supervisor, there was also a concern with widening supervisory experience within departments.

Whittle (1994) explained concerns with numbers. Limiting “the workload of supervisors in research, teaching, supervision and other duties permits them to have sufficient time to provide students with proper supervision” (Whittle, 1994: 44). Elton (1994) illustrated the source of the issue. If research supervision was not given a formal time allowance, “It then becomes something that academics are expected to carry out in their own time, as is the case for their own research rather than in properly allocated time as is the case in their teaching” (Elton, 1994: 27). It was not always a matter of limiting the number of students allocated to each supervisor. In small departments, supervisors might have few opportunities to supervise doctoral students (Hill et al, 1994; Delamont et al, 1997a). Nonetheless, the often marginal position of supervision, located uncertainly, as Elton (1994) noted, between teaching

and research makes the issue of time constraints one of likely importance in considering the nature of high quality supervisory practices.

Number of supervisors appointed

The Codes of Practice generally advised that one supervisor should be appointed for each postgraduate research student for the duration of their studies. However, the appointment of more than one supervisor, and a small group or committee concerned with the overall monitoring and review of individual students, was occasionally recommended. Typical reasons for the appointment of a 'subsidiary', 'additional' or 'joint' supervisor were that it

provide(s) for continuity of supervision in the absence or departure of the Principal supervisor...enhance(s) the effective supervision of the student by contributing a second opinion or additional areas of expertise (UCL: 8).

Such dual arrangements were thought especially necessary where there was a need to give probationary staff or novice supervisors experience. In cases of joint supervision, HEIs/departments stressed close communication and contact between supervisors and the student. Thus 'continuity', 'second opinions', 'additional expertise' and initiating less experienced researchers and members of staff into the processes of supervision were all reasons for a divergence from one-to-one supervisory arrangements.

The level of detail and explanations provided in Codes of Practice on joint supervision far exceeds any available evidence that joint supervision was a frequent or more effective occurrence in the social sciences (Burgess et al, 1994; Parry et al, 1997; Pole, 1998). However, the Harris Report (1996) lent support to the idea of joint supervision which assumed, amongst other things, a critical mass of students and

active researchers. This support was questioned by Delamont et al (1997) and Pole (1998) on the grounds that, unlike the natural sciences, many social science departments lacked such critical mass. Parry et al (1997) entertained the possibility that some aspects of a research team approach, as practised in the natural sciences, might be incorporated into social science PhD practices. However, they stressed the importance of learning more about the traditions and cultures of different disciplines and about how these differences might influence policy and practice. Phillips and Pugh (1987) were uncompromising in their support for one-to-one supervision. They outlined the problems of joint supervision as stemming from, for example, a diffusion of responsibility between supervisors which could act “to reduce the commitment of both of them” (Phillips and Pugh, 1987:97), and students getting conflicting advice which may lead them into taking account of advice from both supervisors, thus entailing extra work and frustration. For these and other reasons, they recommended one supervisor with access for the student to other sources of expertise. Pole (1997, 1998) took a more moderate position, pointing out that joint supervision in the social sciences should not be regarded simplistically as “a panacea for difficulties in the provision of effective supervision” (Pole, 1998: 262). The nature of the expertise involved in joint supervision is certainly likely to be different from, and more elaborate than, that involved in one-to-one supervision. For example, effective joint planning implies an explicitness of plans, difficult to combine with the intuitive judgements on which most supervision seems to depend.

Roles and responsibilities of supervisors and students

General descriptions of a supervisor’s role placed emphasis on the support students should receive at various stages in their research aimed at a successful and timely

completion of their studies. It was their duty, for example, to: “help the student carry out their research and to present their results to the best advantage” (Warwick, Continuing Education: 1); “provide appropriate support and guidance..and through expert advice and direction..encourage their student(s) to achieve their research potential” (Cardiff (2): 2); “encourage[ing] them to participate fully in the planning of their research and to take personal responsibility for decisions made” (York: para 3 (a)). There were also expectations in the Codes of Practice that supervisors would be research active, treat their students with courtesy and respect, and maintain friendly and collegial relations with their research students. Students were expected: “to be enquiring and diligent...and to study conscientiously” (Salford: 11-13); and to “take full advantage of the resources and facilities offered by the academic environment and, in particular, [be in] contact with the supervisor, other staff and research students” (Manchester: 24). Students should have early discussions with their supervisor on “the type of guidance and comment [from supervisors] that would be most helpful” (Cardiff, Education: 12). Typically, concerns that the students should accept responsibility for the work were emphasised.

There is a high degree of consensus across departments and institutions that the students are central actors. They have the responsibility for their studies, for pursuing their research and for producing their thesis (but not explicitly for learning). Equally, there is consensus that the supervisor has a powerful support role in helping, guiding, advising, encouraging, stimulating, and offering ideas (but not for teaching). While relative responsibilities are made clear in general terms in relation to the work to be done, ambiguity remains in these Codes as to whether this is regarded as a teaching-learning relationship.

More specifically, the roles and responsibilities of supervisors and students outlined in the Codes of Practice for the processes of supervision are introduced under such headings as the: *'Introduction of students to degree work'*; *'Planning the student's research project'*; *'Student needs for information, guidance and training'*; *'Work in progress'*; *'Monitoring, reviewing and reporting on progress'*; and *'Examination of the thesis'*. I have used these headings to structure the remaining part of this section.

Introduction of students to degree work

Typically in these Codes of Practice, following registration, research students were required to attend a formal induction day or course. Such days or courses were intended to cover a general introduction to the Institution, School and Department and their rules and regulations. Much emphasis was placed in the Codes on early meetings of students with their supervisors. The aim was to establish together right from the start "a clear understanding between supervisors and students" (Leicester: 16). In particular, supervisors and students were asked to discuss and agree mutual expectations, thus avoiding future "misunderstandings, personality clashes, inadequate supervision or unsatisfactory work" (Manchester: 22). They were also asked to discuss and agree: "arrangements...to draw up a written research plan, and making clear the nature of the degree and the expected completion date" (Bristol: 2). Discussions should include supervisors' responsibilities

in relation to students' written submissions. The understanding must cover the nature of comment or guidance the supervisor will offer within the general principle that a thesis must be the student's own work (Leicester: 16).

Of importance for early discussions was the familiarity of students with institutional rules and regulations, especially those concerning health and safety regulations, ethics

and legal issues, those dealing with the rights of other researchers and research subjects or respondents, and acceptable academic practices in making use of the work of others (and the consequences of copying the work of others). Supervisors were expected to: establish the general field of the student's research; explain to the student the nature of research in their discipline(s); discuss the topic for research and the standards which would be applied; and clarify how progress would be monitored and assessed, informally and formally. In departmental Codes especially, supervisors were expected to talk to students about research training, attendance at courses, and to discuss what research training might be required or needed.

Some of the dilemmas arising from the emphasis placed in Codes of Practice on early discussions between supervisors and students are described in the literature as problems of 'communication', that is, the failure of supervisors and students to be sufficiently explicit early on about, for example, their expectations of each other, and to make sufficient effort to understand each other's preferred ways of working, perspectives, needs and feelings, as a way of negotiating and setting up a satisfactory and productive relationship (Murray and Lowe, 1995; Delamont et al, 1997a; Phillips and Pugh, 2000). For this reason, no doubt, the Codes of Practice stressed early meetings so that structured opportunities were there for supervisors and students to achieve clear understandings on the key issues right from the start. At the same time, expecting too much from such early explicitness might be unwise, unless the relationships were seen largely in managerial terms. Not only would shared understandings have to develop over time as students came to understand more about what is involved in doing research, in doing a PhD, and in doing their own topic, but also, the negotiations involved and responses from supervisors to the distinctiveness

of what each student brings to the task, and their needs, are necessarily long term (Becher et al, 1994; Hockey, 1996a; Delamont et al, 1997a).

One element of supervisor/student discussions related to research training and the institutional expectation that students would attend. Research has suggested that students and supervisors can be resistant to compulsory research training requirements, especially in qualitative disciplines (eg Parry et al, 1994; Hockey, 1995; Deem and Brehoney, 2000) (Chapter 1). Formal research training was normally stated in Codes of Practice as required but occasionally advice in that respect was unclear as to whether or not research training was broadly based or mandatory (as required by the ESRC). In one case, for example, supervisors should:

encourage the student to attend where possible..arrange instruction in research methods appropriate to the student's field of study..(Bristol:1-2).

Another problematic area for such early discussions relate to the findings that students differ widely in their readiness, capacity or willingness to take initiatives (Delamont and Eggleston, 1983; Hill et al, 1994; Delamont et al, 2000). Especially where students wanted a great deal of direction, supervisors faced potentially difficult areas of negotiation in preparing them for independence. The question arose of how supervisors achieved a balance between collegiality, friendliness and personal commitment and the need sometimes to take a tougher line (Hockey, 1994b). Effective communication has to be a central component of the ongoing process of supervision, and only a few research projects have begun to unravel what the processes involve. This will, it is hoped, be one area in which the present project can make a useful contribution.

Planning the student's research project

Supervisors were expected to consult with and advise their students on appropriate topics. An 'appropriate' topic is described in the Codes of Practice as one which "can realistically be completed within the normal period" (Cardiff: 10); and "will stimulate interest" (UCL: 6). In some circumstances, choice of topic may be influenced by "research in progress within the department...Industrial needs may, in appropriate circumstances, influence the choice of topic" (Leicester: 16). In meeting timescale requirements, much emphasis for supervisory support was on guiding and helping students to organise and manage the processes of their own research. For example, while ultimately the responsibility for submitting the thesis within the expected timescale was attributed to the student, supervisors should "provide guidance..in planning an appropriate timetable" (Stirling: 2); and "give[ing]..advice on the necessary completion dates of successive stages of the work (Liverpool, Area Studies, A:1). Thus, in the planning of students' research projects, feasibility, relevance and topicality are important considerations as are timetabling and having shorter term targets, but there can be initial and continuing problems affecting student progress in these respects.

The issue of how students' research topics are selected has been addressed by a number of researchers (Rudd, 1985; Becher, 1993; Delamont et al, 1997a). Rudd (1985) related the importance of who selected the topic to the degree of commitment, interest or investment in the topic and how these could be sustained to completion of the thesis. He concluded that it did not matter whose idea it was as long as the supervisor and the student played active parts in defining it. Similarly, Delamont et al (1997a) on the basis of their research, advised that students

must be allocated to or choose a topic that interests them and fires their imagination. If the thesis subject bores them, it is not likely to get finished. A good supervisor asks students some searching questions (Delamont et al, 1997a: 39).

The issue then is likely to be, not about *who* chooses the topic, but how supervisors, as the more experienced and knowledgeable researchers, negotiate with their students in defining the problem to be investigated to arrive at a feasible project proposal which is intrinsically interesting and important to both (Becher et al, 1994), steering a way between direction and allowing students to take autonomous decisions.

In planning ahead, feasibility of the project was of concern in the Codes of Practice. One feature of research undertaken by expert and experienced researchers is their ability to recognise what is and what is not feasible (Becher et al, 1994) and also the need for planning at the early stages of a project (Delamont et al, 1997a). The importance of the selection of an appropriate topic and of students learning how to manage their project was stressed (Wright and Lodwick, 1989; Wright, 1992). It is likely to be difficult for inexperienced researchers to foresee the need for and implications of selecting a project which is practicable in the time available and making plans ahead for its completion. It may be argued that most students will be unaware of the priorities for the use of time and therefore have little idea of the amount of time which should be allocated to different kinds of research activities at different stages (Phillips, 1983). Furthermore, the amount of time to be invested at different points in the research will depend on the nature of the research. For example, experimental or quasi-experimental research normally requires a larger proportion of time to be invested quite early on at the planning stages (Robson, 1993). Anthropological or case study research requires a heavier investment of time at the

fieldwork, analyses and writing up stages (Delamont et al, 1994). Student inexperience in these, and other respects, makes the role of the supervisor in planning the research crucial.

Phillips (1983) researched the issue of managing the project. She hypothesised that students would learn from their experience of underestimating initially how much time they would need to achieve a short term goal for a piece of written work. At the end of a two year period, her interviews with students showed that estimating the amount of time needed for written work was still a problem, although student estimates of the timing of practical work were relatively unproblematic. This led her to suggest that writing was an integral part of thinking and therefore less easy to place within a given time slot. In a study of science students, Welsh (1981) concluded from her identification of the relative distribution over three years of the activities of reading, writing and practical work that, in general, supervisors seemed unaware of the need to ensure a “planned approach” (Welsh, 1981:162).

Issues commonly raised in the literature related to scheduling, student autonomy, and progress, have focused on the question of how supervisors talked about their strategies and tactics in achieving balance between supervisor direction and student autonomy (eg Welsh, 1978; Burgess et al 1994; Hockey,1995b; Delamont et al, 1997a). To some supervisors, it was a tricky issue; some talked in terms of ‘weaning’ processes; and others took a less reflective view, locating themselves at one end or the other of the dimension, directive-non-directive. Student characteristics, needs and contexts were other factors taken into account by supervisors (Becher et al, 1994; Burgess et al, 1994; Hockey, 1996a). Some students took a relatively long time to develop the necessary confidence they needed to cope on their own while others

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appeared to be more proactive, taking destiny into their own hands from the start (Delamont and Eggleston, 1983; Acker et al, 1994b; Delamont et al, 2000). Phillips and Pugh (2000) recommended that supervisors start off in a directive manner, setting work to be done, short term goals and deadlines. As students gained confidence, supervision could entail guidance and support rather than direction. Pole (2000) identified a more sophisticated model where he identified high degrees of involvement of supervisors in early stages, moving into a more detached phase, followed by greater involvement at the writing up stages. However, it was noted earlier (Section 2) that students differed in their needs for direction, some requiring more, some less, and dependent also on the nature of problems arising. Student needs for confidence building, for example through encouragement and praise, were also reported (Welsh, 1978; Wright and Lodwick, 1989; Becher, 1993).

The Codes of Practice conveyed the widely shared understandings that it was the student's responsibility to do the research and to produce a satisfactory thesis, that many students would not start with the capacity to do this, and that supervisors should do what they could to help students develop such capacity. Commentators were generally very clear that this was a demanding and complex task, but only a few could offer any greater understanding of what it might involve in practice than, for example, the relatively simple models offered by Phillips and Pugh (2000) and Pole (2000).

Student needs for information, guidance and training

In the Codes of Practice, the most frequently mentioned types of information for which supervisors had major responsibilities related to: literature sources and resources; current or recent developments in the subject area; research methods or

skills; and putting students in contact with other academics and students. Typically, it was stressed that supervisors should provide information about courses, seminars, conferences, resources and facilities available, and encourage students to take advantage of these. Guidance from the supervisor was expected in all aspects of the student's work, including "the substantive, theoretical, conceptual and methodological aspects of students' particular projects" Warwick, Education:1-2). Students were responsible for listening, taking advice and attending appropriate seminars, training courses and conferences. They were expected to benefit from attendance at external events not only through the content but also through interacting with their peers. It was, furthermore, the responsibility of the supervisor to "encourage[ing] the student to publish the research" (Manchester: 23); and to try to "keep the student informed..of career opportunities..etc." (Lancaster, History: 2). While such matters are strongly emphasised in Codes of Practice, they are not comparably represented in the *research* literature.

It can be argued that issues related to the provision by supervisors of information, guidance and training are central to the processes of supervision and make all the difference to the quality of supervision and the consequent benefits to students (Moses, 1994; Burgess et al, 1994; Hill et al, 1994; Youngman; 1994). As part of the ESRC's Research into Training initiative (1989-1991), a number of researchers concentrated on the processes of supervision. Burgess et al (1994) focused on the processes of supervision (in Economics, Sociology and Business Studies) relating to the organisation of postgraduate studies; how students were socialised into these studies, formally and informally, and the relationships supervisors sought to establish, not only in terms of academic support, but also in terms of practical and pastoral

support. Hill et al (1994) concentrated on supervisory practices in Psychology and Education, including departmental organisational practices and the perspectives of supervisors and students on supervision and its concomitant issues, and I come back to their research later. Youngman (1994) investigated the *content* of supervisory sessions, compiling a check list from 10 research supervisors' and 10 students' chronological self reports on their experiences of what 'actually' happened in supervisions. His check list provided lists of supervisory activities, but the conclusions went little further in exploring the nature of expert supervision, being concerned with patterns in statistical data. I could find no research on the relationship between what supervisors do and provision for formal research training, although frequent references were made to student and supervisor views on training (eg Bowen and Rudenstine, 1992; Henkel and Kogan, 1993; Deem and Brehoney, 2000).

The 'isolation' of PhD students was a recurring theme in the literature (eg Welsh, 1979; Delamont and Eggleston, 1983; Delamont et al, 2000). Many researchers have remarked on the frequency of student comments on loneliness (eg Delamont and Eggleston, 1983; Becher et al, 1994; Hockey, 1994a). In his interview study of the social and intellectual experience of being a research student in the Arts and Education, Ball (1984) commented on the apparent absence of factors in student responses relating to social integration, reassurance from significant others of their worth, and getting guidance. Nonetheless, a high dependence on supervisors for reassurance and guidance was noted. Lack of social integration, the uncertain status of PhD students in the system (Welsh, 1979; Becher et al, 1994; Hockey, 1994a; Parry et al, 1994), and the sudden transition from structured courses at Masters and undergraduate degree level to self-structured independence at the doctoral level

(Hockey, 1994a) were all thought to contribute to academic isolation. Delamont and Eggleston (1983) distinguished between intellectual isolation and social and geographical isolation. They suggested that intellectual isolation was perhaps unavoidable but that HEIs could do more than they did to reduce the likelihood of social or geographical isolation interfering with intellectual work (see also Deem and Brehoney, 2000). There is, however, little in the research literature which focuses specifically on how supervisors might deal with student isolation in their day-to-day practices, and the present research might have a contribution to make in this respect.

Student networking, for example, through student attendance at seminars, conferences or courses, was thought to be one way in which student isolation might be alleviated. (Becher, 1993; Deem and Brehoney, 2000; Delamont et al, 2000). Salmon (1992) defined the traditional arrangement for student seminars as the “presenting of plans, progress and results”, often to academic staff as well as to other students, where the idea was “to define and sharpen up their ideas” (Salmon, 1992: 25). She described the effects, however, as often: “leaving students feeling..uncomfortably exposed to critical judgement and, at worst, undermined and demoralised” (Salmon, 1992: 25). Becher (1993) and Delamont et al (2000) also acknowledged possible tensions of this kind, suggesting student-only seminars as one desirable form of mutual support. Deem and Brehoney (2000) believed that research training courses could help to ease student transition towards independence and avoid student isolation. With respect to facilities and resources, variations were noted across and within institutional and departmental provision, especially for student study facilities (Becher et al, 1994; Hockey, 1994a; Pole, 1998).

Work in progress

Maintaining satisfactory student progress was a recurrent theme in the Codes of Practice with an emphasis on frequent meetings, careful, timely monitoring and reviewing of the student's work, and on recording progress. How monitoring of the student's work was thought about and accomplished is exemplified by one department's summary account:

progress is monitored in a variety of ways all of which are designed to provide support and to resolve any difficulties which may arise. The most basic monitoring device is the periodic meeting with one or both of the supervisors to discuss progress. The submission of written work for comment and the six-monthly meetings with the Postgraduate Committee..fulfil the same function. (Aberdeen, Economics: 11).

Frequent meetings and close monitoring of the student's work on an ongoing basis by supervisors, are closely related to what supervisors and students do together and, as such, may have special significance for this research. In the following sub-sections, the Codes of Practice and related issues are examined under three headings: a) Frequent meetings; b) Submission of written work; and c) Formal review of progress.

a) Frequent meetings

Regular and frequent meetings between supervisors and their students was a key feature in the Codes of Practice related to maintaining student progress. These meetings, amongst other things, allowed progress to be monitored and, where necessary, "the details of the overall timetable for the progress of the work" (Stirling: 6) to be adjusted. Scheduling meetings was the joint responsibility of supervisors and students, the frequency of which would depend on various factors, for example: "the discipline and the period of the student's research" (Stirling: 6), and "the student's

ability..the progress being made and whether studies are undertaken on a full-time or part-time basis” (Birmingham: 4-5). Typical requirements were for at least one or two regular, scheduled meetings a month, agreed between student and supervisor. These should be regarded by supervisors as “uninterrupted quality time” (Stirling: 6), and the decision-making should be recorded. Where students encountered unexpected or urgent problems, they should initiate supplementary meetings so that the matter could be dealt with as quickly as possible.

I would argue that it is regular and frequent meetings between supervisors and students which are at the heart of the work of supervision. Codes of Practice emphasise the importance of these meetings by, for example, requiring that they should be regular, frequent, and given quality time. What they understandably fail to do is to offer specifications for what should happen at these meetings, and yet, it may well be primarily what happens in these meetings which determines the usefulness of the supervision.

The issue of the amount of contact between supervisors and students was frequently raised in the literature (eg Wright and Lodwick, 1989; Becher et al, 1994; Delamont et al, 1997a). The literature prescribing good supervisory practices concurred with Codes of Practice on the issue of ensuring frequent and regular contact between supervisors and students, scheduling meetings, setting agendas and keeping records (Delamont et al, 1997a; Phillips and Pugh, 2000). Notions of how many meetings should take place, however, varied. Delamont et al (1997a) suggested around 30 supervisory meetings a year as appropriate, starting with weekly meetings to cater for possible student ‘drift’. The Codes recommended between 12 and 24 over a year. Hill

et al (1994) noted that many of the supervisors and students they interviewed held weekly sessions, reporting that student dissatisfaction with frequency of contact was minimal. However, other research has suggested that the frequency, duration and quality of meetings could be a source of student concern (Wright and Lodwick, 1989; Pole, 2000).

The study conducted by Hill et al (1994) focused on supervisors, students and key personnel in three psychology and three education departments in three universities. They reported student perceptions of some supervisors' 'busyness' as putting unsatisfactory limits on frequency of meetings, while other supervisors' 'open door' policies and their availability to see their students on demand were welcomed. They found that students and supervisors diverged in their accounts of who set the agenda. Students without exception saw themselves as responsible, whereas supervisors saw agendas as a matter of negotiation. There was consensus on the purposes of meetings, however. These were to: "review[ing] the student's work, discuss[ing] problems which had arisen in their research, and plan[ning] future work" and that "the focus of tutorials shifted as the student progressed" (Hill et al, 1994: 63).

Most 'process' research into supervision has been based on non-observational, self reported data from students and supervisors (Delamont et al, 2000) where the aim was to illuminate student and supervisor views and perspectives on their work (eg Burgess et al, 1994; Parry et al, 1994; Hockey, 1997). Useful as these and similar studies have been, a consequence of the lack of observational data has been a generality of focus, with little attention to the specific things that supervisors do in particular situations being possible. Hockey (1996a) has gone some way towards this in his analysis of

supervisors' generalised accounts of their strategies and tactics, and in linking these to their motives for undertaking supervision (Hockey, 1996b). Yet because he did not find out supervisors' reasons for adopting specific strategies on particular occasions and in particular situations, he was unable to explore the practical principles underlying their strategies and tactics. What is actually done in meetings, how it is done, why and in what contexts, seem to be important questions and offers a central starting point for the thesis research.

b) Submission of written work

Written work submitted by students to their supervisors was regarded in the Codes of Practice as an important indicator of student progress and of the need for help, guidance or advice from the supervisor. It was the responsibility of the supervisor to ensure that students produced work in writing on a regular basis from an early stage. It was expected that written work would be produced in a number of forms, including thesis draft chapters and commentaries on the evolution of an argument. Typically, it was the student's responsibility to submit such work in good written English, typewritten or word processed, in sufficient time "to allow for comments and discussion before proceeding to the next stage" and to maintain "progress of the work in accordance with the stages agreed with supervisors" (Liverpool: 2). It was the responsibility of the supervisor to give "constructive criticism in reasonable time" (Manchester: 23), and to do so "orally and in writing" (LSE, Sociology: 2).

In the process of discussing the student's work, it was expected that supervisors would take the initiative in offering advice, ideas and guidance and giving positive encouragement. Students had responsibility for bringing forward and developing their

own ideas. In helping students achieve independence in their work, supervisors should encourage students “to question advice, and to reach independent decisions..Advisers will defer to the student’s decision wherever practicable” (Bristol: 2); and

warnings that work submitted might not be up to standard of the degree being sought should be given in a clear..tactful manner, with specific and detailed guidance on how the quality of..work might be raised to the requisite level.. (Lancaster, History: 2).

Earlier in this chapter, I raised the issue discussed by Phillips (1983) of students underestimating the amount of time they needed to complete written work, and its implications for progress, and there are clearly a number of difficulties for supervisors and students associated with written work and meeting Codes of Practice requirements.

A number of researchers have addressed issues related to student-writing (eg Becker, 1986; Hartley and Branthwaite, 1989; Torrance and Thomas, 1994; Hartley and Knapper; 1984). Hill et al (1994) reported that students valued meetings with supervisors especially for their constructive feedback on written work (see also Delamont and Eggleston, 1983; Delamont et al, 1994), and the ability to write was identified as one of the key characteristics of supervisors’ ideal student. Students frequently experienced frustration and stress in the process of writing up their research with consequent delays in their progress. Delamont et al (1994), in the light of evidence that writing was often considered, especially by social anthropologists, as an ‘indeterminate’ skill which is ‘caught’, were convinced that writing skills could and should be ‘taught’. The research conducted by Hartley and Branthwaite (1989) on the writing skills of experienced psychologists confirmed that writing, and the related skills of editing and drafting, could be made explicit, for example, related to making a

plan, setting targets, completing small sections at a time, asking others to read drafts, and so on.

Torrance and Thomas (1994) identified issues in students' writing, for example, their reluctance to admit to difficulties, explaining such difficulties with reference to factors other than writing, or failure to recognise that they have a difficulty at all. They distinguished between 'knowledge telling' and 'knowledge transforming' purposes for writing, the latter of which tended to be identified with academic writing and adopted by more experienced writers (Hartley and Branthwaite, 1989). Hartley (1997) and Murray and Lowe (1995) suggested that different skills were required for such different purposes as writing a thesis chapter, giving instructions to survey participants and making notes on supervision sessions. Torrance and Thomas (1994) identified three types of writing strategies adopted by PhD students: 'planners', who think then write; 'revisers', who write then think; and those who are less coherent and show characteristics of both the 'planners' and the 'revisers'. Some researchers emphasised the importance for those anxious to get it right and unable to start at all (Becker, 1986; Brown, 1994) of "writing anything that comes into your head for a first draft" (Becker, 1986: 164), thus advocating the strategy adopted by the 'revisers' described by Torrance and Thomas (1994), writing then thinking. Phillips (1983) started with the various problems experienced by students in the writing up of their thesis, suggesting that the difficulties reported might be due to

a strong link between written language and thought..If writing leads to discovery and not, as is generally supposed, discoveries merely need to be put into writing, this may in part account for the experience of writing a scientific paper as the most difficult part of the work (Phillips, 1983: 43).

She usefully drew attention to the idea that “difficulties experienced [by students]..may be due to the amount of thinking that needs to be incorporated into the work of organising the research into a coherent whole” (Phillips, 1983: 44), useful because she attempted to draw a relationship between the activities of planning research (evidenced by students rarely managing to meet the deadlines they had set themselves) and the difficulties many students were reported to have experienced in writing at different stages in their research. Other authors stressed the importance of regular and early submission of written work for timely thesis completion (Welsh, 1979; Gottlieb, 1994; Murray and Lowe, 1995), and for example, of supervisors “asking for the regular submission of written work, [so] that any deficiency..is corrected before it becomes a major problem” (Gottlieb, 1994: 110). From students’ points of view, supervisors’ constructive comments were particularly helpful in improving their work (Wright and Lodwick, 1989; Hill et al, 1994).

There is no lack of literature offering general advice to PhD students on their writing (Brown, 1994; Johnston, 1997; Hartley, 1997). Brown (1994), for example, emphasised the need for students to have a clear sense of direction throughout the thesis, clarity in the ideas being expressed and a clear understanding that writing is, at least in part, an exercise in ‘marketing’. By marketing, Brown (1994) meant:

there has to be a benefit for the reader..Readers do not read for the sheer privilege of doing so. Even a captive audience (like the two or three examiners of a dissertation) needs to be persuaded to the writer’s point of view (Brown, 1994: 94).

Johnston (1997), from her investigation of examiners’ reports, also stressed the importance of the positive impact of thesis presentation: “the examiner approaches the reading of a thesis just like a reader of any new piece of writing” (Johnston, 1997:

345). Although the quality and clarity of supervisors' comments on students' written work must rival even what they do in meetings in importance, there has been no research that I know on expert practice in supervisors' commenting on students' written work.

The Codes of Practice reflected a clear awareness that supervisors' comments on students' written work are of major importance, and there is some clear recognition that this is a demanding and complex task. Researchers have begun to unravel some elements of this complexity, but it is apparent that they have done little more than begin. What do expert and experienced supervisors do when they read their students' work and what do they look for? What form do their comments take and why? This too then is an area to which the present research ought to be able to contribute.

c) Formal review of progress

There are times throughout the period of the student's registration when the supervisor and the student must account for their activities and submit reports on progress to a higher authority. Typically:

The progress of all research students is reviewed annually by the Department's MPhil/PhD Board, normally in the Summer Term. All supervisors will submit a full Report on each student's progress, recording the number of meetings and amount of written work submitted during the preceding year and on his/her progress towards upgrading and/or submission (LSE, Sociology: 2).

By way of preparing for these submissions, supervisors are responsible for "creating an open record of progress, showing personal development, achievement and all status reports on the student's work" (Salford: 10).

Research students are usually registered first for an MPhil degree (unless already in possession of a relevant Master's Degree). Transferring to the higher degree of PhD or DPhil (the timing of which can vary) is regarded as a crucial stage in the acceptance by a department of the adequacy of a student's work in terms of the doctoral criteria and standards to be met. Requirements for upgrading to be met by the student include:

the thesis proposal and/or a chapter outline.; at least two substantive draft chapters totalling 50-100 double spaced pages (all typewritten or word processed). These are to be read by the supervisor and at least one other colleague within the School...and judged of sufficient promise for a PhD (LSE: 3).

Alternatively, requirements might specify progress reports from supervisors and self-report forms from students to be submitted three times a year, supplemented at the time of transfer by the preparation of a written report by the student, equivalent to at least one chapter of their thesis, for submission to his/her supervisor. On the basis of the student's submission, the supervisor could recommend to the department "continuation of the current status, beyond the probationary year..revision of status from MPhil to PhD [or] revision of status from PhD to MPhil" (Cardiff: 27.2.3). Following the processes of formal review, where the supervisor and the department were of the opinion that students were unlikely to achieve the degree for which they were registered, several different strategies might be adopted depending on the case in question, for example: "more supportive procedures; suspension of registration; reformulation of the topic; transfer to a lower degree or mutually agreed withdrawal" (Leicester: 19). Where there was an unreconcilable problem in the student/supervisor relationship, a change of supervisor was usually recommended. So, irrespective of the

specific procedures in place, the stakes are high and students must take the hurdle of transfer very seriously.

With respect to upgrading of the student to full PhD status, a variety of departmental arrangements were noted in the literature (Bowen and Rudenstine, 1992; Becher et al, 1994; Phillips, 1994; O'Brian, 1995). Some departments placed more weight and status on these procedures than others, and, where it was thought important, there was a high degree of formality and demands for papers to be defended by the student (Becher et al, 1994). Despite the value placed on the procedure, whether or not it worked in practice often depended on the individual academics involved, for example, the nature of their expertise or their willingness to read student papers thoroughly (Phillips, 1994). From her interviews with supervisors and students, Phillips (1994) concluded that the variety of approaches adopted in upgrading students from MPhil to PhD, the degree of seriousness attributed to them, and the implicit nature of some of the requirements, could lead to: missed opportunities for the students to experience the first step in the examination process, learn about the criteria and standards being applied and identify problems early.

These formal procedures can clearly provide a useful structuring framework of impersonal deadlines and targets for the potentially very personal work of supervisors with their students. They can also provide opportunities for supervisors to check out with their colleagues their own judgements of how students are progressing and sometimes to be given valuable suggestions of work that could be consulted or avenues which might be pursued. These quite infrequent procedures represent only the small visible element of the major ongoing process in which students and

supervisors are constantly engaged in judging the adequacy of all aspects of the work being done, asking questions such as: Is the literature review sufficiently comprehensive and critical? Are the key theoretical concepts defined clearly enough?

Examination of the thesis

In addition to plans drawn up by the student for the work as a whole, supervisors were responsible for ensuring that there was a plan for submitting the thesis: “the supervisor should advise on the manuscript of the thesis in general and on content, presentation and organisation.” (Stirling, 7: 5.10). It was the student’s responsibility to proof read, make revisions, and decide when the thesis was ready for submission. Prior to submission, both the student and the supervisor were expected to be involved in recommending appropriate external examiners for the thesis, and one or two internal examiners might also be appointed (not usually including the student’s supervisor). Having submitted the thesis, it would be read by the internal and external examiners who would provide detailed written reports. The criteria for success outlined in the Codes of Practice were found to be generally shared across institutions, confirmed by Tinkler and Jackson (2000) who provided an extended version of these criteria from their more recent analysis of Thesis Examination Codes of Practice. These criteria included: a distinct and significant contribution to knowledge; evidence of originality; satisfactory literary presentation; and a substantial amount of material suitable for publication.

The Codes of Practice I sampled required students to attend a meeting of the internal and external examiners, the oral examination or viva voce. The purpose of this oral examination was to allow the student to defend his or her thesis in person. Student

presentations of their work on previous occasions were regarded as good preparation for their oral examination and it was the supervisor's responsibility to: "Ensure[ing] that the student is adequately prepared by arranging for the student to present his or her work to staff and graduate seminars" (Manchester: 23, para f). The oral examination, the viva, was seen to perform an important gatekeeping function (Delamont et al; 2000; Jackson and Tinkler, 2000), ensuring that "only appropriately skilled people can enter the professional community and the knowledge community, acting as a meaningful rite of passage" (Jackson and Tinkler, 2000: 45).

From her analysis of examiners' reports, Johnston (1997) noted variations, some slight, some more pronounced, among examiners' recommendations for the award of the degree and in the match between the expertise of the examiner and the thesis topic. She suggested, amongst other things, that more explicit advice and criteria for judging the worth of a thesis could be given to examiners, adding that there would always remain an element of subjectivity in applying standards. She was convinced from the evidence that: "There is a need for the examination process to be opened up [for scrutiny]" (Johnston, 1997:346). In addition, two distinct sets of criteria were identified, one related to qualities of thesis presentation, and the other to intellectual qualities. Johnston (1997) reported that: "By far the most common type of comment made in examiners' reports related to the writing and editorial presentation of the thesis" (Johnston, 1997:339). In terms of intellectual qualities, she found few common themes, but in general, for favourable reports, the criteria used reflected those set out by universities (see also Phillips, 1994). Although it is understandable that the criteria for presentation are more clear cut and obvious, and that examiners, like other readers, will respond well to scripts which help them to progress easily through the thesis, it is

clear that it is the intellectual qualities which are more intangible, more complex and likely to remain implicit.

The examiners interviewed by Phillips (1994) sensed an increasing number of referrals for theses. One possible reason put forward for this was the pressure by Research Councils on institutions and departments for good submission rates. Referrals were thought by examiners to give students more time to complete and were valued for the feedback by students. This demonstrates, perhaps, that, in such cases, students are still seeking to learn the criteria for judgement, this time from those who will examine their theses, right up to the point of submission and beyond. From her interviews with students, Phillips (1994) concluded that they received inadequate advice and help in their preparation for the viva, a conclusion echoed by Hartley and Jory (2000) who advocated more standard procedures to promote “equity and fairness” (Hartley and Jory, 2000: 89).

In all matters of formal and informal assessment procedures, there is the potential for abuse or misuse of the system, especially in matters of implicit bias as may occur, for example, in matters of gender, race or religion (Conrad 1994; Delamont et al, 1997; Gundara, 1997; Leonard, 1997). It could be argued, nevertheless, that these issues are more likely to be exacerbated in systems where the criteria and standards for evaluation are obscure, implicit or based on grounds other than criteria for the work itself.

Research students need to be acutely aware of how expected criteria and standards will be applied to their thesis, and the importance of the enterprise makes it

understandable that many may be obsessed with them. But few of them have sufficient experience to be able to make these judgements themselves. For that, they are heavily dependent on their supervisors. Supervisors, aware that PhD theses are likely to be judged with more attention to detail and with more rigour than most research, and of the sometimes unpredictable idiosyncrasies of examiners (Johnston, 1997), may not always be able to make such judgements with anything like the confidence that their students expect (Becher et al, 1994). In addition, being aware of the very high stakes for their students and of the students' heavy reliance on their views, they must balance the honesty of their judgements against the impact which they expect their expressed views will have on each individual student's morale, enthusiasm and effort at this particular stage of their work. They have to guard their own position against any subsequent claim that they misled the student, but they must equally, in most cases, persuade the student that, while the work is not yet good enough, there are clearly identifiable ways in which that student is quite capable of doing what is necessary to meet the required standard. The constant question faced by each student and supervisor is 'Is this going to be good enough?', and supervisors have to be alert to the messages they give to students, taking account of the strengths and weaknesses of each students' work and of the unique and changing dispositions of the student (Delamont et al, 2000). How supervisors manage this task is likely to be an important aspect of their expertise.

Conclusions: key issues for research

The primary aim of these conclusions is to identify the key issues from this chapter which guided the definition of the problems to be investigated in my research. These

issues have been identified from the relevant research literature, and from gaps in that literature.

A high degree of consensus was found in institutional and departmental Codes of Practice about the responsibilities to be accepted by supervisors, students and departments in relation to PhD studies. For departments, these included care in the appointment of supervisors to ensure that only those with the necessary expertise and experience were placed in sole charge of a supervisee and the limiting of the numbers of supervisees. Amongst the roles and responsibilities supervisors were expected to accept were providing information, help, advice and encouragement to their students and ensuring regular and frequent contact. A shared responsibility was accorded for clear, early and ongoing communications between students and supervisors of their expectations of one another to maintain good working relationships. Student responsibilities were for the thesis research and presentation, listening, studying conscientiously, raising problems with their supervisors when they occurred; and taking full advantage of provision for research training and other forms of resources.

The research literature suggested that, in making an independent contribution to knowledge, PhD students rely quite heavily on the support of their supervisors, especially in the early stages of their research (Phillips, 1983) but also at later stages (Pole, 1997). There has been a considerable amount of research suggesting the nature of students' felt needs and also the variable extent to which these needs are met in practice by supervisors or institutions. Some of the needs identified arose from student inexperience where the help they needed was, for example, in choosing an appropriate and feasible topic, planning ahead, and foreseeing possible problems in

the execution and writing up of the thesis. Student uncertainty about the criteria and standards they were expected to meet, low levels of self-esteem, infrequent contact with their supervisors, and the loneliness of the academic task could all in their ways contribute to debilitating academic and social isolation. In so far as student needs related to the supervisor's qualifications, and administrative arrangements, for example, restrictions on the numbers of students supervised or joint supervision, the research findings are fairly consistent and are generally well reflected in the Codes of Practice surveyed.

However, in so far as student felt needs went beyond supervisor qualifications and administrative arrangements, only a few research findings gave an indication of the relative importance of a large number of diverse needs reported. Those which did, included quantitative findings from studies conducted in one institution (Welsh, 1979; Wright and Lodwick, 1989) but their studies included science and arts students and the samples of social science students were relatively small. The more recent research has tended to be qualitative, conducted through in-depth interviews and aimed at understanding the student experience with less concern about establishing the relative importance of the diverse student needs reported. The results and conclusions of these qualitative projects are interesting and helpful, but leave us uncertain about how representative they are and about the relative incidence of different kinds of student needs. Substantial and useful work has certainly been done to co-ordinate and compare data and conclusions from different projects as part of, or related to, the ESRC Research into Training initiative (Delamont et al, 2000). Nevertheless, the numbers of social science students sampled and the range of institutions and disciplines in which students were located varied in their combinations, often

resulting in quite small samples of social science students in any one project. The Codes of Practice are relatively silent on the nature of student needs to be met.

There is little consensus among commentators about how supervision should be construed as an activity. Three quite different but perhaps complementary views of supervision as a research craft, a teaching craft and as a management craft were examined (Chapter 2). While research has as yet not helped to resolve the issue of the nature of supervision, a good deal of research, reviewed in this chapter, has been concerned with the views of PhD students or their supervisors on various aspects of supervision. That research has begun to throw some light on the processes of supervision, generally through interview studies in which supervisors or students have been encouraged to talk about, for example, their views of supervision (Welsh, 1979; Rudd, 1985), or their experiences (Acker et al, 1994a; Delamont et al, 1994) and, less frequently, about what they do in supervision (Youngman, 1994) or how they resolve the problems encountered (Welsh, 1982; Acker et al, 1994b).

Little research has been identified that has been specifically concerned with seeking an understanding of supervisors' expertise as supervisors. A significant move forward in this direction was made by Hockey (1996b), who explored supervisors' strategies and tactics through interviews with them, and also how these strategies and tactics might be connected to motives for undertaking supervision. However, he did not pursue supervisors' reasons for adopting specific strategies or for employing specific tactics on particular occasions and in particular situations, and was unable as a result to explore the practical principles underlying their strategies and tactics. I found no research concerned to explicate the purposes, concerns, thinking and logic used by

supervisors in their practices, and no research based on observation of what supervisors actually do. There is therefore a dearth of empirically based knowledge of what supervisors can practically and effectively do to meet the felt needs of their students. It was concluded, therefore, that this thesis might be able to contribute usefully to the development of such knowledge

More comprehensively, it was concluded from this review of the relevant literature that the thesis could usefully have the following aims: to establish the nature and relative frequency of felt needs identified by students as met, or which they would like to have met, by their supervisors; to seek a phenomenological understanding of how a number of 'expert' supervisors think about their supervision activities and especially of the logic of their practice in supervising individual students; and to explore the extent to which and the ways in which such 'expert' supervision is directed towards meeting their students' commonly felt needs.

CHAPTER 3 THEORETICAL AND CONCEPTUAL FRAMEWORKS

In order to establish an understanding of how 'expert' supervisors think about their supervision activities, and to explore how they meet their students' commonly felt needs, I adopted a phenomenological approach to my research. With respect to the three theoretical and conceptual frameworks outlined in this chapter, there are three preliminary points to emphasise. First, phenomenological research addresses distinctive types of questions, and the frameworks outlined in this chapter have helped to elaborate these questions in my defined area of concern. Second, a primary aim for this research was to develop theoretical understandings of the ways PhD supervisors and students thought about supervision practices, and these frameworks provided conceptual tools for the development of such theoretical understandings. Third, to achieve this aim, I sought to suspend my own common sense preconceptions about how supervisors and students might construe supervisory practices while at the same time ensuring that the research questions were derived from a substantive body of existing theory.

Three theoretical frameworks were adopted to take account of the lack of theoretical and conceptual frameworks relating specifically to supervisors' craft knowledge or 'knowledge-in-use': Schutz's philosophical theorising about the social world and social action (1962, 1964); Heider's analysis (1958) of interpersonal relations, treating systematically the implicit notions that guide people in their interactions with another person ; and theories developed by Brown and McIntyre (1993) for understandings teachers' classroom craft knowledge.

There were a number of reasons for my decision to adopt these frameworks. What they have in common is a concern with the systematic investigation of common sense logic, the way people construe what they and other people do and say in taking action to achieve certain purposes or goals in particular situations and circumstances. Schutz's constructs of 'the natural attitude' (his term for common sense), 'stocks of knowledge at hand' or 'recipe knowledge', 'typification', and 'motives' have been found useful by researchers concerned with the development of practical theories, for example, for describing and explaining the 'craft knowledge' of experienced professionals (Brown and McIntyre, 1993, in initial teacher education; Benner, 1984, and Titchen, 1998, in the education and training of nurses; Macdonald, 1997, in medical education). My concern is with what people say or do in the terms that they themselves understand these words and actions, not as they might be interpreted by others. Thus, my general research questions can only be addressed systematically with reference to conceptions of the social sciences such as are argued for by Schutz (1962; 1964).

A second reason informing my choice of research frameworks was that Schutz (1962) and Heider (1958) focus on the one-to-one social interaction between 'self' and 'another'. They ask, in complementary ways, how 'common sense' deals with this inter-relationship, and the frameworks they provide seemed promising in an approach where the context was primarily a one-to-one relationship between supervisor and student. Brown and McIntyre (1993) provided a framework from their phenomenological analysis of the way school teachers construed their own teaching, thus complementing and extending Schutz's concepts empirically. In this chapter, I provide descriptions for each of my three choices, discuss their relevance to my

project and formulate some research questions in the terms suggested by the concepts described.

Schutz's phenomenology

Schutz was interested in 'the natural attitude' of everyday life, 'the practices of common sense reasoning', and what it meant to study these. He characterised the ways in which "the wide-awake grown-up man looks at the intersubjective world of daily life within which and upon which he acts as a man amidst his fellow men" (Schutz, 1962: 7), and some of the main concepts he used are outlined as follows.

The natural attitude of everyday life

Phenomenology researchers are concerned to understand the taken-for-granted everyday world as it is experienced by people going about their daily business. Natanson (1962) remarks that the problem of research within a phenomenological position is precisely that the everyday world of social experience is so taken-for-granted:

As common-sense men living in the mundane world, we tacitly assume that, of course, there is a world all of us share as the public domain within which we communicate, work and live our lives..all of this is typically taken-for-granted and that means that these structures of daily life are not themselves recognised or appreciated formally by common-sense (Natanson, 1962: xxvi-xxvii).

Garfinkel (1967) shows how, for all practical purposes of communication, acts of reflection, or attempts to take a more explicit and systematic approach, can seriously disrupt the fluency of the way people normally go about their social interactions.

Eraut (1994) describes the effectiveness of professional people as

largely dependent on the knowledge and know-how they bring to each individual case, problem or brief. Much of this knowledge comes from experience of previous cases, so its use involves a process of generalisation. Some idea, procedure or action that was used in a previous situation is considered to be applicable to the new one....Semi-conscious patterning of previous experience may also occur, making it difficult for the professional to trace the source of, or even to clearly articulate, the generalisation he is using (Eraut, 1994: 44).

The 'know-how' referred to by Eraut is described by Schutz as 'the stock of knowledge at hand'.

The stock of knowledge at hand

The 'stock of knowledge at hand' is central to Schutz's project: "it is the sedimentation of all man's previous experiences, organised in the habitual possessions of his stock of knowledge at hand, and as such his unique possession, given to him and to him alone" (Schutz, 1962: 10). It serves as a reference point for selection of those aspects which are relevant for understanding and controlling the many concrete problematic situations with which people have to deal in the course of their daily affairs. Leiter (1980) described this stock of knowledge as a scheme of references consisting of "recipes, rules of thumb, social types, maxims and definitions" (Leiter, 1980: 5). Eraut (1994) talked about these 'recipes' as 'generalisation'. Schutz (1964) used the term 'cook book knowledge' which has

recipes, lists of ingredients, formulae for mixing them, and directions for finishing off. This is all we need to make an apple pie and also all we need to deal with the routine matters of daily life (Schutz, 1964: 73-74).

In terms of the 'social types' referred to by Leiter, every social group forms stereotypes of the people, things or events they deal with, for example, professional groups like teachers or PhD supervisors have students characterised as 'bright',

'independent' or 'conscientious' (Hill et al, 1994). Referring to stable characteristics of the person makes decision-making easier. Proverbs are examples of common sense maxims, 'a bird in the hand is worth two in the bush' or 'do as I say, not as I do'. However, experience confirms whether or not at any one time a person can take an object as typical of the general type. The point is:

in the natural attitude of daily life we are concerned merely with certain objects standing out over against the unquestioned field of pre-experienced other objects, and the result of the selecting activity...is to determine which particular characteristics of such an object are individual and which typical ones (Schutz, 1962: 9).

Schutz (1962) defines this stock of knowledge as socially derived. He starts with the idea that the world existed as organised, previously experienced and interpreted by those who came before us, and that: "these experiences in the form of 'knowledge at hand' function as a scheme of reference" (Schutz, 1962: 7).

The way Schutz (1962) explains the social origin of knowledge is in terms of 'relevances' or areas of special interest to individuals or groups which apply to "ways of life, methods of coming to terms with the environment, efficient recipes for the use of typical means for bringing about typical ends in typical situations" (Schutz, 1962: 14).

Knowledge is also socially distributed, that is, what is known varies from one person to another depending on position, interests, aspirations and so on. All this is developed and expressed through the medium of everyday language:

The typifying medium par excellence by which socially derived knowledge is transmitted..The vernacular of everyday life is primarily a language of named things and events and any name includes a typification and generalization

referring to the relevant system prevailing in the in-group..The pre-scientific vernacular can be interpreted as a treasure house of ready-made preconstituted types and characteristics, all socially derived and carrying along an open horizon of unexplored content (Schutz, 1962: 14).

There were important questions to ask in my research on ‘knowledge-in-use’ about this ‘unexplored content’, namely, the nature of the typifications drawn upon by supervisors in the contexts of their supervisions and what they considered especially relevant to the tasks at hand. What, for example, were their methods of coming to terms with the environment of PhD supervision? What were the efficient recipes they used as typical means for bringing about typical ends in typical supervisory situations?

The practices of common sense reasoning

Typifications or idealisations are unique to the ‘biographical situation’ of the individual. Schutz (1962) raises the problem of how it is that people can agree about established bodies of knowledge given their unique biographical situations and socialisation experiences. This problem is addressed by Schutz through his idea of the *reciprocity of perspectives*, including *the interchangeability of standpoints* and the *congruency of relevances*. For all practical purposes in interaction with others, individuals assume that, if they change places with someone else in a particular context, their experience is interpreted in roughly similar ways. Any differences in perspectives arising from differences in ‘biographical situations’ is, for the practical purposes at hand, irrelevant “until further notice” (Schutz, 1962:228). This is important as issues arising from actions taken can lead to conscious questioning of previously taken-for-granted assumptions, opening the way for change, improvement or sophistication in courses of action taken.

The 'We relation'

With respect to the importance placed by Schutz (1962) on studying the ways in which people interpret the motives of others with a view to improving the basis on which actions are taken, he talks about 'face-to-face relationships' with another person as a 'pure we relation' where there are frequent opportunities for communication. One implication for Schutz (1964) of the 'face-to-face' sharing of experiences is that previous knowledge about one's consociates can be revised and new knowledge gained:

the we relation enables me to verify constantly the results of my interpretation of other men's experiences. The fellow-man face to face with me can always be interrogated (Schutz, 1964: 31).

A number of issues were raised earlier concerning the quality of communications between supervisors and students and the frequency and regularity of supervisory meetings (Chapter 2). It is possible that experienced supervisors make implicit judgements about how much evidence, and of what kind, is sufficient for their purposes at hand. In relation to Schutz's concept of the 'we relation', what evidence, for example, do supervisors use in assessing their students' motives, intentions, or activities, and in what circumstances, or in what situations, might different kinds of evidence be deemed necessary or sufficient to serve the purpose?

Action

The crucial feature of action for Schutz (1964) is its purposive and projective character. His concern is with understanding action as construed by actors and analysing the processes by which they determine future conduct. When he talks about

purposive action, the reference is to “human conduct as an ongoing process which is devised by the actor in advance, that is, which is based upon a preconceived project” (Schutz, 1964: 67). He uses the word ‘act’ to designate the outcome of an ongoing process, that is, the accomplished action. Schutz is doubtful about referring to peoples’ summing up of a situation as ‘deliberation’ but approves of the term as used by Dewey (1922): “a dramatic rehearsal in imagination of various competing possible courses of action” (Dewey, 1922: 68). However, in imagining the intended act as already accomplished, Schutz (1964) emphasises that, in common sense, there is no *conscious* deliberation of possible alternatives:

As we normally have to act and not to reflect in order to satisfy the demands of the moment, which it is our task to master, we are not interested in the quest for certainty. We are satisfied if we have a fair chance of realizing our purposes..setting in motion the same mechanism of habits, rules and principles which formerly stood the test and which still stand the test (Schutz, 1964: p73).

He concludes that: “Anticipations of future states of affairs are conjectures about what is hoped or feared, or at best, about what can be reasonably expected” (Schutz, 1964: 73).

Action can be ‘covert’, for example, working out a problem mentally, or ‘overt’ as in the performance of a physical task. To be counted as purposive action, however, the action has to be overt:

An overt action is always both projected and purposive. It is projected by definition because otherwise it would be mere conduct and since it has become overt, that is, manifested in the outer world, the voluntative fiat which transfers the project into a purpose, the inner command “Let us start!” must have preceded (Schutz, 1992: 67).

Therefore reflection on practice can only be retrospective. Purposively refraining from a projected action is also included within Schutz's definition: Thus 'projected and purposive action' is the starting point for a phenomenological study of expert supervisors and a major purpose of the research was to address the question of what supervisors do, or do not do, and for what projected purposes.

Constraints on action

In the sociology of education, interpretive phenomenology, with its emphasis on the social construction of society, is criticised from a Marxist perspective for not taking sufficient account of constraints on action. Macdonald (1977), in a summary of a critique by Young (1971) and Sharpe and Green (1975), commented that:

Because of its rejection of all forms of determinism, the phenomenological approach has been accused of being a-historical and misleading. Although man is seen as capable of acting upon and transforming social reality, this occurs purely at the level of social interaction. The social structure and the historical context of political and economic constraints upon the possibilities for action are neglected (Macdonald, 1977: 88).

Schutz (1962) explains that phenomenology does not replace other traditions of social science research. Rather it redresses the balance by taking as its point of departure where researchers in the positivist tradition end. He argues that institutionalised structures are created at the level of social interaction. Once structures are institutionalised, they can constrain or facilitate what people do. Common questions for research within positivism are about the nature and cause of these effects. Phenomenologists start with questions about how people construe their activities, interactions and situations to sustain or create the facticity of these structures.

Giddens (1984) defends a Schutzian approach with reference to how it takes account of constraints. He explains, with reference to the 'actor' as 'agent', that "Constraint..is shown to operate through the active involvement of the agents concerned, not as some force of which they are the passive recipients" (Giddens, 1984: 289). Posing the question of whether an agent is "pushed" or "jumped", he makes the distinction between types of constraints in the following way:

First, constraints do not 'push' anyone to do anything if he or she has not already been 'pulled'. In other words, an account of purposive conduct is implied even when the constraints limiting courses of action are very severe. Second, constraints are of various kinds..deriving from differential sanctions and structural constraints. Third, to study the influence of structural constraint in any particular context implies specifying relevant aspects of the limits of agents' knowledgeability (Giddens, 1984: 308).

Schutz (1962) is aware of the constraints which operate on actions:

We work and operate not only within but upon the world..modifying or changing its objects and mutual relationships..these objects offer resistance to our acts which we have either to overcome or to which we have to yield. Thus it may be correctly said that a pragmatic motive governs our natural attitude towards the world of daily life. World, in this sense, is something that we have to modify by our actions or that modifies our actions (Schutz, 1962: 209).

My research has followed Schutz in accepting supervisors' 'pragmatic motives' towards the world of daily life and, where they have been concerned explicitly with external factors or constraints, asking how these factors were construed by supervisors themselves in relation to what they did and how they did it.

Contexts of action

Schutz (1964) stresses the importance of shared contexts for communication:

every element of speech acquires its special secondary meaning derived from the context or social environment within which it is used and, in addition, gets a special tinge from the actual occasion in which it is employed (Schutz, 1964: 101).

Meanings are thus inextricably linked to the contexts in which they are communicated and may appear contradictory if used out of context for research purposes:

without a supplied context, objects and events have equivocal or multiple meanings. The indexical property of talk is the fact that people routinely do not state the intended meaning of the expressions they use..The sense or meaning of these expressions cannot be decided unless a context is supplied (Leiter, 1980: 107).

Leiter (1980) goes on to describe how, in everyday conversations, people assume a shared context and that the listener will fill in unstated but intended meanings of what is said. People's sense of social structure is an ongoing accomplishment of which there are two main properties, indexicality and reflexivity. These terms describe and elaborate on Schutz's notion that talk, behaviour, objects or events taken out of context have multiple meanings. This taken-for-grantedness between those who share contexts suggested that, as researcher, I should place myself in a position where the context of actions can be observed, that the nature of the taken-for-grantedness of contexts should become a focus for enquiry, and that my own presence would inevitably influence the contexts being studied.

Motives: 'in order to' and 'because'

Schutz (1964) believes that a theory of motives is essential for deepening understandings of why people act as they do, and that: "actions are interpreted by people through the motives they ascribe" (Schutz, 1964: 11). His conception of social interaction in the 'we-relation' is of an interpretative process where people's decisions

about which aspects of their stock of knowledge are relevant rely on cues or clues (words, gestures, facial expressions, etc.) given by the other person. These are used to construct hypothetical typifications of their underlying motives, rendering their conduct understandable and providing a basis for subsequent action directed towards that person. There were two categories of motives, '*in-order-to*' motives involving ends to be achieved or goals to be sought, and referring to future states of affairs, and '*because*' motives, located in the past and referring to reasons or causes, the causal antecedents of the courses of action adopted – the past state of affairs of which account had to be taken. Schutz himself puts it more neatly:

The project is the intended act imagined as already accomplished, the in-order-to motive is the future state of affairs to be realised by the projected action, and the project itself is determined by the because motive (Schutz, 1964: 11).

Schutz characterises '*in-order-to*' motives as in the future tense, subjective, and conscious. '*Because*' motives, were characterised as in the past tense, objective and often obscured or marginal to consciousness. '*Because*' motives were not limited to the personal characterisations which actors use in the interpretive processes in coming to decision to do one thing or another, or to refrain from action. They also take account of a diversity of environmental factors, or conditions, over which the actors may have little control and which may facilitate or constrain what they do. In relation to supervision, environmental factors have increasingly in recent times impinged on the ways supervisors supervise PhD students. For example, the ESRC demands for formal training and submission of the thesis within four years, and the introduction of time and word limits in HEIs. Do supervisors talk about these or other external conditions as affecting their work with students? If so, how are they construed?

Schutz (1964) is concerned to explain scientifically how people construe their activities in relation to the activities of those with whom they interact. In a person's 'face-to-face' interactions with others, their selection of 'recipe' knowledge with which to inform their actions depend not only on the experiences they gained in similar situations with similar people for similar purposes in the past (the content of their 'stock of knowledge at hand') but also on their more detailed typifications of the 'in-order-to' and 'because' motives of the person with whom they are dealing in the immediate present. In so far as any relationship is sufficiently close, Schutz talks about the enmeshing of a person's 'in-order-to' motives to take account of the other's 'because' motives: "I anticipate that the in-order-to motives of my own acting will become because motives of your reaction and vice versa" (Schutz, 1964: 14). Thus an important aspect of what supervisors do follows from the way they interpret their students' motives. Questions for research therefore included how students' motives and characteristics were attributed by supervisors in coming to conclusions about appropriate actions to take and how these were construed.

Schutz's phenomenology, with its basic notions of common sense thinking and related constructs, has been widely adopted and adapted for theorising and research across a wide range of disciplines and research traditions not only in sociology (Whyte, 1955; Garfinkel, 1967) but also in social psychology (Heider, 1958; Jones et al, 1971; Weider, 1974) and the sociology of education (Hargreaves et al, 1975). Sociological research has been conducted from ethnomethodological and symbolic interactionist perspectives in very specific settings and has been concerned with elucidating the actors' constructions of meaning. In social psychology, the research methods have been mainly experimental but the conceptual apparatus is usually concerned with 'the

naïve analysis of action' and causal attribution which I believe to be salient to my own study.

Schutz's phenomenological sociology allows a non-evaluative and celebratory approach to the study of PhD supervision in its search for understanding, not facts. In a context for research where one aim is to help develop the knowledge, skills and understandings of novitiates, studying the 'know-how' or craft knowledge of experienced professionals in educational contexts has been found fruitful (Brown and McIntyre, 1993). Giddens (1984) agreed about the appropriateness of such a focus given that professional workers themselves are in the best position to evaluate their own situations. He states that:

All human beings are knowledgeable agents. That is to say, all social actors know a great deal about the conditions and consequences of what they do in their day-to-day lives (Giddens, 1984: 281).

From the literature on supervision, it became apparent that much of the research undertaken into student views had concentrated on the identification of problems. In other writings, such problems identified were taken as the starting point for prescriptions about how supervision should be conducted or organised. These prescriptions for good practice, however, have not usually been the subject of research. This makes it difficult to know their status. One of the few sources of information on quality of supervision is from students and there is a need to go beyond the problems of the occasional student outcry to a position where there can be a more systematic and explicit understanding of what is involved in expert practice. Gaining access to supervisors' craft knowledge can provide such understandings. I was therefore concerned to adopt such an approach for my research and that it should

be seen as both positive and celebratory, focussing on what experienced supervisors did well rather than on what they did not do or did badly.

In the light of some criticism of contemporary ethnographic research (Hammersley, 1992) (which I elaborate on later), I was interested in going back to the origins of ethnographic research for theoretical and methodological inspiration. Arguments for an alternative conception of social science by, amongst others, Whitehead (1946) and much earlier, by James (1890), were often informed by the need to establish phenomenological thinking and related practices as 'scientific' at a time when what counted as 'science' was defined by the principles laid down in the natural and physical sciences. Schutz (1962, 1964) was concerned with the question of how subjective social phenomena could be investigated in ways which could be defended in scientific debate, and he, and others, argued that it was one thing for scientists to study the constituent elements of inanimate objects and quite another to study human beings with the power to act on their environments, and to interact with others and with themselves. Not only was he concerned with philosophical theorising but also with tracing through the implications of his theorising for a distinctive sociological methodology and the 'procedural rules' necessary for related research. The sociological methodology which he evolved from his philosophical theorising on 'common sense' and its scientific interpretation is outlined in four postulates or principles which I address later (Chapter 5). These have, of course, been built upon and reinterpreted by future generations of researchers in related traditions to meet changing contexts of use or purpose (Atkinson et al, 2001).

Fritz Heider in his 'Naïve Analysis of Action (1958) provides a conceptual category system for Schutz's 'because' motives where a clear distinction is made between environmental and personal characteristics in the way actors make their attributions. To follow is an introduction to Heider's conceptualisation of the typifications that people use in their everyday interpretations of other people's actions.

Heider's Naïve Analysis of Action

Causal attribution as a scientific study has become the focus of interest for many groups of social psychologists in the field of interpersonal relations. Especially noteworthy are the contributions of Fritz Heider (1958) in what has become known as attribution theory. In the light of the respect with which Heider is regarded by theorists and researchers in social psychology, and the extent of the use of these theories, as for Schutz, I wanted to go back to the original phenomenological perspective on attribution theory taken by Heider. He is concerned to treat systematically the implicit notions that guide people in their day-to-day interactions with others, describing "the basic constituents of an action sequence which lead us to know that another person is trying to do something, intends to do something etc." (Heider, 1958: 79). He shares Schutz's ideas about the nature of these basic constituents but goes on to explore the way that responsibilities are attributed. He writes of the most fundamental distinctions an observer makes in attributing causes:

in common sense psychology..the result of an action is felt to depend on two sets of conditions..factors within the person and factors within the environment..One may speak of the effective force..of the person or of the environment when one means the totality of forces emanating from one or the other sources. The action outcome..may then be said to be dependent upon a combination of effective personal force and effective environmental force (Heider, 1958: 82).

Heider (1958) goes on to argue that personal force is, in common sense, composed of 'ability', 'effort' and 'intention'. Like Schutz, Heider (1958) sees the environment as a force which shapes, constrains or negates actions. Environmental forces affect the perceived ease or difficulty of the task in hand and the production of intended consequences. Heider (1958) treats these forces as adding to or subtracting from the 'ability' of the actor so that the two are seen in relation to one another. 'Can' (ability and opportunity) plus 'try' (effort and intention) equals effective purposive action. Using these concepts, he analyses the way personal responsibility for events is attributed by observers. Ashworth (1979), interpreting Heider (1958), states that:

responsibility is attributed to a person if his ability is sufficient, the environment does not present insuperable difficulties, and he intended to perform the action which he expended effort in accomplishing (Ashworth, 1979: 139).

The more an effect appears to be under the immediate personal control of the actor, the more responsibility is assigned (and the more likely it is that explanations of actions which are initially not well understood are sought in terms of the actor's motives). The concept of 'locus of control' seemed to have explanatory relevance for the issue of the degree of responsibility PhD supervisors might be prepared to accept in helping students to complete a satisfactory thesis (Chapter 2).

Schutz (1962) conceptualises motives in terms of a dichotomy between 'in-order-to' and 'because' motives. The 'in-order-to' motives include Heider's 'intentionality' while the 'because' motives include Heider's notions of personal force and forces within the environment. In all, Heider's dispositional properties include: ability, effort, opportunity, task difficulty and a residual property which he terms 'luck'.

Weiner (1971) proposes two basic dimensions to these properties: locus of control and the degree of stability of the typifications involved:

Two of the four components in the model [below](ability and effort) describe qualities of the person undertaking the activity, while the two remaining components (task difficulty and luck) can be considered properties external to the person, or environmental factors. Further, two of the elements (ability and task difficulty) have somewhat enduring characteristics, whereas the magnitudes of the two remaining components (effort and luck) are relatively variable. Thus the four elements in the model can be comprised within two basic dimensions, locus of control (internal vs external) and degree of stability (fixed vs variable) (Weiner, 1971: 96).

Stability	Locus of control	
	Internal	External
Stable	Ability	Task difficulty
Unstable	Effort	Opportunity [Luck]

Source: Weiner, 1971: Fig. 4: 96.

I have taken the liberty of inserting one of Heider's key concepts, 'opportunity', into the figure above which appears to have been omitted by Weiner, and, it should be noted that, in an educational context like supervision, the 'ability' of an individual student to undertake a task might be assumed to be 'stable' only in a temporary way. One of the debates reviewed in the literature concerned the need for supervisors to be 'flexible', adapting to the needs, situations and circumstances of individual students (Hockey, 1996a). Expert supervisors might therefore be expected to regard their students' intellectual needs and problems as essentially temporary and capable of change for the better. Given also the debate on student empowerment (Acker et al, 1994b) and on the balance to be achieved between supervisory direction and student autonomy (Hockey, 1996a), the idea of 'locus of control' seemed particularly important. Questions addressed included: to what or to whom is responsibility or control attributed by supervisors for their students' successes or failures? Are these

attributions made with reference to the personal dispositions of students or to environmental factors?

Some caution is necessary in using Heider's conceptions as a straight forward supplement to Schutz's 'because' motives. Like Schutz, he writes as if the common sense world he describes is universal and as if his theorising is empirically based, but no empirical evidence is reported by either in support of their case. Heider's concepts, however, like Schutz's, have provided a sound basis for a great deal of useful research. I therefore proceeded cautiously with both these theoretical frameworks while remaining open to possible variations and the need to adjust the original concepts in the light of the data gathered. I considered the use of these concepts as a good opportunity to assess their potential for guiding research into PhD supervisor and student interaction.

In Heider's 'naïve analysis' (1958), what is to be explained is talked about in general terms, for example, as an 'action sequence', an 'event', 'phenomena' and 'action outcomes'. Schutz (1962) uses similar terms but the contexts of use of such terms are rather different. Heider's conceptions are developed from the point of view of an 'observer' of actions, and, as far as I am aware, have informed researchers working only within an experimental tradition. Schutz's conceptions are based within an interpretive, qualitative tradition. Furthermore, in Schutz's writing, clear distinctions are made between the perspectives of observers and those of the participants in interaction, entertaining the possibility that an actor's perceptions and interpretations of the actions of another can be more or less sophisticated and can be verified through face-to-face communication, sometimes over a considerable period of time.

Making sense of teaching

Brown and McIntyre (1993) through their research set out to achieve understandings of how classroom teachers

construe and evaluate their own teaching, how they make judgements, and why, in their own understanding, they choose to act in particular ways in specific circumstances to achieve their successes (Brown and McIntyre, 1993:1).

Through the evidence they collected from observation and accounts from teachers of what had gone well in the classrooms observed and how it was achieved, Brown and McIntyre developed three sets of concepts: teacher *goals*, *conditions* and *actions*. They indicate two types of goals towards which teachers described their observed actions as being directed, and in terms of which they construed their actions as being successful. The first is establishing and maintaining 'normal desirable states of pupil activity' (NDS), that is: "steady states of activity seen by teachers as appropriate for pupils at different stages of lessons" (Brown and McIntyre, 1993: 67). The second is promoting pupil 'progress' of several different types, including learning, development of confidence and other attributes, creation of products, and coverage of the work. The actions teachers took to achieve these goals varied from teacher to teacher, but asked to evaluate the success of their actions on particular occasions, all the teachers commented in terms of: "the extent to which they were effective in maintaining particular NDS's or promoting specific kinds of progress" (Brown and McIntyre, 1993: 64). Teacher 'conditions' encapsulated the ways teachers talked about the practicalities and realities of classroom and school life.

This framework of 'goals' 'conditions' and 'actions' reflects Schutz's 'because' motives (the conditions impinging on the actions taken by teachers), 'in order to'

motives (the goals teachers' wanted to achieve in taking these actions) and the actions themselves as a central focus for analysis. That Schutz's concepts were found appropriate empirically, at least in relation to school teaching, suggests that they might also be useful in the context of supervision. Whether or not the substantive content of Brown and McIntyre's findings would apply in similar ways to supervision remained an open question.

Moving on to how teachers sought to achieve their anticipated goals, Brown and McIntyre (1993) referred to these as 'routines' and 'tactics', equivalents to Schutz's 'recipe' knowledge. First, they described teacher routines with respect to their 'actions', 'goals' and 'conditions' prevailing in specific contexts - a series of vignettes illustrating individual responses to particular situations but not claiming to make generalisations. Second, with a smaller sample of teachers, they explored the relationships between the actions teachers took and the goals to be achieved:

Only very rarely did teachers have single Goals in mind and single tactics for attaining them. Actions would instead be chosen with several Goals in mind, and several Actions might be undertaken with the same Goal in mind. Goals, and therefore the Actions to attain them, might be dependent one on another, or mutually compatible, or in conflict. Not only then were teachers choosing Actions from extensive repertoires in view of a large number of possible Conditions; they were also choosing various kinds of combinations of Actions to attain various kinds of combinations of Goals (Brown and McIntyre, 1993: 112).

In this the researchers provide a possible generalisable structure for understanding better the relationships between the actions supervisors take and the goals they would wish to achieve.

One example of an empirical study seeking to elicit PhD supervisors' craft knowledge is Hockey (1997). He was concerned to examine supervisors' 'motives and meanings'

and related 'strategies and tactics' as a way of understanding 'the craft of supervision'(Chapter 2). However, this was done on the basis of interview data alone so the starting point for interview questions was not what supervisors actually did in interaction with their students. No available theories directly relevant to the study of supervisors' craft knowledge were found. Nor did Schutz (1962, 1964) or Heider (1958) illustrate their theorising with reference to empirical research which indicated the necessity of using their theorising and constructs with caution.

Research into teachers' craft knowledge has been underway since the 1950s when educational researchers began to ask questions about what actually happened in classrooms. Later came the realisation that what teachers did depended on what they thought. Many PhD supervisors did not construe their role or craft as teaching but saw it more as a research 'apprenticeship' (Parry et al, 1994). Others believed it was a very 'special form of teaching' (Brown and Atkins, 1990) (Chapter 2). Despite differences in how people view the role, there is a general expectation amongst employers and supervisors that PhD students will learn something through their contact with supervisors and that it is an educative process. Amongst many studies of teacher thinking during the last twenty years, Brown and McIntyre's contribution (1993) is distinctive in that it takes a deliberately phenomenological stance to the craft of classroom teaching. Classroom teaching is of course very different from supervision. The concepts developed by Brown and McIntyre (1993) and the understandings generated by their research findings provided another useful way of thinking about my research, although requiring caution in its application to the supervision of PhD students.

Conclusions

One concern throughout this chapter has been to build up a picture of my research agenda in relation to the theoretical and conceptual resources provided by Schutz (1962, 1964); Heider (1958); and Brown and McIntyre (1993). A number of implications arose for the nature and content of the research questions which should be asked about supervision, and for my research design, and these are identified and discussed below.

Implications of the theoretical and conceptual frameworks for research questions

Schutz's concepts of 'stock of knowledge', 'typifications', and 'in-order-to' and 'because' motives seemed particularly salient to my research concerns. For example, there were important questions to ask about supervisors' 'knowledge-in-use' about the 'unexplored content' of their stock of knowledge at hand, namely, the nature of the typifications drawn upon by supervisors in the contexts of their supervisions, and what they considered especially relevant to the particular tasks at hand, their 'systems of relevances'.

Following Schutz's concepts, supervisors' purposive actions, or courses of action, needed to be described and explained in terms of the motives underlying their actions. What, for example, were the constituents of the situations and circumstances of which an action or course of action was the effect? How were these construed by supervisors? What were the intended effects or goals of the actions or courses of action which supervisors took and how were they construed? What relationships existed between supervisors' summing up of situations and circumstances, their

students', or their own, personal characteristics, the actions taken and their intended effects? What were the recipes they used as typical means for bringing about typical ends in typical supervisory situations? In the terms used by Brown and McIntyre (1993), what were the external conditions impinging on PhD supervision, and what, if anything, could be learned about supervisors' methods of coming to terms with these?

A number of issues were raised earlier (Chapter 2) concerning, for example, the quality of communications between supervisors and students and the frequency and regularity of supervisory meetings. It was expected that 'expert' supervisors would make judgements about how much evidence, and of what kind, was sufficient for determining their students' needs in these and other respects. What evidence did supervisors use in assessing their students' motives, intentions, or activities, and in what circumstances, or in what situations, might different kinds of evidence be deemed necessary or sufficient to serve their purposes?

Important aspects of what supervisors did were expected to follow from the way they interpreted their students' motives. In Heider's terms, research questions therefore included the attributions made by supervisors about what underlay their students' actions in coming to conclusions about appropriate actions to take themselves, and how these actions of their own were construed. With reference to 'ability', how did supervisors construe students' 'ability', 'effort', 'opportunity' and task difficulty? In relation to the concept of 'locus of control', to what or to whom was responsibility for, or control over, the students' work attributed by supervisors? For example, were attributions made by supervisors with reference to student dispositions or to factors in the environment? Were Heider's conceptions for describing and explaining

supervisors' attributions appropriate or sufficient in defining the questions to be asked?

Implications for design of the research

This research set out to achieve a phenomenological understanding of PhD supervisors' craft knowledge of supervision. Well documented in the literature on craft knowledge (Schon, 1983; Eraut, 1994) (Chapter 4) are the difficulties of making explicit one's own recipe knowledge. Research strategies were needed which could enable supervisors to reflect on and explain what they did and how they did, and which could help avoid the importation of the researcher's own systems of relevances. One of the advantages of a phenomenological methodology in understanding the common sense logic of professionals is its non-evaluative purposes and its assumption that "all social actors know a great deal about the conditions and consequences of what they do in their day-to-day lives" (Giddens, 1984: 281). However, there was an evaluative dimension to the research which phenomenological frameworks cannot address. Not only should supervisors taking part in the investigation be sufficiently experienced to have developed a considerable repertoire of routines related to supervision, but also it was necessary to make the distinction between those who were 'expert' supervisors and those who were 'less expert'. The evaluative dimension was addressed through a survey of PhD students' felt needs from which student criteria for expert supervision and supervisors who met these criteria are identified. Considerations relating to student needs, the criteria for expert supervision and the relationship between the survey and the methodological considerations of a phenomenological approach are reported in Chapter 4.

CHAPTER 4 RESEARCH STRATEGY, RATIONALES AND OVERALL DESIGN

One of the most striking needs emerging from the literature review (Chapter 2) was for research into the *processes* of supervision. Much of the research reported in the 1980s was product orientated, focussing on submission rates, factors related to students failing to complete within a four year period and the identification of associated problems (Welsh, 1981; Phillips, 1983; Rudd, 1985). The instigation of the ESRC Research into Training Programme (Chapter 2) was a significant move in the right direction with a number of the projects funded focusing on processes, the perspectives of supervisors and students and how supervisors talked about their strategies (eg Burgess et al, 1994; Parry et al 1994; Hill et al 1994; Hockey, 1996a). These projects and others, however, did not set out to study supervisory activities in their contexts of use or how supervisors explained their actions. Nor did the research literature provide examples of any large scale, coherent, systematic appraisal of the characteristics of 'good' supervision from students' perspectives and priorities.

It was, of course, possible for the interested reader of such research to select various criteria for good supervision for themselves and to learn much from the various quotations and discussions offered by the publication of such research. Several experienced supervisors have since used the results of their research and/or their own experiences in supervision (Salmon, 1992; Delamont et al, 1997a; Cryer, 2000; Phillips and Pugh, 2000) to write books providing advice for supervisors and students on such matters as how to get a PhD or how to improve supervisory practices; but, with the exception of Delamont et al (1997a), they have not, at least for publication purposes, shown how these prescriptions related to research evidence. There seemed

therefore to be a need for research which focused on understanding the processes of supervision on the one hand, and, on the other, a need for systematic representation of the criteria which it might be appropriate to apply to such processes. This research, therefore, has been concerned with an investigation into what is involved in successfully providing good PhD supervision. It was conducted using a survey of the value placed by PhD students on their own supervisors' activities followed by case studies of supervisors' practices where these most fully met student criteria. This chapter is concerned with the research strategies I used and my rationales for their adoption.

In thinking about research strategies, I explored the possibilities for the type of investigation most appropriate for *understanding* supervisory practices. Crucially the research questions were conceived from a phenomenological perspective (Chapter 3). While it is comparatively easy to see how case studies involving observation and in-depth interviews fit into a phenomenological framework, surveys have not generally been considered an appropriate way of gaining understandings of people's articulations of their common sense (Moser and Kalton, 1971; Oppenheim, 1992; Sayer, 1992; Bryman and Cramer, 1994). It was therefore necessary to justify decisions to include a survey as an integral part of this investigation, an issue which I address later in this chapter under the heading of 'Mixed methods'.

In considering how my questions could best be answered, it was necessary first to think about which individuals or groups might be well placed to contribute. Normally, there are two actors involved in the PhD supervision interaction - the supervisor and the student. The perspectives of both seemed equally important in a study of

supervisory expertise but, it can be argued, these perspectives are of two quite different kinds. On the one hand, the students are the ones who need the help and support of whatever kind and it is widely accepted in the literature that the successful completion of students' theses depends to some considerable extent on the needs of the student being met through the processes of supervision (Becher et al, 1994; Pole et al, 1997). It may be argued that the students, as the people best placed to judge whether or not their needs have been met, are probably also the people that are best placed to evaluate supervision. This seemed to be the logic behind much of the research reported in the 1980s where most researchers focused their attention on student opinions about the quality of the supervision they received (Welsh, 1981; Phillips, 1983; Rudd, 1985). Students are also in the best position to articulate the criteria by which supervision should be judged. Of course, students may sometimes be misguided in their judgements about what their real needs are. They may not have thought sufficiently carefully about the issues or about what needs it may be appropriate for their supervisors to try to meet. It followed, therefore, that their views could not be accepted uncritically but, nonetheless, they are the people best placed to know what help and support they need.

On the other hand, the supervisor is the person who has the responsibility for meeting student needs. It may be argued that, for the purposes of this thesis, the supervisors from whom there is most to learn are those who have had considerable experience of trying to meet the different needs of different students in different circumstances and at different stages and those for whom there is evidence about their expertise in meeting student needs. These were the supervisors I believed best placed to judge

what was involved, what conflicts or dilemmas arose, and what factors needed to be taken into account.

Given the different positions of students and supervisors in these respects, and the different things they were best placed to know, questions of how best to access their knowledge were two quite different questions, possibly requiring two quite different strategies. Not only were student and supervisor perspectives different but it could be argued that their motivations and abilities to respond to requests for information could also differ depending on the situations and circumstances under which they are asked to provide it. It has generally been assumed that PhD students are very dependent on their supervisors, and sometimes also on the luck of the draw in being allocated supervisors (Chapter 2). Supervisors could also be regarded by students as the key people on whom future careers depended. Under these circumstances, students were likely to be acutely aware of how well and in what respects their supervisors were, in their judgements, meeting their perceived needs. That being the case, if they were asked clearly, even in an impersonal questionnaire, to say what pleased them about what their supervisors did, or failing that, what would have pleased them, there should be little problem for them in bringing to consciousness or articulating the nature of their satisfactions and dissatisfactions with their supervision.

The focus of this research is not, of course, on supervisors' articulation for their students of their craft knowledge as researchers. It is rather on their *craft knowledge as supervisors*, the knowledge embedded in their practice of supervision (Chapter 2). Gaining access to the knowledge which supervisors used in trying to meet their students' needs was likely to be much more difficult. and by the very nature of craft

knowledge, this could be a problem. The more expert and experienced supervisors become, the less likely they are to make explicit those things most taken-for-granted in their own patterns of activity (Brown and McIntyre, 1993). The very nature of the flexible, fluent and economical ways in which experienced practitioners set about their work makes what they do, and how they do it, seem easy and obvious to the observer. As seems to be the case across a range of professions (Benner, 1984; Dreyfus and Dreyfus, 1986; Brown and McIntyre, 1993), many see their activities as so ordinary and routine as to merit little comment or explanation. A practical implication of the taken-for-granted nature of craft knowledge for a study of expert and experienced PhD supervisors is that researchers in this tradition must be prepared to facilitate the work for supervisors in remembering and making their craft knowledge of supervision explicit.

As reported from several different sources (Schön, 1983; Giddens, 1984; Dreyfus and Dreyfus, 1986; Eraut, 1994; Cooper and McIntyre, 1996), what is known about such knowledge suggests that the more experienced practitioners are, the more embedded their practical knowledge, the more intuitive and situation specific it is, and the more hard work is involved for both supervisor and researcher in articulating that knowledge to make it accessible to others (Delamont and Atkinson, 1995). In some contrast to the relatively simple task of asking PhD students about the nature of their satisfactions and dissatisfactions, the process of gaining access to the expert craft knowledge of supervisors would necessarily involve an extended personal engagement with individual supervisors. Whereas an appropriately designed questionnaire study might be an effective way of gathering the information from

students, in-depth case studies were thought necessary to discover the much more complex information required from supervisors.

This tentative conclusion was reinforced by three other considerations. First, research concerned unambiguously with 'good' supervision is inherently evaluative, and the need for my research was to separate out the *evaluative element* in asking students to identify their satisfactions and dissatisfactions with their supervision from a concern to successfully negotiate access to experienced supervisors with the prime purpose of *understanding* what they did and how they did it. To conflate the two purposes in a case study approach was thought to jeopardise the establishment of the necessary rapport with supervisors which was needed if they were to want to explicate their craft knowledge. Second, if the student survey could properly be conducted by a postal questionnaire, that would open up possibilities of reaching generalisable conclusions through collecting the views of a large and nationally representative sample of PhD students. There was, however, no possibility of being able to make comparatively generalised claims about supervision processes from a small number of case studies. Third, a large scale student survey in advance of the supervision case studies had the added advantage of providing an ideal opportunity to identify supervisors who were considered by students as wholly successful, thus providing an appropriate sample of approved, experienced supervisors for the case studies to follow (Gomm et al, 2000). The consequence of using two such different approaches were, of course, that the status of the knowledge gained through the two strategies was correspondingly different. This raised the question of the appropriateness of using different approaches in the same study.

Mixed methods

Throughout the past two centuries, debates have frequently focused on the social science principles and methods which could or should underpin empirical research and their effects on the quality of that research (Hammersley, 1992; Hammersley and Atkinson, 1995; Atkinson et al, 2001). Various positions have been taken up on whether or not it is possible or desirable to combine the approaches of different traditions in research design or data gathering procedures, for example, surveys involving mainly quantitative procedures with case studies which are predominantly qualitative. It is possible from the literature to identify researchers who strongly resisted the idea of mixing methods, asserting the existence of mutually exclusive epistemological positions (eg Filstead, 1970; Smith and Heshusius, 1986). More pragmatic or eclectic views entertain the possibility of combining methods where these best meet the purposes for the research (Burgess, 1985; Bryman, 1988; Robson, 1993; Guba and Lincoln, 1994; Miles and Huberman, 1994), and there is evidence to suggest that at least 40% of social science research projects conducted in the last decade have made use in some way of mixed methods (Niglas, 2000). Various attempts have been made to define and categorise systematically the different forms that occur when 'mixed methods' are used (Bryman and Cramer, 1990; Miles and Huberman, 1994; Niglas, 2000). Miles and Huberman (1994), amongst others, have encouraged an eclectic approach, believing that "the quantitative-qualitative argument is essentially unproductive" (Miles and Huberman, 1994:41). They stressed careful consideration of the purposes of the research to assess whether or not linking qualitative and quantitative methods is appropriate. They also drew attention to the possibility that such linkages might expand the scope of the research with implications for practicability.

The issues outlined above raised questions for my research based within a phenomenological framework. It was comparatively easy to situate case studies drawing on ethnographic principles within this framework, but more challenging to show how my phenomenological concerns and concepts related to a survey approach. None of the various models and categories for 'mixed methods' so far developed and reported in the literature seemed relevant to my resolution of the problem of situating a quantitative survey within a phenomenological framework. How could such a survey be designed to reflect my initial assumptions? Before returning to this issue later in the chapter, I considered the proposed form of the student survey and case studies and their intended relationship.

The form of the student survey

The survey is a classical tool in the conduct of social science, in its most systematic form, dating back to the 17th Century (Marsh, 1982), and is considered, properly conducted, to be a highly efficient way for collecting information from large numbers of people. There were a number of options available in designing the student survey, descriptive or analytic (Moser and Kalton, 1971; Robson, 1993). The simplest form is 'descriptive', involving the collection and presentation of information on what people say they think, value or do. An analytic survey is more ambitious involving multivariate correlational analysis. For my purposes, all that was needed was a straightforward description of what students most valued and, where possible, a description also of why they valued these things.

Descriptive survey strategies have a number of clear advantages which provide a relatively simple and straightforward approach to the study of attitudes, values, beliefs and motives (Moser and Kalton, 1971, Oppenheim, 1992; Robson, 1993). As Robson (1993) and Marsh (1982) have commented, a major disadvantage was that “data are affected by the characteristics of the respondents (eg memory, knowledge, experience, motivation and personality)..and people responding in a way which shows them [or others][*my insertion*] in a good light.” (Robson, 1993: 128). These disadvantages are particularly applicable to postal questionnaires where researchers have less control over the ways in which questionnaires and their completion are regarded or treated by respondents. Moser and Kalton (1971) commented extensively on the problem of ‘non-response’ where a low response rate (for example, less than 40%) might invalidate the findings, and provided detailed advice about how such problems could be minimised. They suggested that a postal questionnaire could only be considered where simple and straightforward questions were used and where respondents were sufficiently skilled, knowledgeable and motivated on the subject to answer these questions. As reported earlier, with the focus on ESRC research students, I was confident that, with careful presentation, such conditions would prevail.

The form of the supervisor case studies

Case Study research has been variously defined in the literature (Burgess, 1984; Robson, 1993; Miles and Huberman, 1994; Bassegy 1999; Gomm et al, 2000) and the term does not imply any particular set of techniques or tactics distinctive to ‘case study’ (Hammersley, 1992; Miles and Huberman, 1994). Frequently the methodologies and methods are those deriving from qualitative social science research traditions, including ethnography, symbolic interactionism and

phenomenology (Hammersley, 1992; Miles and Huberman, 1994; Hammersley and Gomm, 2000). There is some agreement about major characteristics. Most generally,

Case study is a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence. (Robson, 1993; 5).

Referring to 'real life' contexts, Bassey (1999) describes case study as "strong in reality" (Bassey, 1999:23) with special attention paid to the subtlety and complexity of the case and its embeddedness in the context. Miles and Huberman (1994) equate case study with qualitative empirical investigations where data are collected from individuals or groups "in close proximity" (Miles and Huberman, 1994:10). Contrasting case study with surveys and experiments, Hammersley (1992) defines case study as a distinctive case selection strategy "involving the investigation of a relatively small number of naturally occurring cases" (Hammersley, 1992:185). Case studies are also described in terms of their purposes, for example, developing theoretical propositions, providing rich descriptions, and testing theories or hypotheses (Bassey, 1999; Hammersley and Gomm, 2000).

Case study strengths and weaknesses

Major strengths of a case study approach are that a great deal of detailed information can be collected about people's views, interests, concerns and activities related to specific situations and circumstances. These are thought especially useful for exploring situations where little is known (Miles and Huberman, 1994). There is, for example, the potential for researchers to learn about the complexity of situations and about the understandings of participants which normally remain implicit (Mitchell, 2000). In contrast to survey strategies, Robson (1993) points to the flexibility of case

study where a reasonable balance can be struck between prespecified and 'emergent' design, that is, there is the possibility of making changes to take account of unexpected events or situations which occur in the processes. He advises researchers to be cautious in adopting highly structured conceptual frameworks as important features of the case (as seen by the participants) may not emerge and evidence may be misinterpreted.

A major issue arising for case study approaches is whether or not generalisations can be made from case study findings to a larger population, and the debate is ongoing (Hammersley, 1992; Stake, 1995; Simons, 1996; Bassey, 1999; Gomm et al, 2000). It is generally agreed amongst protagonists that the generalisations which can be made from case study research are different from the probabilistic generalisations sought from statistical analyses (Yin, 1994; Bassey, 1999; Gomm et al, 2000). This debate has been fuelled in part by the conduct of case study research where the design, processes and especially the implicit nature of the design criteria do not allow readers or potential users to exercise their judgements (Atkinson and Delamont, 1985; Hammersley, 1992). In attempts to resolve some of the issues, Gomm et al (2000) have brought together in one volume, a range of authors who theorise the nature of the generalisations appropriate to case study research differently according to their purposes. For example, some advocate 'naturalistic generalization' or 'working hypotheses' in contexts where the research aims to directly inform professional practice, for example, in action research. In these cases, generalisations are expected to be drawn by the readers or 'users' of the research in response to rich descriptions rather than to any general conclusions drawn by the researcher. Thus readers decide whether or not descriptions have 'transferability' and 'fittingness' for use in their own

settings (Stake, 2000). For most other purposes, generalisations of some form are expected and regarded as necessary to fulfil criteria for social science research (Yin, 1994; Bassey, 1999; Lincoln and Guba, 2000; Donmoyer, 2000; Mitchell, 2000). For example, Mitchell (2000) argues that legitimate inferences can be made about “general, abstract theoretical principles” (Mitchell, 2000:10) which the case(s) is taken to exemplify. In considering the various arguments presented, Hammersley and Gomm (2000) comment on the weaknesses of the generalisations which it is possible to make from case study research compared with surveys. They argue that a comparative analysis across case studies can provide a much stronger basis for general theoretical conclusions than those of a single case. They advise researchers to pursue such goals in full awareness of the difficulties involved, and, given general conclusions which have potential generalisability at best, “researchers must build on one another’s work” (Hammersley and Gomm, 2000:249).

In ‘full awareness of the difficulties’ reviewed in this sub-section, the issues of generalisation outlined here are raised later in the thesis (Chapter 6) where the specific design features of the supervisor case studies are presented in relation to ethnographic principles and Schutz’s phenomenological postulates.

Relationship between the student survey and the supervisor case studies

The next question was how it was possible for the two different kinds of outcomes from the empirical research to be related to one another as very different claims could be made for the outcomes of the research. It was clearly not possible to make any straightforward comparisons such as: ‘whereas students emphasise ‘x’ and ‘y’, supervisors pay more attention to ‘p’ and ‘q’’. Within the limits of this thesis,

questions of the following kind were addressed: 'when supervisors attempt to meet needs of type 'x', much emphasised by PhD students, what are some of the factors of which they have to take account? What dilemmas, if any, can arise? What are some of the ways supervisors attempt to deal with the situations?' Linking the two different approaches through addressing such questions in the conclusions to the study meant that they could be viewed as relatively independent until the interpretation stage (Mason, 1994; Niglas, 2000). There were, however, several other related dimensions which suggested a 'mixed method' design where the survey had a supplementary role to the more dominant case studies (Cresswell, 1995). First, the survey provided the information needed to choose case study supervisors approved by their students and, second, it provided sensitising information about student criteria to aid the conduct of case study observation and interview.

Marsh (1982) in her discussion of the contribution of surveys to sociological explanation talked about the adequacy of a survey approach to 'meaning' in which she drew upon phenomenological conceptions of social research:

By conducting the logical elements of the survey method with the method of Verstehen, we can begin to construct much more satisfactory explanations for social phenomena (Marsh, 1982:100).

She suggested that one fundamental way of assessing an actor's meaning is by asking the actor, but there could be problems arising from the use of a survey to do so, one of which was knowing the characteristics of the respondents and how these might affect their responses (Moser and Kalton, 1971; Oppenheim, 1992; Sayer, 1992; Robson, 1993; Byrne, 2002). Given wide UK dispersal of the ESRC funded student

population, face to face interviewing or interviewing by telephone were considered impractical, and a postal questionnaire was considered more appropriate.

I was confident that the important established criteria for the valid use of a postal survey would be met in this case, but this was not a sufficient justification for the intended use of a survey from a phenomenological standpoint. Often, a survey on this scale would ask respondents to select their responses from a number of predetermined categories, closed questions decided by the researcher in advance, which, amongst other reasons, makes the coding of responses easier and does not rely on much thought or time having been spent by the respondents in considering the questions. Pre-categorised responses were rejected on the grounds that this was the first time a systematic appraisal of PhD student criteria had been attempted on such a scale and I could not be sure of having sufficient prior knowledge of how students thought about the positive aspects of their supervision. An extensive pilot study in advance (Moser and Kalton, 1971, Oppenheim, 1992; Robson, 1993) with the express purpose of pre-categorisation seemed redundant in my case and I was reluctant also to negotiate access to ESRC students twice with my employers; once for a pilot study and then for the main study. More fundamentally, quick student responses to pre-categorised questions did not fulfil the conditions that students answered the questions in their own terms and that the questions did not impose the researcher's preconceptions - distinctively phenomenological considerations. The choice of open-ended questions meant, however, that a considerable amount of effort was required at the later stages in creating a category system sensitive to what students were saying and how they were saying it. Thus the implications for the analysis somewhat offset the reported benefits of a survey as an 'efficient' means of collecting large amounts of data. A

further consideration made with respect to open questions was my awareness of a number of small and large scale surveys where open questions had been used successfully before, for example, a study of 85 responses from postgraduate research students in education conducted by Delamont and Eggleston (1983).

As an outcome of the reasoning reported in this first part of the chapter, data were collected using two different approaches; first, a postal survey of PhD students' evaluation of their supervision and second, a small number of case studies of supervisors and students in the specific settings within which their supervisions took place. These were related by the use of data from both procedures to answer questions about the various ways expert supervisors went about the provision of supervision which students most valued. Whereas it was possible through the student survey to establish some quite strong empirical generalisations about the nature of PhD students' perceptions of their own needs and about their criteria for evaluating what their supervisors did, the supervisor case studies were aimed instead at generating potentially helpful theoretical insights.

In Chapter 5, the results of the student survey are reported, but first it is necessary to describe how the survey was conducted and the questions which guided the analysis of data. Details of the development of coding categories and related issues are in Appendix 2.

Design of the student survey

The open questions to which students were asked to respond in the survey were:

- i) What do you most value about what your supervisor does for you?
- ii) Why do you value these things?
- iii) Is there anything else that your supervisor could do which would be valuable to you?
- iv) Why would these be valuable?

There were, I have argued, strong grounds for being confident that social science PhD students would understand these questions as I intended, would be both able and motivated to articulate their own thinking about them, and that I would generally be well able to understand the intended meaning of what students wrote.

Survey access and sampling procedures

Questionnaires (Appendix 4) were sent out to all the students currently holding full-time research studentship awards from the Economic and Social Research Council (ESRC) in 1993. I targeted students holding ESRC awards because they had successfully competed in an open national competition where, in 1993, only one out of four gained an award. The assumption was that successful students were, in some sense, the 'cream' of UK (and Economic Community) postgraduates, and would therefore have positive self-images and confidence in their own abilities to produce a good and timely PhD thesis. This factor was expected to increase the chances of their returning questionnaires with full and considered responses. Only departments which have successfully met the ESRC criteria for good formal training and supervision are eligible to receive ESRC research studentships (Chapter 1) and I assumed that these departments were more likely to provide expert supervision than unrecognised

departments. More pragmatically, ESRC research students were an easily identifiable grouping for which access to names and departments could be negotiated for a project of considerable interest to the ESRC (Chapter 1). The ESRC was approached for permission to use its data on all the research students and their supervisors for awards which started in October 1990, 1991 and 1992. Permission was granted on condition that it was made very clear to students that they were under no obligation from the ESRC to respond to the questionnaire. Information released was: student name, award number (indicating the year the students started their studies), institution, department, ESRC subject area classification, age, gender, and the name of the principal supervisor.

Conduct of the survey

On 25 June 1993, the questionnaires were sent to 789 ESRC postgraduate research students with a letter of explanation (Appendices 3 and 4) and a stamped addressed envelope to facilitate return. 354 questionnaires were returned by the closing date of 31 July 1993, a 45% response rate. 54 more questionnaires were returned later from students who were, for example, conducting their research abroad or who had gone on holiday before the receipt of the questionnaire, bringing the total response rate to 52%. Included in this response rate were seven returned by the Post Office marked 'Not known at this address' (0.9%) and sixteen returned by students without responding (1.9%).

Each questionnaire was numbered in order to establish demographic characteristics of students and their supervisors (including their universities and departments). Two students indicated the numbering as a reason for returning their forms uncompleted,

and nine others effaced the numbers or photocopied one form. Deducting the above respondents and non-responses, the total number of responses for analysis was 376. However, in 58 responses, students made prescriptions for what supervisors *should* do rather than saying what their supervisor actually did and no coding was attempted. This brought the total number of student responses coded to 318. 17 students responded only to Questions 3 and 4, bringing the total number of responses to Questions 1 and 2 to 301. Those responding to Questions 3 and 4 numbered 163.

Most students reacted in the spirit in which the decision was taken to number the forms. Students were asked to celebrate the experience and expertise of their supervisors and this was spelled out in the letter attached (Appendix 3). It was also made clear that they were under no obligation to answer the questions, the condition stipulated by the ESRC for data access. A related factor in the response rate could have been my own connection with the ESRC (General Introduction to the Thesis).

Survey research questions

In order to gain a general picture of the population of ESRC students whose responses to the questionnaire were coded (Appendix 5), the nature of the distribution of student respondents across year groups, subject areas, age groups and gender was analysed. The major aim for the statistical part of this survey, however, was to identify the criteria most frequently used by doctoral students to evaluate their supervision. Four questions guided the numerical analysis.

First, what do students most frequently value in what their supervisors do for them? Are there significant differences according to year group? Second, where students

provide explanations for what they value, what is the nature of these explanations?. Are there significant differences according to year group? Third, what categories of valued supervisory activities and dispositions are most frequently mentioned by students as having constraining or facilitating contexts? Fourth, at the second stage of the analysis, the aim was to identify, exemplify and comment on distinctive properties and dimensions of different kinds of student responses.

CHAPTER 5 THE STUDENT SURVEY ANALYSIS

Having decided that students were best placed to know what kinds of supervisory activities best met their felt needs, and that supervisors were best placed to know how to meet student needs (Chapter 4), the major aim for the statistical part of the survey reported in this chapter was to identify the criteria most frequently used by doctoral students to evaluate their supervision. The nature of 'good' supervision is, therefore, determined by students' responses in the survey to the various ways their supervisors went about their tasks which students most valued. Thus the survey laid down the foundations for the sampling of supervisors selected as 'experts' in an unqualified way by student respondents and the conduct of the case studies reported in Chapter 7.

Three types of analysis of the student survey data were conducted. In Section 1, the survey data was used to portray the demographic characteristics of student responses by subject area, gender and age and to compare the distribution with that of the stock of ESRC research studentship awards held by the ESRC for the same year (1993). In Section 2, I report and discuss the results of my numerical analysis using my coding categories (Appendix 2). In Section 3, the results of a closer analysis of the content of students' responses is made, drawing on sub-categories (Appendix 2) and using the frequencies of responses to determine my priorities for discussion. The analysis was based broadly on the four questions outlined at the end of Chapter 4: 1. What do you most value about what your supervisor does for you? 2. Why do you value these things? 3. Is there anything else that your supervisor could do which would be valuable to you? and 4. Why would these be valuable?

SECTION 1 Demographic characteristics of PhD student responses

This chapter begins by showing diagrammatically the distribution of student respondents by subject area (using the ESRC category system), age and gender. Figure 1 shows the distribution of student respondents by subject area and gender. The most frequently represented subject area in the survey is Human Geography (HUG), the least well represented subject areas being: Social Policy (SOP), Linguistics, and Planning (PLA). The distribution of respondent students by subject area is very close to that of the whole population of those taking up ESRC studentship offers from 1990 to 1992 (during that period Human Geography and Planning were not differentiated, nor were Psychology and Linguistics nor Sociology and Social Policy, so for comparative purposes these categories were combined)(ESRC, 1993). The rank order correlation between the number of respondents in each subject area and of those awarded grants is 0.93. Most over-represented was Human Geography and Planning, with 23% of the total sample instead of 16% of the population; and most under-represented was Sociology and Social Policy, with 13% of the total sample instead of 16% for the population.

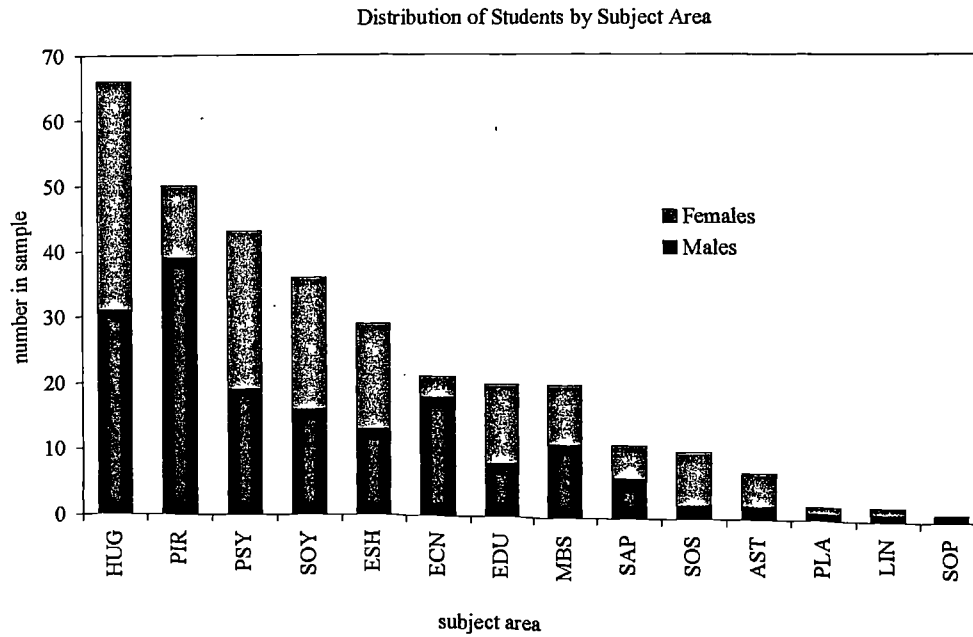


Figure 1

ESRC Subject Area Categories

Human Geography (HUG)	Economics (ECN)	Area Studies (AST)
Politics and International Relations (PIR)	Education (EDU)	Planning (PLA)
Psychology (PSY)	Management and Business Studies (MBS)	Linguistics (LIN)
Sociology (SOY)	Social Anthropology (SAP)	Social Policy (SOP)
Economic and Social History (ESH)	Social Legal Studies (SOS)	

Science, Technology and Innovation Studies, and Statistics, Research Methods and Computing applied to the Social Sciences, and Multi-disciplinary, are unrepresented in this survey.

With regard to gender, 47% of the respondents were female. This matches fairly closely the 42% of the whole population of ESRC supported PhD students who were female. The slight tendency for males to be in the majority overall is accounted for very largely by the heavy dominance of men in two subject areas, Economics and Politics

and International Relations (Figure 1). This is true of the whole population of those students receiving ESRC awards as it is for the respondents.

Figure 2 shows that most student respondents were between the ages of 23 and 30. Precise comparison with ESRC population records is not possible because different age categories are used in the ESRC statistics. In the sample, an estimated 29% were aged 25 or under, as opposed to 37% for the population. However, in both population and sample, 8% of students were 40 or over.

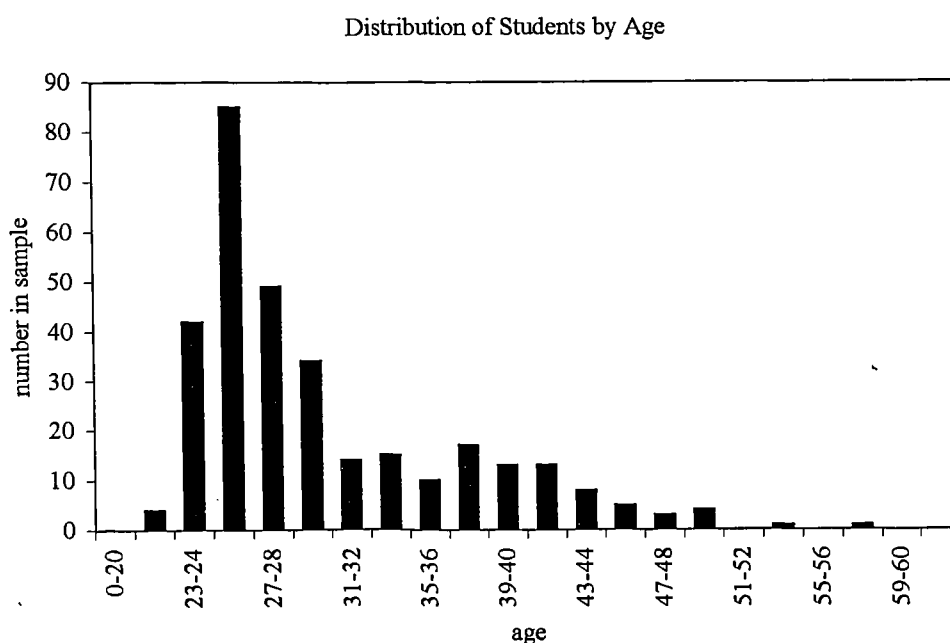


Figure 2

Figure 3 shows the age distribution of student respondents by subject area with the largest proportion of students under thirty years of age in Human Geography and Economics and the lowest proportion under thirty in Sociology and Education.

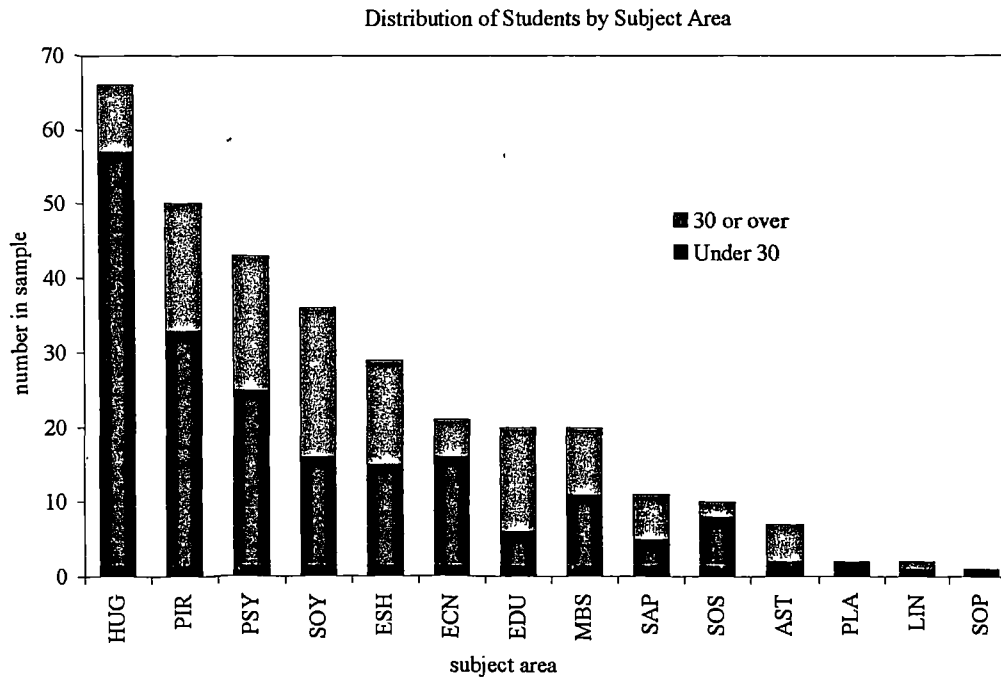


Figure 3

SECTION 2 Frequencies and trends of student responses

In this section, I present my numerical data using tables to represent frequencies of student response in the main categories, followed by a commentary on major trends.

2.1 Student descriptions of their supervisors' activities

In their responses to Questions 1 and 3 of the survey questionnaire, 314 students wrote about what they most valued, or would have valued, about what their supervisors did for them. The first important thing to be noted was that, asked about what their supervisors did for them, students responded not only in terms of supervisory activities but also frequently in terms of supervisor characteristics or dispositions. Their responses in terms of dispositions are analysed in the next sub-section. The supervisor activities that were valued could be seen as falling into three major categories: 'Reading and commenting on written work' (where students mentioned supervisory

assessment of their written work); ‘Help and advice’ (where students mentioned supervisory actions linked to help, advice, guidance, teaching, training etc.); and ‘Managing the thesis’ (where mention was made of supervisory actions related to time management, setting of deadlines, shorter term objectives or targets for the work) (Appendix 2). Tables 1 and 2 below show the numbers and percentages of student references to each of these three types of supervisor activity by the year in which the students began their PhD studies with ESRC funding. Table 1 shows those activities positively valued while Table 2 shows those activities which students would have valued. Of the total number of 314 respondents, 301 (96%) responded to questions 1 and 2 while 163 (52%) responded to questions 3 and 4.

Table 1

Distribution of numbers of students making positive references to each of three types of their supervisors’ activities by year group (Q 1)

	Acts	CW	HA	MAN
Year St No				
1990 N=81		40 (49%)	47 (58%)	26 (32%)
1991 N=89		39 (44%)	53 (60%)	40 (45%)
1992 N=131		47 (36%)	91 (70%)	55 (42%)
All years N=301		126(42%)	191 (64%)	121(40%)

Table 2

Distribution of numbers of students making negative references to each of three types of their supervisors’ activities by year group (Q 3)

	Acts	CW	HA	MAN
Year St No				
1990 N=55		17 (31%)	18 (33%)	12 (22%)
1991 N=60		17 (28%)	27 (45%)	11 (18%)
1992 N=48		19 (40%)	18 (38%)	11 (23%)
All years N=163		53 (33%)	63 (39%)	34 (21%)

While all three kinds of activities are widely mentioned, it is ‘Help and advice’ that receives clearly the largest proportion of mentions. Remembering that the 1990 cohort were coming to the end of their third year, that the 1991 cohort were coming to the end of their second year and the 1992 cohort were coming to the end of their first year, the figures above would suggest that, in general, there is little difference in these

percentages across the three cohorts with three possibly significant exceptions. There are slight trends for students at earlier stages to value more help and advice, with Table 1 showing more positive comments on 'help and advice' made by students at the end of their first year (70%) than are made by students in the other two years (60% and 58% respectively) (Welsh, 1979; Pole, 1997). For those at later stages, there are slight trends for students to put more value on comments on written work and less than those in earlier years on managerial help. For example, Table 1 shows that the proportion of students referring positively to 'comments on written work' grows incrementally from the first year (36%) through second year (44%) with most references made by third year students (49%) (Burgess, 1994; Hockey, 1995; Pole, 1997). No comparative distinctive patterns are, however, discernible in Table 2 for those students making negative references to their supervisors' activities, which emphasise that the trends apparent in Table 1 must be interpreted with caution.

2.2 Student descriptions of their supervisors' dispositions

The supervisor dispositions that were valued could be seen as falling into four major categories: 'Abilities' (where students mentioned such attributes as supervisory skills, knowledge, understandings, awareness, experience or reputations); 'Process' (mention of relatively stable characteristics of supervisors, including aspects of their social skills such as conscientiousness, enthusiasm or interest); 'Availability' (mention, for example, of supervisors' availability, making time, open door); 'Relationship' (mention of rapport, trust, respect, friendship etc.)(Appendix 2). Tables 3 and 4 below show the numbers and percentages of student references to their supervisors' dispositions for each of these four types of 'dispositions'. Table 3 shows positive references; Table 4 shows negative references.

Table 3

Distribution of numbers of students making positive references to each of four types of their supervisors' dispositions (Disps) by year group (Q 1)

Disps	ABS	PRO	AV	REL
Year				
St No				
1990				
N=81	21 (26%)	43 (53%)	26 (32%)	23 (28%)
1991				
N=89	29 (33%)	34 (38%)	23 (26%)	20 (22%)
1992				
N=131	32 (24%)	68 (52%)	41 (31%)	32 (24%)
All years				
N=301	82 (27%)	145 (48%)	90 (30%)	75 (25%)

Table 4

Distribution of numbers of students making negative references to each of four types of their supervisors' dispositions (Disps) by year group (Q 3)

Disps	ABS	PRO	AV	REL
Year				
St No				
1990				
N=55	8 (15%)	10 (18%)	7 (13%)	0
1991				
N=60	10 (17%)	16 (27%)	9 (15%)	0
1992				
N=48	7 (15%)	12 (25%)	0	2 (4%)
All years				
N=163	25 (15%)	38 (23%)	16 (10%)	2 (1%)

Although all the categories of supervisors' dispositions receive frequent mentions, it is more than anything else the 'Processes' that receive most positive and negative mentions. Also worthy of comment is that for 'dispositions' much more than 'activities', it is (as intended) the supervisors' positive attributes that are much the more frequently mentioned by students. No very clear trends are apparent in differential mentions of 'dispositions' across year groups.

2.3 Student explanations for the value they placed or would have placed on their supervisors' activities and dispositions

In their responses to Questions 2 and 4 of the survey questionnaire, 94% of those students responding positively (N=301) gave explanations for the value they placed on what their supervisors did for them, and 26% of those students responding negatively (N=163) gave explanations for why they would have valued activities they did not experience. It should be noted that any mention by a student of supervisory *activities* coming under one of the three major categories was coded as '1' (even if the student mentioned several aspects of that activity) so that its frequency was equivalent to the

number of students referring to that activity. The same was not true of explanations. Every explanation following from a mention, or mentions, of an activity was coded under one or another of the appropriate 'explanation' categories. As one student could give anything from 0-6 explanations for one or more different aspects of an activity coded as '1' under an 'activity' category, the frequencies of student explanations are *not* equivalent to the number of students.

The explanations were of several different kinds. One major type of explanation for valued supervisory activities or dispositions related them to 'Outcomes' (OUT) seen to follow from them. Other explanations were in terms of needs which they met. Two different kinds of needs were distinguished, 'Personal needs' (PND) and 'needs arising from external sources' (XND). Explanations of a very different kind were those which offered evidence of the valued supervisor characteristic or disposition, 'Evidenced by' (EVBY). Tables 5 (positive references) and 6 (negative references) below summarise the relative frequency of these kinds of explanations.

Table 5

Distribution of numbers of student references to each of four types of explanations for the value they placed on their supervisors' activities and dispositions by year group (Q 2)

Cats Pos	OUT	PND	X ND	EV BY	Total
Expl					
1990	95	139	2	11	247
1991	96	141	3	14	254
1992	141	245	4	37	427
Total	332 (36%)	525 (57%)	9	62	928

Table 6

Distribution of numbers of student references to each of four types of explanations for the value they would have placed on their supervisors' activities and dispositions by year group (Q 4)

Cats Neg	OUT	PND	X ND	EV BY	Total
Expl					
1990	30	55	0	2	87
1991	31	49	1	8	89
1992	15	34	0	1	50
Total	76 (34%)	138 (61%)	1	11	226

The significant trend is for students to explain the value they attach to their supervisors' activities and dispositions primarily in terms of supervisors meeting students' 'Personal Needs' (PND) (57% and 61% of the total number of explanations respectively) and secondly in terms of 'Outcomes' which also accounted for a significant number of explanations (36% and 34% respectively). This clear trend, which is common across all three year groups, and across explanations of both positive and negative responses, is complemented by the equally consistent almost negligible frequency of explanations in terms of external demands (XND).

Context

This category represented student mention of the contexts in which their supervisions took place and the presence or absence of contextual properties or conditions which students believed facilitated or constrained what their supervisors did. Table 7 below shows the frequency of student references to 'context'.

Table 7

Frequency of student references to facilitating or constraining contexts within which they value or would have valued their supervisors' activities and dispositions

Contexts			
Cats Years	Facilitates	Constrains	Total
1990	18	9	27
1991	13	8	21
1992	13	17	30
Total	44	34	78

Most noteworthy is the very low level of student comment on either facilitating contexts or constraining ones. If one can talk about trends at all, there is a small trend

for students in the third year group to refer more to facilitating contexts whereas in Year 1 rather more references are made to constraining contexts.

SECTION 3 Detailed analysis of the content of student responses

In this Section, a more detailed analysis is undertaken of the differences in student responses within the main categories of supervisors' activities and dispositions. For each of these main categories, student responses were examined and coded under a number of sub-categories which seemed to capture the different types of properties to which students referred (Appendix 2). The frequencies of references within these sub-categories are represented in tables, one for each of the eight major categories: for Supervisor Activities: 'Comments on Written Work' (CW), 'Help and Advice' (HA) and 'Management' (MAN); for Supervisor Dispositions: 'Abilities' (ABS), 'Process' (PRO), 'Availability' (AV) and 'Relationships' (REL); and 'Contexts' (CON). Similarly this is done for students' explanations. The purposes of the tables in this Section are to allow me to note, exemplify and comment upon the most frequently mentioned sub-categories. As I have disregarded the differential numbers of students in each year, concentrating only on the frequency of comments, it is not possible to compare the frequency of comments between year groups. It is however possible to compare frequencies *within* year groups. In the absence of any evidence of distinctive trends overall for student negative references, the focus is on positive references (unless the sub-categories and frequencies worked out for students' negative responses demonstrate otherwise). The tables are placed at the beginning of each section to emphasise (in bold) the most frequently mentioned sub-categories across all three year groups so that discussion can be prioritised.

3.1 Supervisors' Activities: 'Reading and commenting on written work'

Table 8 Reading and commenting on written work (CW) sub-categories: frequency of positive student references to each of seven sub-categories

CW Pos Sub- Cats	Read			Comment						Total
	CW GEN	RQul	Other	CQul	Focus	Speed	Form	Type	Other	
Year										
1990	8	9	1	20	9	5	7	5	0	64
1991	9	6		28	2	3	3	2	0	53
1992	8	12	0	37	8	4	6	4	0	79
Total	25	27	1	85	19	12	16	11	0	196

Sub-Cats =
Sub-Categories

Gen =
General

RQul = Qualities of the
supervisor's reading

CQul = Qualities of the supervisor's
comments

In Table 1, 42% of students in all years especially valued their supervisors' comments on written work (Welsh, 1979; Hill et al, 1994). In Table 8 above, 25 references were made by students in terms of 'reading and/or commenting on written work' providing no further information (CWGEN). I focus here on those other sub-categories with the highest frequencies, and a brief summary is provided of the remaining categories. Overwhelmingly of greatest concern was the 'Quality of comments' (85), followed by 'Quality of reading' (27) and 'Focus of comment' (19).

The qualities of supervisors' comments on students' written work

Students were particularly pleased if supervisors' responses were thorough, searching, comprehensive, challenging, in-depth, accurate, objective, and included both positive and negative comments (Becher, 1993), for example: "close and thorough criticism of

written work” (134: yr3)*. Constructive criticism included: “point[ing] out the faults but also suggest[ing] solutions” (721: yr1); and:

there is nothing worse than being told that the last "n" number of weeks work is not what is needed without being told why and how you can work in what you've already done (34: yr3).

For some, it was also important that the critique be objective. One of the students quoted above went on to say: “you definitely need someone to look at what you have written objectively” (721: yr1) and the next student spells out what he means by ‘objective’:

I value his criticism because it is independent of any personal friendship or relationship. This is what distinguishes it from those of other friends who may read my work (461: yr2).

Several students mentioned the importance of supervisors praising work well done: “praise is crucial” (688: yr1) .

A number of references were made to how supervisors delivered their comments. Some students placed value on supervisors who could judge whether or not their students could ‘take the knocks’ in making their comments. Some students seemed quite comfortable with honest, frank, direct and sometimes hard critique, whereas others emphasised critiques which were never harsh or negative but which built constructively on the good points (Welsh, 1978; Wright and Lodwick, 1989; Becher, 1993). One student called this a ‘coaxing’ kind of critique where the supervisor “always couches his comments and criticisms in a positive way so that they are

* Student quotations are always followed in brackets by their questionnaire reference number and the students’ year of study.

supportive and not undermining” (307: yr2). Students who seemed to be able to ‘take the knocks’ described their supervisors as

acutely critical of everything I do or suggest. This means that nothing that is anything less than rigorous and workable can get past him (302: yr2);

reads anything I give her and returns it promptly with very critical and challenging comments. It forces me to think and agonise long and hard about what I’m doing and why; its not an easy or comfortable kind of supervision but it will produce a better (more academically rigorous) thesis in the end (169: yr3).

Qualities of supervisors’ reading of students’ written work

How supervisors read the work seemed important too (27). Students were pleased when their work was thoroughly and carefully read by their supervisor, for example:

When I give him a serious piece of work, he treats it with full attention, reads it closely, comments and suggests directions, weaknesses and strengths (425: yr2);

I have really appreciated my supervisor’s close reading of my work, stylistic as well as substantive criticism (632: yr1).

Some students also appreciated their supervisor for reading anything they submitted:

“he is always happy to read anything I write which is a lot and often” (433, yr2).

Focus of supervisors’ comments on written work

19 student references were to the focus for valued critique, including the substance of the text, the structure, ideas, logic, assumptions and arguments, style of writing, and grammar and spelling according to the individual students’ perceptions of their need or the stage they had reached in their research, for example: “lets me know where my argument falls down and where it is strongest, and suggests lines of thought I might pursue” (32, yr3).

Also valued were critiques returned promptly, regularly, at short notice or 'more or less speedily depending on my needs' (211: yr3) ('Speed' category) and provided orally, in writing, or both, and, for two students, in typescript ('Form' category). 'Types' of written work commented on included: thesis chapters and papers, funding applications, reports and papers for publication.

Student explanations for the value they place on supervisors' 'reading and commenting on written work' (CW)

Table 9 Frequency of student references to each of nine explanatory sub-categories for the value placed on supervisors' Reading and Commenting on written work' (CW) (Q2)

CW Expls Sub-cats	PNd			XNd			Outcomes					Ev By	Total
	St Cog	St Aff	Oth	TD	Opp	StCog	Use	Stnd	Product	Imp	Oth		
Year 1990	4	8	0	2	3	3	1	6	0	10	0	1	38
1991	2	7	0	6	6	1	1	9	3	7	0	2	44
1992	3	6	0	4	2	8	7	6	0	8	0	6	50
Total	9	21	0	12	11	12	9	21	3	25	0	9	132

PNd = Personal Need

St Cog = Student Cognitive Characteristics

St Aff = Student Affective Characteristics

XNd = External Need

TD = Task Difficulty

Use = student/supervisor use of comments

Imp = improvement in the work

Stnd = standards for the work

Prod = product

Oth = Other

Ev By = Evidenced by

In contrast to the tendency overall for students to explain the value of their supervisors activities and dispositions in terms of 'personal needs', supervisors' comments on written work attracts a greater number of student explanatory references to 'outcome' sub-categories (60% of the total number of explanatory references, N= 122) than to 'personal and external need' sub-categories (40%). The highest number of student explanatory references to outcomes were made to the sub-categories, 'Improvement in the work' (25) (Wright and Lodwick, 1989; Hill et al, 1994) and 'standards for the

work' (21) (Becher et al, 1994). Among references to 'personal needs' much the highest number (21) of references were to student affective personal characteristics.

Examples of valued improvement outcomes included: "Improvement of the quality of the work" (211: yr3) and, more specifically: "my written work, style and content, has improved considerably" (433: yr2). Students made reference also to the criteria and standards for the work: "quality control..judges the standard in relation to what is expected" (4: yr3); and "my work is validated by the supervisor as part of the academic establishment" (750: yr1).

One student, responding to what her supervisor might have done (Q4), explained her concern about getting to know the criteria and standards for her work, especially relative to the performance of other PhD students:

I wish I could get a straight answer to a straight question, that is, 'is this any good?' This is perhaps an unreasonable desire. In the first place, I seem unable to ask this question in any direct clear way. Secondly, I realise my supervisor cannot say '68%' or '45%', and that any answer to this question is going to be fudged! The first wish arises from lack of confidence. Clearly this is due to leaving the level of competitive education where you are continually assessed quantitatively. I have a nightmare that after 3 years I hand in my thesis only to be told 'no, this isn't a PhD – we'll award you an 'A' Level!'. Perhaps a bit far fetched but I miss knowing how I'm doing (342: yr2).

The comments on written work provided by supervisors thus provide crucial information which students need both to improve their work and to learn about academic criteria and standards being applied (Becher et al, 1993; Delamont et al, 1997). A third aspect to which students frequently referred in explaining the value they placed on supervisors reading and commenting was their own 'affective needs' (Burgess et al, 1994):

[where the supervisor is] reading everything you give them and being honest about it, but judging whether you are at the stage to take the knocks or whether you need a bit of confidence..it makes you feel like they are interested in what you are doing and that it's worthwhile. You need someone to have confidence in you as its difficult to keep motivation going on one topic alone for 3-4 years. You can lose interest if they aren't interested either (275: yr2).

Related to the value placed by students on evidence of a supervisor's interest and concern through provision of constructive comments on written work, several students mentioned feelings of 'isolation' (Delamont and Eggleston, 1983; Deem and Brehoney, 2000), for example, "doing a PhD is very isolated and lonesome so it is necessary for everyone to get help and criticism..without a supervisor one would work completely alone on something that might be unintelligible to anyone else" (249: yr2).

In responses in the sub-category, 'Opportunity', it was further explained that supervisors were the only people who have a responsibility for, or an interest in, reading and commenting on their written work, for example: "DPhil students get very little direct and detailed feedback from anywhere else" (39: yr3); and "I wouldn't be guaranteed constructive criticism and acute listening..and you need someone to be closely attentive" (525: yr1). Thus students see themselves as wholly reliant on their supervisors for the feedback on their work (Delamont et al, 2000).

Two sub-categories which relate to what students believe they have learned or to what they need to learn, are 'cognitive outcomes' and 'cognitive personal needs' and, together, these account for a substantial number (21) of the explanations offered for valuing supervisors' comments in terms of 'cognitive outcomes', for example: "helps me discover what I am interested in..he makes comments like "Isn't this what you are really trying to get at?" or "I think this PhD is increasingly about 'y'" (461, yr 2).

In relation to cognitive ‘personal needs’, students mentioned their lack of skills, knowledge, understanding or experience related to their work, including getting too close to their subject matter (Becher et al,1994), which had been met by their supervisors’ comments on written work, for example: “I tend to lose sight of the objectives and need a second opinion” (501: yr1). Particular cognitive weaknesses for which supervisory comment was appreciated included: spelling and grammar and weaknesses in structuring written work. Cognitive outcomes for students included clear ideas about how to move forward, an improved ability to be self-critical and being forced to think. These are generally short term ‘cognitive’ needs and outcomes, not long term, as they would be if students had responded, for example, in terms of ‘what I need to learn in order to be a good researcher’.

3.2 Supervisors’ Activities: Help and advice

Table 10 Help and advice (HA) sub-categories: frequencies of positive student references to each of five HA sub-categories

HA Pos. Sub-Cats	2-way Discussion	1-way information from the Supervisor	Opportunities created by supervisor	Supervisor back up and support	Other	Total
Year						
1990	27	32	10	12	0	81
1991	35	50	18	6	0	109
1992	77	60	36	19	0	192
Total	139	142	64	37	0	382

In Table 1, it was shown that 64% of students across all years valued the ‘Help and advice’ which their supervisors gave them. Two broadly different kinds of help and advice seemed to be of dominant value: ‘Information’ was the most frequently mentioned sub-category (142), concerned with one-way communication from

supervisors to students. It includes all the different kinds of advice; practical help, direction and information provided by supervisors to their students (Burgess et al, 1994; Hill et al, 1994; Moses, 1994). Of almost equal value to students was 'two-way discussion' (139), including discussions of the students' work and other diverse kinds of oral dialogue. Students in their first year tended to place more value on two-way discussion while there was a slight tendency for students in their second and third year to mention more often 'one-way information' from supervisor to student as valuable.

Providing information

The kind of suggestions, help or advice most valued by students in one way communications were many and various. Students were grateful to their supervisors for information passed on to them to use as they thought fit or as the occasion arose (Becher, 1993). There were at least six main kinds of information which students seemed to value, each of which are exemplified in the examples below:

gave me 'hot tips' on how to approach my PhD psychologically. He told me that there would be good days and bad days..to keep a diary of ideas and to make sure that I wrote the footnote references in full at the time (229: yr2);

suggests books and papers to consult (209: yr2);

keeps me informed of..conferences etc., and work going on in other universities (666: yr3);

names contacts, both disciplinary and international (111: yr3);

gives informal background information about 'how things work' in academic institutions (8: yr3);

gives information on administrative procedures (636: yr1).

Students in their first year were concerned to have information related to relevant reading sources:

drawing my attention to sources I was not familiar with (534: yr1);

giving indications of where to find relevant literature (517: yr1);

advising me what research has been done and what is still to be done (540: yr1);

points to authors; theories; practices; current thinking etc.. which I am not yet familiar with and provides a kind of short-cut to acquiring knowledge (643: yr1).

As exemplified in the last quotation above, supervisors were sometimes regarded by students as handy and quick sources of information, saving students time and effort.

Two-way discussion

Students placed considerable importance on engaging in discussions with their supervisors (139), mentioning three main valued aspects of oral dialogue. First, they emphasised their need to have someone who could and would listen very carefully and intelligently to them: “she really listens to what I say I have been doing..making helpful suggestions and offering appropriate advice” (768: yr1), but, second, who also would actively and helpfully provide feedback on what they heard: “she listens to my ideas and offers constructive criticism” (185: yr3), and, third, could be relied on to exert a balancing influence: “suggests alternatives/ideas if I’m slightly off-track” (239: yr2).

A good summary of the kinds of student values frequently expressed, with regard to discussions which lead to feedback from the supervisor, is provided by one student where the way in which the feedback is given is also mentioned:

My supervisor helps me to make sense of the various ideas I have had and provides new aspects which have been useful to my work. She has also helped me to work out an appropriate methodology. In doing so she has tried to bring out the best in me without too much interference. She has had the sensitivity to provide positive and useful advice without slighting my own work (264: yr2).

For the less well subscribed category, 'Opportunities' (64), students valued the opportunities that their supervisors gave them to gain access to useful help and advice from sources or experiences other than the supervisor personally (Becher et al, 1994): "he arranges contact with other people working in similar fields" (350: yr2).

'Support and back-up' (37) involved the supervisor's support or back-up for students, for example, in applying for funding, jobs, undergraduate teaching in the department: "stands up for me when I need a voice" (688: yr1); and "[provides] backup in the administrative hassle that faces the average PhD student with a position in no man's land such as getting resources, access to funding etc." (68: yr3).

Notable by their infrequency were direct references by students to 'telling', 'teaching' or 'training'. Nevertheless, good supervisors were described by their students as engaging, for example, in helping students to learn to think more clearly for themselves, pointing out the important issues to be addressed, and helping them to take more economical approaches to their projects on the basis of their own experience of what worked in practice. The issue is of how 'helping students to think' is different from 'teaching', and a number of commentators on this issue might argue that it is little different (Brown and Atkins, 1990; Hill et al, 1994).

Student explanations of their supervisors' help and advice

Table 11 Frequency of student references to each of nine explanatory sub-categories for the value placed on supervisors' Help and Advice (HA) (Q2)

HA Expls Sub-Cats	Personal needs			External needs			Outcomes				Evby	Total
	StC	StAff	Oth	Opp	TD	StC	Qual	Prog	Opps	Auto		
1990	2	14	0	4	6	5	6	3	4	1	1	46
1991	2	12	0	4	3	6	5	3	4	2	2	43
1992	12	24	0	16	19	12	4	2	3	2	6	100
Total	16	50	0	24	28	23	15	8	11	5	9	189

StC = Student Cognitive Needs
Qual = Quality of the work Outcomes

StAff= Student Affective Needs
Prog = Progress Outcomes

Opp = Opportunity needs
Opps = Career related Outcomes

TD = Task Difficulty Needs
Auto = Student Autonomy Outcomes

StC = Student Cognitive Outcomes
Evby = Evidenced by

Most frequently mentioned types of explanations were those related to students' 'Affective' needs (50), that is, how supervisors' 'help and advice' affected the way they felt about themselves or their work and this was the case across all year groups. 'Task difficulty' (28); and 'Opportunities' (24) followed, with 'Outcomes' mentioned less frequently ('cognitive' outcomes: 23).

Students' explanations in terms of 'affective' needs (50)

There were three different aspects referred to by students under this sub-category. First, students appreciated their supervisors' 'help and advice' in a situation where only their supervisors were seen to have special responsibility, relevant specialised subject knowledge, experience of the relevant research processes, relevant knowledge and understanding of, and interest in, the student's own research, and to whom they felt they had legitimate access (Parry et al, 1997), for example: "there is no one else around with the relevant knowledge" (8: yr3); "my supervisor is the only one that can

help me” (168: yr2); “I am not guaranteed help from anyone else” (525: yr1); “no-one else would want to discuss it [my research] in detail “(669: yr1). Here, as in explanatory responses to the sub-category of ‘Reading and commenting on written work’, many students referred to doing a PhD as a lonely and isolated situation (Delamont et al, 2000). When supervisors facilitated access to other students and academics and listened, some students explained this in terms of: “relieving isolation, an occupational hazard” (213: yr3); and providing “a listening ear because doing a PhD is very lonely and you need someone academic to talk things over with, ready to listen when I need to discuss any difficulties or inspirations” (105: yr3).

Second, students were grateful for feedback which met their needs, especially in the earlier stages, for focus and direction (Hockey, 1994a). The students in the quotations below explain in terms of what might have happened if they had not had ‘help and advice’ from their supervisors:

its very easy to get side-tracked by other issues (academic) arising out of your first year reading (34: yr3);

without his help in establishing the parameters of my research and the questions..at an early stage, I would easily have lost my way when gathering data. A clear idea of what one is looking for is vital when data is plentiful and time is short. (378: yr2).

Other students wrote in similar terms about the need to avoid ‘losing the way’, ‘going up blind alleys’, or feeling that they were in a ‘sink or swim’ situation (Becher, 1993; Delamont, et al, 1994). One student who did not receive the kind of help and advice in the above respects reported that “as time went by..despite very much hard work, I became very frustrated and unhappy, and a great deal of time and effort had been

wasted” (180: yr3). Third, students mentioned particular affective needs which were met by their supervisors’ help and advice, for example:

I appreciate the reassurance that things are going well (182: yr3);

he helps me to express my ideas in an uncluttered way. This helps increase my confidence and competence as a researcher (270: yr2);

all valued for confidence that the research will be successful and enabling me to enjoy the experience more (637: yr1).

Thus students offered three main kinds of explanations in terms of how their supervisors’ ‘help and advice’ met their affective needs. These were expressed in terms of intellectual isolation (Delamont and Eggleston, 1983), their inexperience in research (Hockey, 1994a) and their need for confidence through reassurance and encouragement (Delamont et al, 1997). Related to inexperience in research, a number of student responses were in terms of ‘task difficulty’.

In this category, there were wide ranging explanations for the value students placed on their supervisors’ ‘help and ‘advice’ in terms of making up deficits stemming from their backgrounds (Hockey, 1994a), for example:

as an undergraduate, one receives no training to do original work. One is not optimally prepared to start research and thus has to rely on good supervision (780: yr1);

points out relevant literature/areas of new work on occasion. I am working in an interdisciplinary field where all cognate fields are difficult to cover (658: yr1);

Coming from the lazy world of journalism, I need clear guidelines on style (34: yr3);

as a new research student, I am looking at the area for the first time (517: yr1).

Student explanations in terms of the ‘outcomes’ of valued ‘help and advice’ were less frequent. Of these, the most frequent explanations were about taking the students’ thinking and work forward through, for example: ‘clarification of ideas’ (34: yr3); ‘progress in my thesis’ (248: yr2); and ‘[successful] negotiation of fieldwork access’ (636: yr1). In explanations in terms of the ‘quality’ of the work (20), students mentioned the value placed on their supervisors’ ‘help and advice’ as improving the quality, acceptability, credibility and feasibility of their thesis (15). A small minority of students (11), at later stages in their studies, appreciated their supervisors’ writing references for them and furthering their careers by suggesting contacts, meetings or conferences (the ‘opportunity’ category) (Becher et al, 1994). A few students (5) were grateful to their supervisors for offering their ‘help and advice’ in ways that ensured that the students work would be original and independent (the ‘autonomy’ sub-category) (Hockey, 1994a).

3.3 Supervisors’ Activities: Management

Table 12 Management (MAN) sub-categories: frequency of positive student references to each of four MAN sub-categories

MAN Sub-Categories	Supervisor intervention	Supervisor non-intervention	Management Style	Other	Total
Year					
1990	19	12	4	0	35
1991	22	17	7	0	46
1992	30	17	9	0	56
Total	71	46	20	0	137

Table 1 in this chapter shows that 40% of students across all year groups valued their supervisors’ ‘management’ activities most. According to the frequencies of mentions

by students in Table 12 above, two broad aspects of supervisors' 'management' activities seemed particularly salient, with students valuing supervisors' 'non-intervention' coming a good second to their valuing supervisor 'intervention' (Wright and Lodwick, 1989).

Supervisor intervention

There were two main aspects in which supervisors' interventions were especially valued. One was making sure that students had schedules and/or timetables and that students worked towards meeting these (Burgess et al, 1994). The other was the setting of targets and deadlines for the work (Burgess et al, 1994). In relation to schedules or timetables, many students were grateful for their supervisors' close attention in this respect:

he helps to make sure I have a timetable to work to (666: yr3);

establishing a timetable for writing draft chapters because I need..to have some pressure on me to produce the work (251: yr2);

knowing what the student is doing each week, ie obliging the student to do a weekly timetable (626: yr1).

Second, with respect to deadlines and targets, the several examples given below show what is involved:

helping to ensure I maintain satisfactory progress by keeping to deadlines (768: yr1);

demands for the presentation of written material from the very start and the constant writing up of fieldwork and other substantive work in the form of draft outlines and chapters; involves discipline with respect to the setting and monitoring of targets and deadlines (188: yr3);

projects to tasks beyond [my] immediate concerns; sets realistic goals; confirms my plans..indicating possible modifications where appropriate; maintains an overview of the project as a whole (687: yr1).

One further aspect of special importance to a significant minority of students was the emphasis placed, and the actions taken, by their supervisors to ensure 'continuous' writing: "insisting that I write things up as I go along" (96: yr3); "I welcome the discipline that their insistence on my continually writing gives me" (525: yr1). Supervisor intervention was seen, therefore, as providing these students (71) with the discipline or pressure they needed to maintain progress in their work (Acker et al, 1994b). However, a significant number of students (46) preferred less intervention.

Supervisors' non-intervention

Some students valued their supervisors' non intervention more, for example:

does not chase me up if I do not see him or submit work for a while because I work very well in a hassle-free atmosphere ie plugging away on my own with no distractions (711: yr1);

My supervisor permits me to set my own pace and programme for my research and writing...he does not impose his will although I am aware that he is concerned to monitor progress and timescale. He keeps his distance. I am used to working alone and to my own deadlines and feel that close supervision would not be beneficial to my way of working (642: yr1);

He largely leaves me to my own devices and this is something I do value. I personally would not welcome a supervisor..breathing down my neck every five minutes. To be fair, my supervisor does appreciate that I like working on my own and being allowed to get on with it (446: yr2).

So some students prefer intervention while others prefer non-intervention (Becher et al, 1994), and students value flexible supervisory practice in these respects where student preferences are taken into account, a question of 'management style' (Acker et al, 1994a; Delamont et al, 1994; Pole et al, 1997).

Supervisors' 'management styles'

A significant minority of students valued the ways their supervisors set about the task of helping them to manage themselves and their projects. Many of these mentioned their appreciation of pressures applied by their supervisors with sensitivity or negotiation (Hockey, 1995b). In relation to sensitivity:

She is careful to maintain regular contact with me and my work so I rarely feel out of touch with her and the university. She has set me short term tasks, both practical and intellectual, to ensure that I maintain the momentum of the work over a long period. She has given me space and time to develop my own ideas without leaving me to my own devices. She is interested in my topic and has lots of ideas about how to approach it but is careful to let me come to my own opinions and conclusions. (328: yr2),

and, in relation to negotiation (Hockey, 1996c):

setting deadlines; we have a written contract - what each of us can expect from the other - which I drafted, and we amend together when necessary (including deadlines, amount of contact etc.) (440: yr2).

These, and other students responding in this vein, appreciated that their supervisors differentiated both in their actions between students according to their needs and also in striking a balance between exerting pressure and leaving the student to exert pressure on themselves (Burgess et al, 1994; Hockey, 1994b):

he has looked at each student as an individual and tailored the supervision to match and has allowed me to develop my project with a strong degree of autonomy...I personally needed this..others may need more structure. My second joint supervisor pushes me when at times I might have let an idea come to rest (304: yr2);

we have regular meetings to discuss work and ideas about future work. These have been flexibly defined according to my work timetable and progress rather than predetermined according to an abstract calendar which I consider to be an advantage and I appreciate my supervisor's open disposition in this respect. A reasonable flexibility over deadlines (632: yr1).

Students' explanations of the value they placed on their supervisors' management activities (MAN)

Table 13 Frequency of student references to each of seven explanatory sub-categories for the value placed on Supervisors' Management Activities (MAN) (Q2)

Man Expl Sub- Cats	Personal Needs		XNds		Outcomes				Ev by	Total
	StCog	StAff	TD	Other	Auto/ Own	Prog	Qual	Other		
Year										
1990	1	12	2	0	6	6	0	1	3	31
1991	0	19	4	0	9	2	1	1	1	37
1992	1	24	4	0	7	4	1	0	3	44
Total	2	55	10	0	22	12	2	2	7	112

StCog = Student
Cognitive needs

Auto/Own = Student
Autonomy/Ownership
outcomes

StAff = Student
Affective needs

Prog = Work Progress
outcomes

XNds = External
Needs

Qual = Quality of the
Work outcomes

TD = Task

Difficulty needs

Oth = Other

As shown in Table 5 of this chapter, 57% of students' explanations for the value they placed on their supervisors' activities were in terms of 'personal needs', and this pattern is reflected in students' explanations for supervisors' managing activities. The tendency in the above table is for students to explain the value of their supervisors' management activities largely in terms of references to 'affective' needs (55) and, to a far lesser extent on 'outcomes' related to 'autonomy' and 'ownership' of their work (22). With reference to supervisors' insistence on students having clear schedules and deadlines for the work (Becher, 1993), examples of students' 'affective' needs met and the conditions under which they feel they can make their best efforts include:

I value good organisation as you cannot afford to waste time if you are to complete a thesis in four years; also it is helpful to divide up the tasks because they are easier to manage and you feel that you are making progress as you complete them (185: yr3);

He's not too intrusive..he allows me to go off and do my own thing..This gives me space to sort things out and relieves any pressure (so long as regular contact is maintained). I value having my own space in that I don't feel under pressure or that I am being monitored all the time. I value his support which encourages me to go forward and make my own decisions and have confidence in them (as opposed to having to go running to him every step of the way) (693: yr1).

Some students seem to need more external pressure and direction than others, for example: "sets short and long term targets in order to keep me focussed on my work" (44: yr3); and "establishing a timetable for writing draft chapters because I need to be set deadlines and to have some pressure on me to produce the work" (251: yr2) (Delamont et al, 2000). Other students explain the value placed on their supervisors' management activities in terms of the appropriateness of the judgements made by their supervisors about what students want or need with respect to intervention:

prompting when you need help, ie taking the trouble to take account of your preferred working practices - not just simply applying their own; this leads to less frustration as you feel able to follow your own track and not pressurised into adopting other people's practices (423: yr1);

Some students feel that schedules and deadlines are necessary to get through the work in time (Wright and Lodwick, 1989; Phillips and Pugh, 2000), to make the work easier to manage; and, where the supervisor takes some responsibility for managing the process, to allow the student 'space' to think and explore. Others feel the need for a greater degree of external pressure. Whatever the needs are, students welcome supervision where there is a 'judicious combination of pressure and understanding', and where independence is encouraged always in the knowledge that the supervisor is there when needed. Independence was mentioned by students also in terms of 'outcomes'.

Outcomes

22 students explained the value they placed on their supervisors' 'management' activities in terms of 'outcomes' related to student independence, autonomy and ownership of the research (Wright and Lodwick, 1989), for example.

promotes independent study and confidence to determine your own research structure and timetable. This confidence..is maintained even when things don't go to plan as you still feel willing and able to obtain the supervisor's help (423: yr2);

doesn't interfere in direction of work..reacts to what I produce (although I needed that sort of help at the beginning). Ultimately I know that my thesis is my work and contains my ideas not those of my supervisor (134: yr3).

The quotations above show how these students construe their supervisors' non-interventionist, responsive and supportive styles of management in terms of forward looking outcomes where they themselves will play a dominant role.

3.4 Supervisors' Dispositions: Ability

Table 14

Abilities (ABS) sub-categories: frequency of positive student reference to each of seven sub-categories

ABS Pos. Sub-Cats	Know	Skill	Und	Exp	Rep	Catt	Mtch	Other	Total
Year									
1990	9	2	5	9	1	3	2	0	31
1991	20	3	3	6	2	2	5	0	41
1992	19	9	4	8	5	1	8	0	54
Total	48	14	12	23	8	6	15	0	126

Sub-Cats = Sub-Categories
Rep = Reputation

Know = Knowledge
Catt = Compensatory attributions

Unds = Understandings
Mtch = Match

Exp = Experience

Many students explicitly valued their supervisors' depth of knowledge (48) (Welsh, 1979). The kinds of knowledge valued were many and diverse, including knowledge of

subject, theoretical approaches, research methods, relevant sources, what is formally expected of a thesis and the practicalities of doing research. Different kinds of supervisor experiences were also valued (23). These included experience: “of critical analysis” (189: yr3) over a wide range of research approaches; of “completing a PhD himself” (50: yr3); “based on the research he has done and on the large number of students whom he has guided through a PhD successfully in the past” (370: yr2); and long experience “in the discipline and in the system” (326: yr2). So, ideally, supervisors will be established academics with a comprehensive knowledge of their field and relevant literature, methodologies and methods, and the criteria and standards expected of a thesis. In addition, they should be experienced, research active supervisors who are familiar with the practicalities of doing research (Welsh, 1979; Hockey, 1994a). The question is why these abilities are valued.

Student explanations of the value they place on supervisors’ ‘ability’ dispositions

Table 15 Abilities (ABS): frequency of students’ explanatory references for each of six sub-categories (Q2)

ABS Expls Sub-Cats	PNds		XNds			Outcomes			Evby	Total
	Stcg	StAff	TD	Opp	Oth	SAct	Stcg	Oth		
Year										
1990	1	4	1	1	1	4	0	0	0	12
1991	1	4	1	3	1	9	2	0	4	25
1992	3	2	4	5	1	7	2	0	2	26
Total	5	10	6	9	3	20	4	0	6	63

PNds = Students Personal Needs

Stcg = Student Cognitive Needs

StAff = Student Affective Needs

XNds = Needs arising from External Sources

TD = Task Difficulty Needs

Opp = Opportunity Needs

SAct = Supervisor Activity Outcomes

StCog = Students’ Cognitive Outcomes

Evby = Evidenced by

Relatively few explanations were provided by students for the value they placed on their supervisors' 'ability' dispositions. The greatest emphasis is placed on 'outcomes' in terms of what their supervisors can do for them as a result of their greater knowledge, skills, understandings, experience and reputations (20). Few references were made to the meeting of students' 'affective' needs (10) and even fewer to 'opportunity' needs (9).

Students explained the value of their supervisors' 'abilities' mostly in terms of what supervisors could do for them as a result, for example: "he can suggest potential angles and pertinent sources" (189: yr3); "constantly suggests material that might be relevant/interesting, etc." (100: yr3); "helps me to avoid many of the problems and pitfalls of research " (436: yr2); and "challenges intellectual prejudices, helps me to refine questions and answers to questions" (537: yr1). Some students explained that, because they knew that their supervisors were knowledgeable, skilled or experienced, they were able to trust their supervisors' advice or suggestions (Hockey, 1996c): "I have a great deal of faith in his judgement" (650: yr1).

In terms of students' 'affective' needs (10), what supervisors know and the faith students have in them increases confidence and provides reassurance, for example:

he has an overview of the task and what it entails.. this increases my confidence and competence as a researcher (270: yr2);

His knowledge and experience are invaluable - they provide reassurance about what I'm doing (516: yr1).

The supervisors' experience of supervision means that: "she achieves the right balance between encouragement and constructive criticism so counters pessimism" (189: yr3).

The supervisors' abilities can also facilitate student activities, for example: "his good knowledge of the economic tradition..can act as a source of new directions and literature to follow-up" (39: yr3).

With relatively few responses in this sub-category, it may be concluded that, either students are taking their supervisors' abilities very much for granted or that these abilities are not very high on students' lists of priorities. This picture is rather different for supervisors' 'process' dispositions.

3.5 Supervisors' Dispositions: Process

Table 16

Process (PRO) sub-categories: frequency of positive student reference to each of four sub-categories

PRO Pos Sub-Cats	Concern	Interest	Encouragement	Support	Other	Total
Year						
1990	3	24	12	12	0	51
1991	8	15	18	11	0	52
1992	21	30	38	52	0	141
Total	32	69	68	75	0	244

As shown in Table 3 in this chapter, 48% of student respondents mentioned the value they placed on their supervisors' 'process' dispositions. The main student emphases were on 'support' (75), 'interest' (69), and 'encouragement' (68) (Welsh, 1978, 1982). What is being counted here is student mentions of general supervisor dispositions rather than of supportive *actions* taken by supervisors (which have been discussed already under the sub-categories of supervisors' 'help and advice'). Some examples of how students variously described their supervisors' 'supportive' dispositions are: "continual support" (34: yr3); "personal support" (42: yr3); "moral

support at all times” (23: yr3); “supportive of ideas, suggestions, seminars, reading groups that I think are needed” (219: yr2); “she is supportive [that is] she provides the reassurance necessary for anybody doing a thesis” (365: yr2); “greatly value his enthusiastic support” (568: yr1); and “valuable emotional support” (768: yr1).

Almost equally, students valued the ‘interest’ (69) their supervisors displayed in themselves and their work, for example: “genuine interest in how I’m coping” (34: yr3); “interested in the work and in other aspects of my professional activities..writing articles, teaching and securing a job” (188: yr3); “genuinely interested in the nature and findings of my research and the need for me to complete it” (316: yr2); “high level of keenness for and interest in my work” (521: yr1); and “I value the general interest he takes in what I’m doing” (626: yr1). Supervisors’ encouragement (68) was also frequently mentioned: “she provides welcome encouragement, primarily about the quality and utility of my work” (12: yr3); “encourages me” (153: yr3); “she encourages me, building up my self confidence” (387: yr2); “encouragement, not only academically but also personally” (229: yr2); “always encouraging” (239: yr1); and “encouraging when I show a lack of confidence” (469: yr1).

Students place a high priority on their supervisors’ constant and reassuring support in personal and intellectual matters; on genuine and high level interest in what students are doing; and on encouragement which, as I will show in the next table, is crucial to students’ self-esteem.

Student explanations of the value they place on supervisors' 'process' dispositions

Table 17 Process (PRO) sub-categories: frequency of students' explanatory references for each of eight sub-categories (Q2)

PRO Expl Sub- Cats	Student Personal Needs						XNd	Anticipated Outcomes				Ev By	Total
	StCg	StAff	Eff	Rel	TD	Oth		StCg	Qul	Prg	Oth		
Year													
1990	0	19	7	2	2	0	1	1	1	1	0	3	37
1991	0	17	4	0	5	0	2	1	3	1	0	4	37
1992	1	36	8	1	3	1	3	1	1	1	0	6	62
Total	1	72	19	3	10	1	6	3	5	3	0	13	136

StCg = Students' Cognitive Needs

StAff = Student Affective Needs

Eff = Student needs for Effort and Direction for Effort

Rel = Relationship Needs

TD = Student Task Difficulty Needs

XNd = Needs arising from sources external to the student

StCg = Students' Cognitive Outcomes

Qul = Qualities of the Students' Work Outcomes

Prg = Progress in the Work Outcomes

EvBy = Evidenced by

In Table 5 in this chapter, 57% of students explained the value they placed on their supervisors' activities and dispositions in terms of 'personal needs' (61% for those students who responded less positively). Table 17 shows that students' explanations for the value they placed on their supervisors' 'process' dispositions were overwhelmingly couched in terms of 'affective' needs (72) with relatively few 'outcome' references. Less frequent were direct references to 'effort' (19). The frequency of explanations in the form of 'Evidenced by', that is, in terms of the evidence they used to draw conclusions about the nature of their supervisors' dispositions, exceeded the frequency of this form of explanation for any other of the main coding categories (13). This may indicate that students are constantly seeking evidence (especially in the early stages) that their supervisors *are* interested and involved in what they are doing.

In explaining the needs which their supervisors' support, interest, and encouragement met, students reported most frequently in terms of three main kinds of explanations: 'isolation', 'motivation' and 'confidence'. First, in relation to 'isolation' (Delamont and Eggleston, 1983; Becher, 1993; Hockey, 1994a), students explained that their supervisors' 'process' dispositions helped to offset the felt loneliness of the research undertaking, for example: "research can be an isolating experience-a solitary exercise" (34: yr3); "it is good to feel that someone is genuinely rooting for me in what could otherwise be a fairly lonely undertaking" (568: yr1). As implied in the last quotation, their supervisors' dispositions also made them feel that the burden of responsibility was shared: "You feel that at least one person feels some responsibility for your getting through your PhD and this is very valuable" (364: yr2).

Second, with regard to 'motivation', supervisors' support, interest and encouragement were explained in terms of levels of self-esteem which could vary often depending on the stage of their studies (Hockey, 1994a), for example:

My supervisor is interested and takes my work seriously. This has sustained motivation, especially in the latter stages when morale and enthusiasm are waning (111: yr3);

my supervisor is enthusiastic about the project I'm working on and the general research area; outcome: in my meetings with him he is always stimulating and encouraging..he helps me a great deal particularly when my motivation is low (788: yr1).

Third, 'confidence boosting' was referred to by students in the same terms as 'motivation', both inextricably connected to levels of self-esteem and often related to the students' work:

She provides welcome encouragement, primarily about the quality and utility of my work. This seems to boost my self confidence which is essential when I'm trying to be creative and productive (12: yr3);

keeps my morale up. My supervisor always makes me feel that what I am doing is worthwhile (299: yr2);

my supervisor is genuinely enthusiastic about my research and inspires me with confidence..I always feel lifted and more positive by the end of a supervision session (525: yr1).

A number of students explained the value in terms of fostering a desirable relationship, for example: "very supportive and professional. He is approachable and honest, leading to the development of a friendly working relationship" (185: yr3) (Welsh, 1978).

There are at least two distinctive and possibly interacting dimensions identifiable from student explanations of the value they place on their supervisors' 'process' dispositions. First is the nature of PhD studies where inexperienced research students are engaged in a substantial, demanding, and often unique project where the expectations are that students will be responsible for the success of their research (Chapter 2). The 'loneliness' of such an enterprise is in some contrast to previous learning experiences at undergraduate and/or Masters degree level (Acker et al, 1994b; Becher et al, 1994). Thus the supervisor becomes the central point of reference for the student, if not the only reference point (Ball, 1984; Delamont et al. 2000). The second dimension concerns student self-esteem, and in particular, academic self-esteem. Student responses suggest that academic self-esteem can be in a delicate balance, requiring ongoing sensitivity from supervisors and constant support, interest and encouragement (Hockey, 1994b). Given that the supervisor is regarded as a student's main source of support and critique, the amount and quality of student/supervisor contact with the supervisor seems crucial.

3.6 Supervisors' Dispositions: availability

Table 18

Availability (AV) sub-categories: frequency of positive student references to each of five sub-categories

AV Pos.Sub- Cats	General	Formal time	Flexible time	Amount of time	Quality time	Other	Total
Year							
1990	1	10	18	1	0	0	30
1991	2	11	18	3	0	0	34
1992	8	22	29	6	4	0	65
Total	11	43	65	10	4	0	129

As shown in Table 3 of this chapter, 30% of students referred to their supervisors dispositions in terms of 'availability' (Wright and Lodwick, 1989; Hill et al, 1994). Table 18 above shows that the largest proportion of student references were concerned with 'flexible time' (65) and 'formal time' (43). The sub-category of 'flexible time' was developed in response to students who valued their supervisors' availability at times when the student most needed it or, at least, at times which were negotiated. 'Formal time' refers to more regular, scheduled meetings. 'Flexible time' attracts the largest response in all three year groups (Hill et al, 1994), and there appears to be little difference between preferences at different stages in the research.

Flexibility is variously defined by students. 'Open door' policies are especially appreciated:

he is totally accessible. I feel able to approach him with the most seemingly trivial worries and anxieties related to my research. He is accessible in that, rather than having 'office hours', he keeps an open door policy, but, most importantly, he is

always..physically present in the department daily during the working week (147: yr3).

If not totally accessible, then a meeting can always be arranged:

If unavailable for an immediate meeting, he will always book me a time in his schedule when free rather than just letting it slip. He doesn't assume that I am always available to meet or do something just because he is available (451: yr2).

There can also be flexibility in terms of the purposes of a meeting (Acker et al, 1994):

"I can see my supervisor weekly on an informal basis, not solely to talk about work"

(711: yr1). An 'open door' policy and flexible arrangements do not preclude formal meetings. Regular meetings can take place weekly, fortnightly, or once every three weeks (Becher et al, 1994; Delamont et al, 1997a). Some examples of what students say about their supervisors' 'availability' in terms of formal scheduled meetings (43)

are:

I have regular (usually weekly) meetings with my supervisor to consider my thesis ideas as well as any general issues in anthropology. With few exceptions, he has always been available to discuss any academic and admin problems I have had (54: yr3);

We have a regular meeting time every three weeks just to keep a check on how things are going and arrange additional meetings as necessary. As a policy, I run my own work and am expected to be proactive in seeking aid (478: yr2);

regular contact at regular times, especially important when the student is new and has to learn the ropes and where the student is beginning to formulate research proposal/design (751: yr1).

There are three main ways in which students gain access to their supervisors (not mutually exclusive). First, there is the 'open door' policy where students report immediate access, that is, the student decides if and when a meeting is necessary (Hill et al, 1994). The second, is negotiated access where the student decides when a

meeting is necessary and the date and time of the meeting is negotiated (Hill et al, 1994). Third, regular, scheduled meetings are set up in advance at a time convenient to both student and supervisor (with additional meetings as required). In terms of amount of contact at least, there appears to be little to choose between these arrangements. In understanding more about the situations and circumstances which might shape decisions about which arrangements are most appropriate, however, I turn now to students' explanations.

Student explanations of the value they place on their supervisors' 'availability' dispositions

Table 19

Availability (AV) sub-categories: frequency of students' explanatory references for each of six sub-categories (Q2)

AV Expl SubC ats	Personal needs			XNd	Outcomes					Evby	Total
	Stcog	StAff	Oth	Opp	Oth	Disc	Stcog	HA	Oth		
Year											
1990	9	3	0	6	0	9	0	6	0	0	33
1991	2	0		4	1	2	1	6	0	1	17
1992	6	2		12	2	8	0	7	0	5	42
Total	17	5		22	3	19	1	19	0	6	92

Stcog = Student Cognitive Needs
Disc = Discussion Outcomes

StAff = Student Affective Needs
Stcog = Students' Cognitive Outcomes

Opp = Opportunity Need
HA = Help and advice Outcomes

The frequency of the explanations provided by students for the value they place on their supervisors' 'availability' dispositions are distributed across the different forms of explanatory sub-categories, 'personal' and 'external' needs and 'outcomes'. While the 'opportunities' offered by supervisors' 'availability' gets 22 mentions, this is closely followed by the satisfaction of 'cognitive' needs (17) and 'outcomes' in terms of the

facilitation of 'discussion' (19) and provision by the supervisor of 'help and advice' (19).

In the explanations students gave, they rarely considered arrangements for meetings from their supervisors' points of view, and, when they did, these were very general references to their supervisors' 'busyness' (Becher, 1993) as in the following example:

Sometimes, of course, my supervisor is not always around when I would like which can get quite frustrating if I feel I need to discuss eg his comments on a first draft before settling down to revise it. This is not his fault of course; merely the product of a system which seems to dictate that supervisors should be busy academics (182: yr3).

In relation to the 'opportunity needs' sub-category, student emphasis was on 'isolation' (Delamont et al, 1994, 2000; Pole, 2000): "He's almost always around. This means that I can get in touch with him very easily and I don't feel stranded on my own" (207: yr3); "he is approachable, door and phone are always open. He is always on hand if needed so I never feel distanced from him" (712: yr1).

Student responses in the 'cognitive needs', 'discussion outcome' and 'help and advice outcome' sub-categories all stressed the importance placed by these students on assessing progress and getting help and advice on problems encountered, for example, in relation to 'cognitive needs':

my supervisor is always available when needed. Its easy to arrange meetings. During the first year, we had frequent meetings every fortnight and I could always pop in when I had an important question. I found that important because there was still a lot of confusion and lack of clarity about where my project was going (715: yr1);

and for ‘discussion outcomes’: “Being available when I need advice, and when they say they will, in order to discuss specific problems and for general discussion on how they think the work is progressing” (34: yr3); and “he has been available to discuss ideas/problems/ issues” (659: yr1). Examples of student responses in the ‘help and advice’ ‘outcome’ sub-category include:

to discuss work and other matters. Particularly in the early stages and at the end, it is often necessary to see one’s tutor regularly to assess progress and work handed over for comment. Lack of access can cause irritating delays as the student is unable to work further without the supervisor’s input (94: yr3);

regular contact. This means I get support and help with problems etc. and also feedback on written work on a regular basis. This means I’m getting it done (426: yr2).

Students therefore value frequent contact with their supervisors on their terms (Becher et al, 1994) but have not in this study provided clues about the situations and circumstances under which different approaches to meetings may be adopted.

3.7 Supervisors’ Dispositions: Relationships

Table 20 Relationships (RELS): frequency of positive student reference to each of three sub-categories

RELS Pos Sub-Cats	Rapport	Relationship roles	Properties of the relationship	Other	Total
Year					
1990	3	5	4	0	12
1991	2	9	9	0	20
1992	4	7	13	0	24
Total	9	21	26	0	56

As shown in Table 3 of this chapter, 25% of students made reference to the kinds of relationships which their supervisors had helped to engender. Table 20 above indicates

the frequency of mention by students of the 'properties' of the relationships valued (26). and the 'roles in the relationship' which they most valued (21). While explicit references to 'rapport' were infrequent, much of what students wrote suggests that 'rapport' in general, and 'properties' and roles in particular, are central to the way students have described and explained their supervisors' activities and dispositions and, if this is so, they constitute an important dimension across the study as a whole.

Many students distinguished between 'formal' relationships and 'informal' relationships. Some students valued formal, professional, objective and distanced relationships (Acker et al, 1994b) where the student's work was the main focus, for example:

I value a supervisor who is an interested and qualified outsider; because he can offer guidance..with a degree of impartiality and, as interested critic, can offer a second opinion on the viability, progression and readability of the thesis (50: yr3).

Others seemed to prefer a warm, friendly, relaxed and informal relationship where the supervisor not only took account of their work but also showed a kindly interest and concern for their students' personal and social life (Acker et al, 1994a; Hockey, 1994a):

personal support; my supervisor is someone the student can talk to if there are any personal difficulties affecting the work. Also, a personal rapport helps offset any necessary criticism of the work that the supervisor must provide, and enables a friendly relationship to continue regardless of academic views (751: yr1).

Some students commented on how their supervisors managed to strike a good balance in the relationship between attention to the work and a wider concern with other social and personal matters (Hockey, 1994b), for example, through a "friendly and

professional working relationship” (91: yr3). A few students valued their supervisors also for the ways they involved their students in the wider cultural and political life of disciplines and departments which students saw as related to their career aspirations (Acker et al, 1994b; Delamont et al, 2000):

I enjoy the fact that when I meet with my supervisor the conversation doesn't purely revolve round my work. We have a general chat about the department, what he's doing, gossip about the world of geography in general. I feel a PhD is about more than your own narrow field of work and its helpful that supervisors feel they can branch beyond this (403: yr2).

Two properties of a relationship frequently mentioned by students were 'trust and respect' (Hockey, 1994a), for example: “spends some time meeting informally, therefore more relaxed. This engenders greater trust” (382: yr2); and “a most valuable practice is to talk through your ideas and difficulties with someone you trust and respect” (681: yr1).

Another aspect of a relationship involved supervisors' approachability, for example:

my supervisor and I get on well. I have little inhibitions talking things over with him (669: yr1);

A student must be happy to call upon the supervisor whenever in doubt or need. Nothing is worse than the fear of bothering a supervisor if he gives the impression of being very busy with his other duties (789: yr1).

Many students referred to the value of a relationship where they were treated as adults. In particular, mentions were made of the types of adult relationships they valued, including being regarded as a friend, as a colleague or as an equal, for example: “being a friend and being approachable” (275: yr2); “I am a member of the department. I am

treated as a colleague rather than a subordinate. Whenever he is free, he is willing for me to see him (even on weekends)” (464: yr2).

In one sense, students seem to be looking for signs that their supervisors are willing to sponsor them in an academic career (Delamont et al, 2000):

The relationship I enjoy with my supervisor is a most agreeable one for both of us. He lets me pursue my research interests without interference One of the things I most value about our relationship is that I am treated very much as an equal, advising other people from our own, and other universities, to talk to me for advice and information, putting my name forward to give papers at conferences, encouraging me to teach, and submitting work for publication. In this way he has one eye consistently fixed on my impending academic career (433: yr2).

In another sense, students valued their freedom as a significant part of being treated as an adult:

I feel it is important to be treated in as adult a way as possible and my supervisor does this. I am 28 years old and spent 4 years in the real world before returning to academia and I expected to be treated somewhat differently to an undergraduate. People obviously have different preferences but mine is for maximum freedom to pursue my own lines of research within an overall framework of guidance. This is what I have been allowed to do (182: yr3).

The quotation above suggests that there might be a ‘maturity’ factor where age and prior experiences lead to certain student expectations for the relationships to be developed (Welsh, 1979; Phillips, 1983).

Student explanations of the value they place on their supervisors' 'relationship' dispositions

Table 21: Relationships (REL) sub-categories: frequency of students' explanatory references for each of seven sub-categories (Q2)

REL Expl SubCats	PNds		XNd			Outcomes		Ev by	Total
	StAff	Oth	TD	Opp	Oth	Disc	Oth		
Year									
1990	4	0	0	1	1	1	0	0	7
1991	5	0	0	3	2	1	0	3	14
1992	3	0	2	8	0	3	0	0	16
Total	12	0	2	12	3	5	0	3	37

Although explanatory references from students for the value they placed on their supervisor' relationship dispositions were few, many of the students who did respond emphasised the importance of their own confidence about being able to make demands on their supervisor (Becher et al, 1994). I coded these references under the sub-category of 'opportunity' (12), reflecting as it did, the options students felt were open to them when they needed, for example, to talk over problematic aspects of their work. Good relationships enabled students to approach their supervisors even when the students felt that they were impinging on their supervisors scarce time:

my supervisor and I get on very well. I have little inhibitions talking things over with him (669: yr1);

a comfortable relationship is crucial. You must be able to feel you can approach your supervisor over anything. If you don't then major problems can arise both in the setting up of your research and in the writing up (775: yr1);

I have developed quite a good friendship with them both, and so feel free to approach them with problems (have provided a shoulder to cry on once or twice). (134: yr3).

The emphasis placed on ‘approachability’ in students’ explanations of the importance of their relationships with supervisors seems to confirm findings in previous sections that students prefer supervision which is on their terms, that is, responsive to their individual needs as and when they need it. Given such emphases, crucial factors seem to be the approachability (and accessibility) of supervisors, making it easier for them to discuss problems of whatever nature (Delamont et al, 1997).

Students also explained the value of good relationships directly in terms of ‘affective’ needs (12) with a slight tendency for second and third year students to give these needs a little more importance than ‘approachability’, for example, rapport “built up between supervisor and student helps avoid the stresses and problems” (58: yr3); and “[to be] treated very much as an equal..is a real boost for my academic confidence” (433: yr2).

3.8 Contexts in which students place value on their supervisors’ activities and dispositions

Table 22: Frequency of student references to eleven facilitating or constraining contexts within which they value or would have valued their supervisors’ activities and dispositions

Cont ext	Gen	Facilitates					Constrains						Total
		2S	2S	Dept Arr	Prior Acq	RT	St loc	S busy	Iso	HEI arr	RT	Smove	
1990	1	3	4	0	0	0	5	6	0	0	0	1	20
1991	2	8	7	4	0	1	2	1	3	1	2	1	32
1992	5	4	1	8	2	2	3	2	2	1	1	3	34
Tot	8	15	12	12	2	3	10	9	5	2	3	5	86

2S = Two Supervisors
RT = Research Training
Iso = Isolation

Dept Arr = Departmental Arrangements
StLoc = Student Location
HEI Arr = Departmental and University Arrangements

Prior Acq = Prior acquaintance with supervisor
Sbusy = Supervisor Busy
Smove = Supervisor moves

As shown in Table 7 of this chapter, 78 students made reference to the contexts in which they valued their supervisors' activities and dispositions. Table 22 above shows the nature of the contexts mentioned in their 86 references. The sub-category 'General' is reserved for instances where students mentioned contexts but did not make any comments about them being facilitating or constraining. All eight student references were to the fact that they were jointly supervised, probably a response to the questions on the questionnaire which assumed single supervision. All other responses to joint supervision (15) suggested that it was facilitatory, for example: "I'm lucky enough to have two supervisors..One supervisor is an expert on the former USSR, the other a Psychologist" (450: yr2). 12 facilitatory references were made to the value placed by students on departmental arrangements or working environments, for example: "The department provides a good working environment. I have an office, access to excellent computing facilities, free photocopying, some secretarial help, stationery etc..some teaching too" (478: yr2). Equally valued was that students had known their supervisors prior to starting their PhDs (12): "My supervisor was..my undergraduate tutor, so we have known each other for a long time. He encouraged me to stay on and do postgraduate research" (272: yr2).

With reference to constraining contexts, some students found the contexts within which they were working to exacerbate the loneliness of working on their PhDs (Becher et al, 1994), for example:

this is a very small department. I rarely meet other social policy postgraduates (if there are any), and its quite remote (in more ways than one) from the Sociology department. Research can be fairly isolating at the best of times and the set-up at this dept doesn't help (534: yr1).

Students also commented on how busy their supervisors always were and how sometimes this busyness constrained them in approaching their supervisors for advice (Hill et al, 1994), for example: “he is always so busy I feel I am taking up too much of his time” (105: yr3); “he is doing too much. He has 3 research students, too much admin, is rewriting his book, and the phone always rings as you sit down in his office” (256: yr2). Other constraints mentioned were the failure of a university to have monitoring mechanisms to ensure that supervisors supervised and to limit the number of students they supervised, and supervisors taking up new posts in other universities, for example, entailing “a new post for my supervisor, and therefore a change of university and department for both of us” (568: yr1). No students who were jointly supervised commented on constraining factors which rather throws into doubt the reservations expressed about joint supervision by Phillips and Pugh (1987), although more evidence focussed on joint supervision is required. Most noteworthy is the relatively few students who commented on external contexts and this may be explained in at least two ways. It may be that the form of the questions to which students were asked to respond led them to comment largely in terms of their *supervisors*’ actions and dispositions but perhaps it is also the case that contextual factors do not impinge very much on students’ perceptions of the quality of the interactive processes to which they refer.

Conclusions

The analysis of the student survey has portrayed a rich picture of what PhD students value and want from their supervisors. There is, however, little in what students mention that suggests a challenge to the official orthodoxy represented in the Codes of

Practice or in the research literature (Chapter 2) in terms of the criteria they apply. Almost everything they say has been recommended or endorsed previously by other researchers and commentators. Nonetheless, as a substantial, national survey of ESRC students, it provides an authoritative overview and confirmation of what many researchers and commentators on PhD supervision are saying. In addition, the survey was sufficiently large scale to engender confidence in the relative importance (or at least frequency) of the value placed by student respondents on their supervisors' activities and dispositions. Responses from students were impressive and seemed to provide an intelligent, thoughtful, balanced and helpful articulation of their wants and felt needs which could be very helpful to supervisors, especially to those less experienced and perhaps supervising PhD students for the first time.

In addressing the question of what PhD students want from their supervisors, there is a very wide ranging set of activities and dispositions valued for which there are a number of strong trends. First, supervisors' 'help and advice' receives the largest proportion of references. Second, with reference to supervisors' dispositions, 'processes' (the more general and stable characteristics of supervisors displayed in the processes of their interactions with students) receives the most frequent mention.

In terms of explaining the value they placed on their supervisors' activities and dispositions, students explicitly and most frequently explained their values with respect to their individual needs and how supervisors have met these needs. These felt needs varied considerably (Acker et al, 1994a; Collinson and Hockey, 1997), for example, between concerns of an affective kind, such as confidence building, and tough objectivity from the supervisor when it comes to giving comments on written work

(Acker et al, 1994a; Becher et al, 1994). There were marked variations also in student preferences, on the one hand, for informality in their relationships and, on the other, an emphasis on formality (Burgess et al, 1994). In addition, some students wanted more intervention than others in relation to supervisors' management activities (Wright and Lodwick, 1989). Thus, it is clear that skilled supervision will necessarily entail the tailoring of approaches to supervision taking account of individual students (Hockey, 1994a).

The highest number of references made by students responding to supervisors' comments on written work was for the 'quality' of these comments. In particular, comments which not only provided indications of strengths and weaknesses but also which built on the strengths, and showed how students might deal with the weaknesses, were especially valued (Hill et al, 1994; Becher, 1993; Delamont et al, 1997). Supervisors' constructive comments provided the information which students needed to improve their work and to learn about different kinds of academic criteria and standards being applied. They also had the effect of confidence building, showing that the supervisor was interested in their work (Becher et al, 1994). Quite frequently students explained that the supervisor was the only person who could or would make useful and informed comment on their written work.

But the dominant student emphases on supervisors' meeting their felt needs seems to place students very much in the position of consumers and it cannot be automatically assumed that the consumer is always right, nor especially that they are telling the whole story (Rudd, 1985). It is in this sense that I use the term 'felt' or 'perceived' needs to indicate caution. Unsurprisingly, students emphasised what they needed to

complete their PhDs in the time given, and to a lesser degree, to enable or sponsor academic careers. However, there was little in their references which would help develop a profile of the expertise students might need to be useful social science researchers.

There was also a striking lack of concern or awareness amongst students (as one might expect of consumers or clients in general) with how supervisors might be able to deliver what they wanted and what constraints might be encountered. Some students were aware of how busy their supervisors were, but in most other respects, such issues did not impinge on student responses. For example, students, in making explanatory references to 'external needs', or to contextual facilitations and constraints, referred almost exclusively to issues related to their own concerns and not to what supervisors might be able to do to address such issues or the dilemmas they might encounter.

It is the case then that this survey has, properly and as intended, identified what PhD students value but not what might be involved in *delivering* to them what they most value, far less what they might need. For that, I proceed to the next part of my empirical research, six case studies of supervisors identified by their students as 'good' supervisors.

CHAPTER 6 THE DESIGN OF THE SUPERVISOR CASE STUDIES

Three conceptual frameworks were outlined previously (Chapter 4), one based on Schutz's phenomenological theorising (1962, 1964) and two others, Heider's 'Naive Analysis of Action' (1958), and the concepts and theory developed by Brown and McIntyre (1993) in their empirical research on classroom teachers' craft knowledge. Some very open research questions were formulated in relation to these frameworks and the strategic implications for the design of the case study research are taken forward in this chapter. The design features are introduced under four main headings: *Schutz's postulates and ethnography*; *Design implications*; *Conduct of the case studies*; and *A reflexive account*.

Schutz's postulates and ethnography

Schutz (1962) provides a number of guidelines or 'postulates' about what makes good phenomenological research. These postulates do not extend to research strategies or techniques, although there are some strong implications which I have explored in relation to ethnographic approaches. Ethnography is mostly associated with the research practices of social and cultural anthropologists and sociologists in the ethnomethodological, phenomenological and symbolic interactionist traditions (Atkinson et al, 2001) and many of the principles of ethnography have their roots in Schutz's postulates (Leiter, 1980).

The past decade has witnessed rapidly increasing interest in ethnographic principles and practices in applied research (Miles and Huberman, 1994), for example, in education (Brown and McIntyre, 1993), nursing (Titchen, 1998) and medicine

(Atkinson, 1995) where understandings are sought about how practitioners think about their practices. One major claim for ethnography is that it contributes to the development of grounded theory, that is, the processes are inductive and discovery based, and not limited to the testing of explicit hypotheses (Glaser and Strauss, 1967; Strauss and Corbin, 1998; Charmaz and Mitchell, 2001), and this is what I aspired to in my research.

It is possible to compare Schutz's phenomenology with what ethnographers do. A primary aim of ethnographic approaches is to contribute to an understanding of human action (Hammersley and Atkinson, 1995). Many ethnographic researchers share Schutz's concerns to study the practices of common sense reasoning in contexts of use. In ethnomethodology, for example, the understandings to be understood by the researcher relate to their "use of the practices of common sense reasoning to create and sustain the factual character of the social world and to employ the contents of the stock of knowledge in concrete situations" (Leiter, 1980: 14), that is, with reference to PhD supervision, how supervisors think about and apply their knowledge and practical experience in interaction with students.

Like Schutz, ethnographers think of acquired knowledge as shared in distinctive and describable ways by the members of a particular culture or sub-culture, that is, as socially constructed (Pollner and Emerson, 2001). For ethnographers, 'culture' is a shared system of meanings which is "learned, revised, maintained and defined in the context of people interacting" (Spradley, 1979: 6). In phenomenology, what people do is the starting point for ethnographic questions (Gordon et al, 2001). People's actions

are assumed to be purposive and meaningful rather than moulded by external forces, and no single meaning or identity is assumed (Maso, 2001) (Chapter 4).

The attitude of ethnographers to research is summed up by Spradley (1979): “Rather than studying people, ethnography means learning from people” (Spradley, 1979:3). I considered such an approach to be an appropriate way to elicit and understand supervisors’ craft knowledge. There are many different views about how to do ethnography, however, and many different purposes for engaging with it (Atkinson et al, 2001). Schutz is committed to grasping subjective meanings scientifically and to examining the question of how that is possible. The important distinctions he makes between scientific (or objective) constructs and common-sense (or subjective) constructs, and between first and second level common-sense constructs, have often been blurred in qualitative educational research (Hammersley, 1992; Shipman, 1997). Failure to make the distinctions can lead to confusion about whose understandings are being represented, researchers’ or informants’. Thus, subsidiary aims of my research were to return to the roots of phenomenological research, to inject some of the original rigour and discipline of Schutz’s thinking, and, in doing so, to assess the applicability of his phenomenological constructs to research into supervisors’ ‘knowledge-in-use’.

A diversity of terms in the research literature can be used to refer to the ‘subjects’ of research study. Spradley (1979) makes clear distinctions between ‘subjects’, ‘respondents’, ‘actors’ and ‘informants’ in terms of the roles of those providing the researcher with information. ‘Subjects’ provide information to researchers within terms set by the researcher, for example, as part of a ‘natural experiment’.

'Respondents' are approached by researchers to take part in surveys or interviews, often asked to respond in terms set by the researchers. 'Actors' became the 'object' of observations in natural settings but are not necessarily asked to provide their interpretations of events. Ethnographic research involves both observation and interviews where 'informants' provide their own interpretations of observed events (Hammersley and Atkinson, 1995; Delamont, 2001; Rock, 2001).

Schutz's postulates (1962) stem from his concerns about the analysis of actors' meaning structures and accompanying issues of generalisation and validity. They are not about strategies or tactics for data collection but have provided a number of general criteria against which case study conduct and analysis can be compared. In Schutz's first postulate, "*the postulate of subjective interpretation*" (Schutz, 1962:34), he asserts that "all sciences have to construct thought objects of their own which supercede the thought objects of common-sense thinking" (Schutz, 1962: 36). This is one of the fundamental distinctions drawn by Schutz between his 'epoché' of the 'natural attitude' and a 'scientific' outlook (Maso, 2001) (Chapter 3). The 'epoché of the natural attitude' is the suspension of doubt in the outer world and its objects. People in common sense suspend any doubts they may have that the world and its objects might be otherwise than they seem. This allows them to take fluent and continuous action on the basis of how things *appear*, noting only such evidence as might give them strong cause for doubt. For researchers, it is belief in common sense itself which must be suspended or 'bracketed'; they must suspend their own value judgements as to the validity or credibility of common sense explanations:

The phenomenologist does not deny the existence of the outer world, but for his analytical purpose he makes up his mind to suspend belief in its existence - that

is, to refrain intentionally and systematically from all judgements related directly or indirectly to the existence of the outer world (Schutz, 1962: 104).

Whether or not it is possible for researchers to suspend their own assumptions has been the subject of much debate (Hammersley, 1992; Delamont and Atkinson, 1995; Maso, 2001; Pollner and Emerson, 2001). A non-evaluative position, however, is a central feature of Schutz's approach to data collection and analysis of data, an indifference to whether a person's view of something is true or false. The researcher's purpose is to establish how a view makes sense to the persons who hold it, for example, PhD supervisors.

The scientist's 'thought objects' or concepts do not refer directly to the "unique acts of unique individuals occurring within a unique situation" (Leiter, 1980: 36). Rather researchers construct 'scientific models' of clearly *circumscribed* sectors of the social world relevant only to those issues of particular concern to them. Everything else pertaining to that sector is subsumed, for example, by the phrase 'all other things being equal'. In conducting my case studies, I was interested only in what supervisors did in their sessions and how they explained what they did. Schutz believes that for these selected aspects only:

it is possible to construct a model of a sector of the social world consisting of typical human interaction and to analyse this typical interaction pattern as to the meaning it might have for the personal types of actors who presumptively originated them (Schutz, 1962: 36).

Schutz (1962) places prime importance on the clear separation by researchers of their roles as 'disinterested observers' and as 'actors' likely to share much in common with their 'subjects' of study. In his second postulate, "*The social scientist as disinterested observer*" (Schutz, 1962:36), he suggests a number of ways a researcher can adopt

and maintain such a position. As a researcher rather than an active participant in the action, it is the research problem which becomes: “the locus of all possible constructs relevant to its solution” (Schutz, 1962: 38).

In contrast to common-sense thinking, which is intuitive, ad hoc and implicit, phenomenological researchers reflect on and make explicit those aspects of the social world they intend to ‘bracket’ and make problematic. In this way, ‘bracketing’ can be regarded as a device for helping researchers to focus clearly on their problem and to stand back from their focus of study by the need to select, justify, prioritise, clarify and theorise questions in advance. This notion of ‘bracketing’ is also of significance in ethnography, but less well theorised. For example, one distinctive feature of ethnography is that researchers adopt a ‘naïve’ position in relation to their ‘subjects’ of research, that is, efforts are made to suspend prior assumptions in relation to the area of study. Hammersley and Atkinson (1995) stress the maintenance of “self conscious awareness of what is learned, how it has been learned, and the social transactions that inform the production of such knowledge” (Hammersley and Atkinson, 1995:101). This strongly suggested my own role in the case study research as a non-participant observer in the supervisory sessions and as a ‘learner’ in interviews with supervisors.

In Schutz’s seminal essay, ‘The Stranger’ (1964), he writes about the typical processes of social adjustment through which ‘strangers’ go as they attempt to interpret the social patterns and language of a different culture and to successfully orient themselves within it. Schutz emphasises the distinction he is making between a scientific position and the situation of one who is learning to cope in that strange

culture, aiming to live and work in the future within its customs and mores. He does not equate the scientific process of a researcher learning from an encultured informant to the actual processes of enculturation of an aspiring new member. However, Schutz might agree with the view that a researcher, like a 'stranger' "becomes essentially the man who has to place in question nearly everything that seems unquestionable to the members" (Schutz, 1962: 96).

Hammersley (1992), like Schutz, thinks that it is possible to avoid the infiltration of researchers' assumptions into ethnographic accounts when he states that

neutrality takes the form of confirmability. The key question is whether the analysis is grounded in the data and whether inferences based on the data are logical and of high utility (Hammersley, 1992: 64),

and suggests that, in practice, it is necessary to "monitor our assumptions and the inferences which we make on the basis of them, and investigate those we judge not to be beyond reasonable doubt" (Hammersley, 1992:53) (thus raising the issue of researcher 'reflexivity' to which I return).

In ethnography, the forms of questions used in interviews are usually open-ended (Burgess, 1984; Hammersley and Atkinson, 1995) and have the potential in practice to avoid importation of the researcher's views or assumptions:

there is a tendency among ethnographers to favour non-directive questioning. The aim here is to minimize, as far as possible, the influence of the researcher on what is said, and thus to facilitate the open expression of the informant's perspective (Hammersley and Atkinson, 1995: 129).

Spradley is particularly systematic and detailed in his presentation of open-ended ethnographic questions. For him, "descriptive questions form the backbone of all

ethnographic interviews” (Spradley, 1979: 91). In considering the form of the case study interview questions, the message was clearly that open questions should predominate.

Schutz (1962) reaffirms the possibility that researchers can suspend their own views and assumptions in their areas of study in his third postulate. Here he points to the “*Differences between common-sense and scientific constructs of action patterns*” (Schutz, 1962:38). Again, he contrasts common-sense with the scientific attitude where researchers are not involved in the action. They are observers who have cognitive purposes, not practical ones, and where the research being undertaken meets a need for ‘objectivity’ in the sense that there will be propositions which are subjected to controlled verification. Schutz terms common sense constructs involved in common-sense experience, ‘first level constructs’, the ‘subjective’ elements from the point of view of the actor whose views are being represented. Scientific constructs, or ‘second level constructs’, are ‘objective ideal-typical constructs’, essentially of a different kind from ‘first level constructs’. ‘Second level constructs’ are theoretical systems constructed by researchers from their understandings of what their informants say or do, often embodying testable general hypotheses, and are contrasted with ‘first level constructs’, the common sense understandings of the informants (Chapter 3). Such a distinction drew attention to the need to check the validity of, and make explicit, the process of moving from first to second levels in my case studies so that a generalisable representation of the researchers’ understandings could be justified (Hammersley, 1992; Maso, 2001). In giving prime importance to the distinction between first and second order constructs, Schutz (1962) resolves some of the questions raised by Hammersley (1992) in his critique of ethnography. Ethnographers

are criticised for their reliance on ‘theoretical descriptions’ in support of their claims to validity and generalisability and, following from that, a frequent confusion in the status of their accounts. Validity is defined as: “An account [which] is valid or true if it represents accurately those features of the phenomena that it is intended to describe, explain or theorise” (Hammersley, 1992: 69).

In terms of generalisability, Hammersley promotes the idea of ‘a correspondence theory of truth’ provided that it gives “a selective representation rather than reproduction of reality” with the validity of the claims made based on “the adequacy of the evidence offered in support of them” (Hammersley, 1992: 69). In his critique, Hammersley rejects the notion that it is possible for ethnographers to produce theoretical descriptions. In this, he says, ethnographic descriptions are no different from common sense descriptions and, echoing Schutz, he asserts that: “Their distinctiveness should lie in the explicitness and coherence of the models employed and the rigour of the analysis” (Hammersley, 1992: 28).

Schutz (1962) tackles the confusion noted by Hammersley in his fourth postulate, “*The scientific model of the social world*” (Schutz, 1962:40). This involves the construction of “typical course-of-action patterns corresponding to the observed events” (Schutz, 1962: 40), models which Schutz calls ‘puppets’ or ‘homunculi’. It is through his idea of the construction by the scientist of an ideal-typical ‘homunculus’ with a ‘fictitious consciousness’ that Schutz addresses the problem of validity and generalisability in the study of common sense. To this ‘fictitious consciousness’, he attributes:

a set of typical in-order-to motives corresponding to the goals of the observed course of action patterns and typical because motives upon which the in-order-to motives are founded (Schutz, 1962: 40).

The homunculi are such that the typical sets of motives attributed by the researcher makes the real actor's actions understandable.

The construction of such models are followed up in Schutz's fifth postulate, "*Postulates for scientific model constructs of the social world*" (Schutz, 1992:43).

The main problem he sets out to address is how a method for the social sciences can be developed to deal scientifically with the actor's 'first order' common sense constructs and how the objects of common sense thinking can be articulated to the 'second order' constructs formulated by the researcher. He outlines three sub-postulates as ways of proceeding: "*the postulate of logical consistency*"; "*the postulate of subjective interpretation*", and "*the postulate of adequacy*" (Schutz, 1962:43-44).

In Schutz's terms, the researcher is charged with interpreting and translating the common sense understandings of the actor (first order constructs) into typical constructs of human action, related to each other by the principles of formal logic (second order constructs). His first sub-postulate, '*the postulate of logical consistency*'

warrants the objective validity of the thought objects constructed by the social scientist, and their strictly logical character is one of the most important features by which scientific thought objects are distinguished from the thought objects constructed by common sense thinking in daily life which they have to supercede. (Schutz, 1962: 43).

Thus, to explain supervisors' actions, questions had to be asked about what 'model' of supervisors' logics could be constructed and what 'typical contents' must be attributed to it in order to explain their views or actions meaningfully or "in an understandable relation" (Schutz, 1962: 43).

In his second sub-postulate, '*the postulate of subjective interpretation*', compliance with this postulate, according to Schutz (1962): "warrants the possibility of referring all kinds of human action or their result to the subjective meaning such action or result..had for the actor" (Schutz, 1962: 43). In the case studies, I aimed in my analysis to construct sets of generalisations (or typifications) derived from the supervisors' explanations for what they did. The generalisations were justified by logical inferences from the data and demonstrated through relevant quotations from the interview transcripts. These constituted my supervisor model (or homunculus), my generalised explanations of the supervisors' common sense logics or 'knowledge-in-use'.

Schutz (1962) emphasises that, to verify the results of the scientific construction of common sense understandings, the researcher's scientific models must make sense to those whose understandings have been represented, his third sub-postulate of '*adequacy*'. In this way, the consistency between scientific and common sense constructs and the adequacy of their relationships can be established. Hammersley (1992) concurs that the adequacy of ethnographic research can be judged in terms of a "commitment to truth value..represented by concern with credibility, with whether the people studied find the account to be true" (Hammersley, 1992: 64).

Hammersley's account of adequacy (1992) concerns 'dependability' and commitment by the researcher to 'consistency' which suggests to him that: "the naturalist must seek to assess the effects of research strategies employed on the findings" (Hammersley: 1992: 64). So, for example, it was necessary for me to verify the generalisations constructed with the supervisors involved and to enquire from both supervisors and students about the possible effects of my research strategies on what they did or said in supervisions.

Ethnomethodologists place great importance on the property of 'indexicality' or the situation of talk in its context (Pollner and Emerson, 2001). Schutz (1992) points out that:

every element of speech acquires its special secondary meaning derived from the context or social environment within which it is used and, in addition, gets a special tinge from the actual occasion in which it is employed. (Schutz, 1964: 101).

Leiter (1980) explains that the indexical property of talk allows a meaningful exchange in a shared context without the need to make those aspects of the context, assumed to be shared, explicit: "people routinely do not state the intended meaning of the expressions they use..The sense or meaning of these expressions cannot be decided unless a context is supplied" (Leiter, 1980: 107). Thus the listener in shared contexts fills in unstated but intended meanings of what is said. In the supervisor case studies, for example, the relevant issue for the researcher was of finding ways to help supervisors make explicit these 'unstated but intended meanings' to enable her to move towards an explicit scientific account. If a researcher's understanding of what people say and do depends on knowing about the context of interaction, then it follows that the studies of individuals or groups should be carried out in 'natural'

settings, aiming as far as possible to reduce the impact of the researcher's presence (Hammersley and Atkinson, 1995; Rock, 2001). Various solutions to this issue have been offered, including the notion of an observer as a 'fly on the wall' or as a non-participant observer (Schutz's 'disinterested observer') or, at the other end of the spectrum, the notion of 'participant observer' (Burgess, 1984; Hammersley and Atkinson, 1995) (Schutz's 'stranger', seeking to join in the activities of another cultural group). Different possibilities for reducing the impact of the presence of an observer have their supporters depending on the nature of their research (Burgess, 1985; Hammersley and Atkinson, 1995), but, whatever the contexts of use, one implication of 'reflexivity' is that

the researcher's own actions are open to analysis in the same terms as those of other participants. an obligation is placed on the researcher to make himself aware of the decisions he is taking and the motives underlying (Hammersley, 1992: 3-4).

An essential part of this in ethnography is the 'reflexive account' showing that the researcher has set out to determine, as far as possible, the effects of his or her plans, procedures and research methods on informants and on the research outcomes (Hammersley and Atkinson, 1995). This suggested that my own accounts of the research processes and outcomes should be explicit so that the role I adopted, my plans, rationales and courses of action, amongst other things, could be scrutinised.

Design implications

I was confident that Schutz's postulates and ethnographic principles provided a useful and complementary basis for the conduct and evaluation of my case study research. For example, these principles emphasised a non-evaluative approach where the

primary aim was to learn from the practices and understandings of informants. Schutz (1962, 1964) makes clear distinctions between common-sense, which is intuitive, ad hoc and implicit, with the need for phenomenological researchers to be scientific, that is, to reflect on, make explicit and be systematic about all those aspects they intend to 'bracket' and make problematic. Schutz's distinction between 'first and second level constructs' and his notion of 'homunculi' offered a clear way forward in addressing the problem of validity and generalisability in a study of common sense. My approach to the analysis of my case studies was based on my understanding of what Schutz and others were saying about a rigorous analysis based on phenomenological principles. The implications guided the conduct of the case studies in the following ways.

First, I was not concerned with taking what supervisors said at face value. What they said to their students, and what they did, was just the starting point for analysis. It was how they explained what they said or did that gave me the data I needed to formulate my 'second level constructs' and to create a plausible theoretical model of my own understanding of supervisors' understandings. Second, with a theoretical model of the kind envisaged, I could not aim to have an established set of 'truths' about why supervisors did what they did. I could, however, make strong claims for plausible theories and interesting new questions. Third, I aimed to construct these 'models' and pose new questions through identifying the ways supervisors typified motives, student characteristics, or situations in their explanations drawing on the terms defined in (but not dictated by) my research questions (Chapter 3). I aimed to give examples of these typifications from transcripts or field notes, examined for similarities and differences. Taking into account the similarities and variations in the ways supervisors talked about their work, their students, and their students' work, and the contexts in which

these were talked about, my aim was to construct a 'model' or 'theory' along the lines of Schutz's 'homunculus'. The construction of this model depended firmly on the data gathered but also provided the missing parts necessary to establish coherence in the relationship between examples. The aim was to construct a model of supervisors' craft knowledge which could be viewed as plausible until such time as additional evidence was supplied or the 'theory' was invalidated by contrary examples.

The research was designed to meet four other considerations. The aims of the research were to describe and explain the knowledge-in-use of expert and experienced PhD supervisors in the social sciences. The first criterion, therefore, concerned the ways in which the expertise and experience of supervisors were defined, who defined them, and how supervisors with the requisite qualities were identified and recruited to the project. The validity of what was claimed on the basis of the evidence presented in the end depended crucially on these population and sampling considerations (Miles and Huberman, 1994; Schofield, 2000).

Sampling and access

One aim of the student survey was to answer the question of which supervisors of ESRC students most fully and consistently met their students' criteria for good supervision, how they had met these criteria and what outcomes or needs had been met. Thus the criterion used for identifying a sample of 'expert' supervisors was that these supervisors' own students judged them to be expert. This way of approaching the definition of a population and sample of 'expert' supervisors also had advantages for negotiating access.

Asking students to describe and explain the attributes of their supervisors was a method of sampling successfully developed by Brown and McIntyre (1993) in their study of teachers' craft knowledge. They made clear to teachers that the researchers were taking an entirely positive view, reporting that:

The teachers seemed unaccustomed to attention being focussed on their strengths rather than their weaknesses, and they appreciated the new emphasis. They were also unused to receiving systematic feedback on what their pupils admired in them. This approach appeared to have a motivating effect and to engender confidence in the teachers to talk about and explain their actions in the classroom. (Brown and McIntyre, 1993: 35).

My use of unqualified student praise as a basis for the selection of supervisors was intended to achieve the same motivating effect with supervisors in my negotiations of access to their supervisions. That the approach was positive, not evaluative, was especially important. I asked them to allow me to sit in on supervisions and to tape record them, an unusual, intrusive and perhaps threatening request, and later to explain to me what they did in their supervision sessions and why. In adopting a similar approach to Brown and McIntyre (1993), I counted upon PhD supervisors' appreciation of my positive focus. I believed that this maximised the possibility of being allowed by supervisors to observe their sessions and of being ready to talk with me about their practices.

Implicit 'knowledge in use'

The second set of considerations were connected to the first. 'Knowledge-in-use' is tacit practical knowledge which works at the level of common sense (Chapter 4). The success of the research depended on the researcher being able to articulate supervisors' practices explicitly and to reconstruct the thinking underlying what they

did and how they did it. Good reasons were needed to persuade supervisors to reflect on their practices and a high degree of rapport between the supervisor and the researcher was also necessary (Hammersley and Atkinson, 1995). Given a sampling technique based on the student survey, there was little opportunity for an extended period of getting acquainted. Reliance was therefore placed on the positive basis on which supervisors were selected, on careful explanations of the research to those who agreed to become involved (especially about how their contributions would be represented), on taking considered account of the situations and circumstances of the supervisors and their students and on reducing to the minimum the demands made on them by the research.

With regard to helping supervisors to articulate their practices, several conditions had to be met. First, the use of a tape recorder had to be negotiated to facilitate the stimulation of accurate recall of the events and transactions taking place in the observed supervisions and to provide a focus for questions or discussions of specific activities or events observed at the interview stage (Hammersley and Atkinson, 1995). The use of a tape recorder, and transcriptions of the tapes, was essential at the interview stage also to ensure the accuracy of my representations of the ways in which supervisors construed events and transactions and to assess the effects of my own presence and actions. In addition, transcripts of the recordings of observations were necessary to allow me to reflect on the details of events and transactions and decide where I might need more information or explanations.

The form of the questions I planned to ask was particularly important. As appropriate to my adoption of the 'learning' role (Spradley, 1979; Hammersley and Atkinson,

1995), my questions were mainly open ended. I avoided the use of 'why' and, as suggested by both Spradley (1979) and Brown and McIntyre (1993), concentrated on asking descriptive questions like 'what were you doing when you asked the student to redraft the letter?'. Also, encouraging the supervisors with expressions of interest, or asking them to say a little more, were useful ways of helping supervisors to expand on what might initially be fairly short replies (Spradley, 1979). Even so, it was necessary to be aware of the possibility that the researcher might influence data production (Hammersley and Atkinson, 1995) and to monitor the situation by using the interview transcripts and by asking the participants how my presence might have affected their behaviour.

Generalisability

The third set of considerations were related to the steps necessary to achieve potentially generalisable research results. As Schutz's *postulate of adequacy* states, the validity of the researcher's construction of common sense understandings has to be tested by finding out whether it makes sense to those whose understandings are being represented. I aimed therefore to give supervisors sight of my accounts of their own contributions and a chance to comment (Rock, 2001). In addition, a 'reflexive account' of the research process was necessary, showing how I set out to determine, as far as possible, the effects of my plans and actions on informants' responses.

Management structure

The fourth set of considerations were pragmatic, aimed at providing a clear structure for the management of the case study research. For example, a primary concern at the

planning stage was the flexibility of time available to arrange a series of observation and interview sessions involving at least three people: the researcher, a supervisor and a PhD student, all with their own busy schedules and demands on their time. It was clear from the beginning that it was not possible to commit myself to an ethnographic approach involving 'extended' field work. Spradley (1979), for example, suggested that his approach minimally required six or seven one hour interviews interspersed by careful analysis and this did not take account of the additional time I required for observation, transcribing, and studying the taped observations. I decided to attend closely to Schutz's postulates and to ethnographic principles but not to aim to achieve ideal ethnographic practices. Six case studies were thought to be minimally sufficient for a part-time student over a period of five months to observe and interview supervisors three or four times.

The organisation and conduct of the supervisor case studies

Sampling and access

A supplementary aim for the design of the student survey (Chapter 4) was to locate those supervisors described by their students in positive terms. Twenty-three eligible supervisors were identified from student questionnaire responses when the criterion of unqualified positive response was applied, giving some flexibility of choice of location as well as some choice of social science discipline. In applying my criterion of 'location', that the supervisor's university should be within reasonable travelling distance of my home, the list of twenty-three was narrowed down to nine.

Six letters were sent out: to two supervisors in one institution in the Midlands, three supervisors in two institutions in the South East and one supervisor in an institution in London. These letters (Appendix 6) explained briefly my project, and how the supervisors had been identified, and asked for an initial meeting to discuss how they could help with my study. A proforma for responses and a stamped addressed envelope (Moser and Kalton, 1971) were enclosed to facilitate replies (Appendix 7). As protocol was likely to vary across academic departments, two copies of the letter were sent, one of which could be passed on to a Head of Department by the supervisor if necessary.

The aim of the initial meeting was to describe and explain my research in rather more detail than was possible or desirable in the introductory letter. It also provided me with the opportunity to answer any questions supervisors might have about my plans, to explore with them the kinds of things which they might be prepared to do, and, for those prepared to help, to negotiate terms and conditions which I might have to meet in order to secure their willing assistance. In preparing for this promised flexibility, I formulated not only my preferred procedures but also some fall-back positions, including the minimum conditions I could accept to realise the aims of my project. First, ideally, I wanted to sit in with the supervisor and student in three or four scheduled meetings using a tape recorder, with each observation followed immediately by an interview with the supervisor lasting between half an hour and an hour (Brown and McIntyre, 1993). Second, I was prepared to exclude the tape recorder, relying on my own notes in observations and/or in interviews. Third, I was prepared to accept a tape recording of scheduled meetings made by the supervisor (or the student) as a substitute for direct observation.

There were five affirmative responses to my initial letter and, accordingly, five introductory meetings were arranged. Four of the five supervisors agreed to my observing and taping their meetings with PhD students over three supervisions (provided the students they had nominated agreed) and to taped interviews following these meetings. Letters were sent out to three more supervisors to which there were two positive responses. Their agreement at the introductory meetings brought the total number to my target of six case studies.

Three aspects of my research in particular were stressed at the introductory meetings. First, the supervisors were told how positively their past student(s) had spoken about the supervision they had provided and that they were therefore being approached as experts from whom others could learn. Second, they were told of my intentions to negotiate from a position as 'learner', not as an expert. Third, I stressed my preparedness to negotiate the ways in which they might be able to help. In the event, all the supervisors and students involved agreed to my observation of their supervision sessions and to my use of a tape recorder. With a spread over four institutions, areas of subject expertise of the supervisors recruited (using ESRC subject area categories) included Human Geography, Social History, Sociology, Psychology, International Relations and Education (Appendix 8).

The supervisors also agreed to my observation of at least three consecutive supervisions with the same student, meetings which would have been taking place anyway. Exceptionally, one supervisor was leaving for Australia in mid-November and it was agreed that I would observe instead four supervisions of three students over a period of two weeks (weekly supervisions were the norm for that supervisor). It was

agreed that the dates and times of observed sessions would be selected by the supervisors to fit in with their normal pattern of supervision within the five month time scale which I had allowed for my fieldwork.

In deciding which students to involve, supervisors were asked to consider only those students who were confident and making good progress, such students being thought more likely to agree to the presence of an observer with a tape recorder. Students would be alerted in advance to the circumstances and their approval sought before the supervisors committed themselves. Some supervisors discussed various students so it was possible, to a limited degree, for me to have a hand in selecting students at different stages in their PhD research (Appendix 8).

In my negotiations with supervisors, I indicated that I would prefer not to participate in the supervisions, and that I needed to schedule time for my interviews (half an hour to an hour long) as soon as possible after the observed meetings so that details of the supervision were still fresh in our minds. If for any reason, an interview could not be arranged immediately following a session then the alternative was to talk at a later date using the tape recording of the supervision as an aide memoire. I stressed that no supervisor, institution or student would be named and, where quotations were used, these would be unattributed and unattributable. It was agreed that supervisors would indicate if they wanted to say something off the record and that the tape recorder would be switched off in the event of a telephone conversation or the need for the supervisor to talk to someone not connected with the supervision. At the analysis stage, I sent each supervisor a tidied up draft of my observation notes and a summary

of what they said in interviews, indicating that any comments on factual accuracy or representation of their understandings would be appreciated.

From November 1999 to March 2000, I attended supervision sessions at the four institutions. Three of the six supervisors observed said they were accustomed to setting the date of the next supervision with the student at the previous meeting and to holding monthly meetings. A fourth was in the habit of meeting his student once every week. These arrangements facilitated the scheduling of observations. Two supervisors were different in this respect. One set meetings in advance on two occasions (possibly because of my observation schedule) but, on the third occasion, the date of the next meeting was left open, the student having asked for more time to complete a difficult chapter. As time passed, this third supervision fell outside the timescale for my fieldwork so that only two out of the three supervisions were observed. The second vacillated on the issue of setting specific dates. The student had a room just opposite and quite often they tended to meet (subject to the availability of the supervisor) whenever the student needed to discuss something. This supervisor, as part of his academic and research work, was often called upon to make short journeys abroad, sometimes at very short notice. We arranged to maintain contact by e-mail about dates which were arranged at short notice, but, as in the previous case, time ran out on the third supervision and the two meetings which were observed were not consecutive.

It became apparent after the first round of visits that supervisors found it difficult, for a variety of reasons, to make time as negotiated to discuss what had happened directly following their observed supervision. In three instances, ten minutes or less had been

allocated by the supervisor for an interview before another meeting or teaching was due to start and frequently the time allocated for the session was over run, impinging on the time allocated for my interview. Our brief discussions were often interrupted by telephone calls or discussions with colleagues at the door (rarely a problem during supervision sessions). After several unsatisfactory attempts at interviews where supervisors could take the time to reflect on their supervisions, I abandoned further attempts directly following observations. Instead, one longer, more formal interview was negotiated with each supervisor on completion of the observation schedule. This radically changed my original plan to ask supervisors themselves to identify and talk about salient aspects of their own activities. Instead, I identified particular activities from the tape recordings of the observations, and, using the transcripts as an aide memoire, asked the supervisors to talk about these. This made it necessary to identify the criteria I used to select supervisor activities as I could not be sure whether or not my selections were salient.

The task was to find a set of general criteria which could be applied to my selection of supervisor activities across all the case studies. Most obviously, many of the case study supervisors had long discussions with their students where it was not at all clear to me what was happening. One task therefore was to find out in the interviews what was happening on these occasions. Sometimes the student or the supervisor raised a problem in the observed sessions, and, where that happened, I used it as a focus, asking the supervisor what had happened. Frequently, the supervisors and students talked about things, the context of which I was not privy, and I asked for background information. Sometimes supervisors would express something several times in different situations in a way which was distinctive to them and, where that happened,

I used these as prompts, asking what they were doing on these occasions. Most frequently, the supervisors' activities seemed to speak for themselves and it would have been easy to assume shared understanding. In these cases, it was necessary to approach the matter in a more round about way, for example, by expressing interest in some aspect of the activity, or in a related aspect of the students' activities, in order to help supervisors to respond and expand on their accounts. As occasions arose, I asked supervisors to make comparisons with other students in other contexts, for example, 'was that the same or different for other students you supervise?'. At all the interviews I started by asking some factual questions about the supervisor's area of special interest, the student's topic and how many other students they currently supervised. At the end, I asked if they wanted to add anything about their supervisions which had not been covered already and if my presence had made any difference to the ways they and their students had behaved. The supervisors' responses to my questions about what they were doing were more than sufficient to fill the time made available for each interview. I asked for an hour but, on three occasions, supervisors allocated two hours (more in one case), and it was then possible to ask more questions, to encourage more extended responses and to explore responses in greater depth.

A reflexive account

Earlier in this chapter, I outlined the implications of the phenomenological and ethnographic principles which I decided to adopt in the design of my case studies, and how I conducted the research drawing on these principles. I used these to evaluate possible effects that my plans and actions may have had on the case study supervisors and students to assess the level of confidence about the data collected.

The most positive indication of the adequacy of my approaches, plans and implementation was that six out of the nine supervisors approached were willing that their supervisions with students should be observed and recorded over a period of five months and were prepared to spend time explaining what they did in these sessions. They seemed pleased that previous students thought highly of their supervision, and that they were being asked to contribute to the professional development of less experienced supervisors. Despite their knowledge of my previous connection with the ESRC Postgraduate Training Division, they seemed confident and relaxed in what might have been an uncomfortable experience for them. In only one of the six cases was some additional reassurance sought about how my data would be used. When supervisors and students were asked directly about the effects of my observations on them, I was assured that the supervisions had proceeded normally (although some of the supervisors were conscious of being more explicit on matters where they felt the observer needed more background information). The tape recorder was considered to be an acceptable part of a researcher's stock-in-trade.

The interview transcripts were scrutinised to assess how my use of questions and prompts might have affected informants' responses. As expected, the examination revealed some missed opportunities which, if there had been an extended sequence of interviews, could have been followed up. What was clear was that the proportion of interviewer talk to informant talk was consistent with my role of 'learner', supervisors doing most of the talking. I was also satisfied that they were able to establish their own systems of relevance and priorities, even although the selection of activities for initial focus was mine.

There were some indications of a need for caution. When asked at interview to reflect on the actions they took in the observed supervisions, supervisors varied in the depth of their responses. Some were very fluent, detailed and focused in their explanations; others found it more difficult, requiring constant prompting and encouragement to say more or inclined to move away from the specifics to theorising about supervision in general. It was difficult to know whether or not such variations could be explained with reference to the researcher, the researcher's questions, insufficient information provided to supervisors about what the researcher needed to learn, or, as reported in the literature on craft knowledge (Chapter 4), the inherent difficulty for experienced professionals of articulating their own craft knowledge. Nonetheless, despite these variations, all the interviews generated more than sufficient quality data of the kind I needed for analysis.

It could not be assumed too easily that supervisors and students were unaffected by the taping of the meetings. For example, one student waited until the end of a session when the tape recorder was switched off to raise a serious issue which had arisen for his work. I experienced some technical problems in the placement of the tape recorder, given different sized rooms, positioning of furniture, and the way supervisors and students were accustomed to place themselves relative to each other. Many supervisors were surprisingly mobile, moving between files, bookshelves, desks and computers in the course of supervisions. A radio mike would have been ideal to ensure good quality recordings under such conditions.

Field notes were written up for each of the meetings observed for all six case studies, and a preliminary analysis was made within case studies of interview data related to the observation. This material was sent to the supervisors involved for comment. One response was received, pointing out an inaccuracy, thanking me for the material, and hoping that I would complete the research successfully. I could only assume that the non-response of the other supervisors meant that they were satisfied with the way their contributions were represented. In all major respects, I was satisfied that my criteria for the adequacy of my plans for, and conduct of, the case study research had been satisfactorily met, and I felt confident about the quality of the data. There was certainly a degree of reactivity to my presence and tape recordings but these were perhaps inevitable in this type of research. I found little evidence that these effects fundamentally affected the nature of the data in a way that would invalidate my results.

CHAPTER 7 THE SUPERVISOR CASE STUDIES: ANALYSIS

The analysis of my six case studies drew on the theories and concepts of Schutz's phenomenology for the study of common sense, and is carried out in accordance with his postulates for phenomenological research and related ethnographic principles. I have drawn also on theories and concepts developed in educational traditions including research into teachers' craft knowledge. The data analysed is based on a series of observations of supervision sessions, followed by interviews focussed on the observed activities. The supervisors were approached to participate on the basis of the very positive evaluations they had received from past students responding to the student survey (Chapter 4).

My aim in this analysis is to generate 'scientific' concepts, Schutz's notion of 'second order' constructs (Schutz, 1962) from the 'first order' constructs which the supervisors used in talking about their activities. Schutz theorised that people would explain what they did in terms of 'because' and 'in order to' motives, and this is what the case study supervisors did. I analysed these explanations, not only in terms of the type of motive, but also in terms of the points of reference of the explanations provided. The supervisors talked about their 'because' motives in terms of two main types of influences on their courses of action. First, they talked about their students' *personal characteristics* relevant to their actions, and, second, they talked about the *contexts* within which their courses of action were situated. 'In order to' motives were talked about in terms of the *outcomes* they anticipated, or were trying to achieve, as a result of their actions. In taking account of personal student characteristics, contexts and anticipated outcomes, the supervisors explained their *courses of action* in terms of

what they did to meet student needs and problems and enable their students to learn and to progress.

Throughout this chapter, I illustrate how my second order concepts have been abstracted from supervisors' first order constructs by a selection of quotations which I use to justify the generalisations I am making. The quotations may be interesting to readers in their own right but my use of them in the analysis is solely to establish abstract concepts well grounded in the evidence, and that is how I hope the appropriateness of these quotations will be judged. 14 generalisations were drawn from supervisors' explanations of their courses of action. These are represented in the present tense to indicate their status as hypotheses, yet to be confirmed through more extensive case study research.

SECTION 1 Supervisors' conceptions of the personal characteristics of their students

In explaining their courses of action, supervisors talked about their students' personal characteristics in two ways. First, they talked about the knowledge, skills and understandings which their students had acquired previously and those which they needed to acquire to complete a task at hand or their PhD studies successfully, and, second, they talked about their students' personal dispositions with reference, for example, to their conscientiousness, enthusiasm, interest, confidence and attitudes which students brought to the different aspects of their studies. I report on the ways supervisors talked about these under two headings: *cognitive characteristics*, representing students' knowledge, skills and understandings (Bloom, 1976); and *affective characteristics* (Bloom, 1976), representing motivational characteristics such

as conscientiousness, enthusiasm and interest. The two terms, cognitive and affective characteristics were drawn from Bloom (1976), an eminent educational theorist, who, like Schutz (but in less abstract terms), asserts the unique and historical properties of the knowledge, skills and understandings which individual students bring to a learning task or set of tasks, the importance of these characteristics for success on the task, and also the 'alterability' of these characteristics. I used Bloom's concepts when it became clear in the analysis that I would need to extend my existing conceptual frameworks to take account of how the case study supervisors talked about their students' needs.

Cognitive Characteristics

In summative terms, the case study supervisors described their students in such words as: 'technically gifted'; 'organised and efficient'; 'bright'; 'thoughtful'; 'systematic', and having a 'natural feel'. It is difficult to know whether or not supervisors regarded these general characteristics as 'alterable'. However, in relating their students' cognitive characteristics to their own courses of action, supervisors frequently mentioned more specific knowledge, skills, understandings and beliefs which students had or had not acquired or which they would need to learn for success (Rudd, 1985). They talked about these 'alterable' characteristics in three distinguishable ways: first, in terms of those characteristics which students had usefully learned elsewhere; second, in terms of those learned previously but which needed to be applied or applied in a different way; and, third, in terms of those which they lacked altogether and needed to acquire. In addition, fourth, one supervisor talked about a student in the past whose prior learning constituted a constraint on new learning. I exemplify these four ways of talking with reference to the supervisors' 'first order constructs' illustrated below.

With respect to characteristics which students had usefully acquired elsewhere, one example is provided by the case study C (CSC, Education)* supervisor who talked about the benefits of his student's prior mathematical training:

she was able to bring to bear a systematic way of thinking..to transfer that..into the context of the greater ambiguities of social science thinking..she was able to see that the rigour in social science comes of being aware of alternatives and being able to make sense of these alternatives systematically (CSC: 2).

The case study A supervisor (CSA, Geography) described his student, a research assistant of seven years standing, as having “a very good mind when it comes to design of computer algorithms to solve problems” (CSA:4). In terms of those characteristics acquired previously but which needed to be applied in a different way, the CSA supervisor talked about his student, the research assistant, as having little experience of writing on theoretical or conceptual issues, a task usually carried out by supervisors as directors of the research, not by their assistants. The student had ‘intellectual skills’, so writing on theoretical and conceptual issues

is the thesis area that he has to catch up on..if he's going to become an independent generator of research..he's really got to use his intellectual skills now in a different way (CSA: 2).

In the case of the ‘mathematics’ student in CSC, the student had worked in a secondary school as a teacher prior to her PhD studies. What she had learned from that experience had been helpful to her in formulating her project but the supervisor thought that what she needed now in carrying out her fieldwork was to learn the skills of talking to her professional colleagues, not as a teacher, but as a researcher.

* The quotations used throughout this chapter were taken from the interview transcripts. The letters and numbers in brackets following each quotation indicate the case study (A-F) (Appendix 8) and the page number of that case study interview transcript.

Characteristics lacked by students were seen by the CSC supervisor to lie not so much in the knowledge and understandings acquired by students from books or formal research training as in the practical application of what they learned from these sources to their research:

you can read all these methods in books..it all looks very neat and tidy but how do you actually turn it into a practice?..applying it is where many students have difficulty (CSC:11).

A similar concern was expressed by the case study D supervisor (CSD, History):

I think she was aware of these things [concept of motivation]..partly because of the courses she's done and partly because of the papers I've made her write in the first term..but..to actually do it (CSD: 1).

For the case study B supervisor (CSB, Psychology), the student lacked: "a repertoire of research tools" (CSB: 5). The CSC student with the mathematical background required skills in writing "because she comes from a mathematics background..she hasn't done much writing" (CSC: 8). This supervisor explained that, as the student's topic concerned the use of calculators in mathematics classrooms, her background knowledge of teaching mathematics was helpful, and she was adapting well to posing questions within an interpretive social science approach. From past experience, however, this supervisor observed that, unlike his present student, other mathematics students generally had more difficulty in becoming "aware of different assumptions and interpretations" (CSC: 2) in studying in the social sciences, and, as a result, needed more help.

In CSD, a previous student working on a historical topic came from a background in accounting and a science degree and: "when she came in..she wrote like a

scientist..you know?..one sentence' (CSD: 5, History). With respect to a student whose prior learning constituted a constraint on new learning, this same supervisor, also with reference to a past student, described her as apparently unable to develop the kind of conceptual framework which she thought would be necessary to give direction and coherence to the student's research:

no matter how hard I tried to steer him to making some sort of overt conceptual linkages and so on.. he couldn't do it.. he just didn't think that way..there were also some limits to what he could do..he had a rather narrow approach and nothing I could do could push these [limits] out (CSD: 1).

Cognitive characteristics were therefore very important to supervisors reflecting on their own practice. The question is of what patterns, if any, can be found in their considerations in practice of these characteristics and, if there are, how they can best be understood.

Commentary on cognitive characteristics and proposed generalisation

Bloom (1976) defined the various kinds of knowledge, skills and understandings which people bring to a learning situation as 'cognitive behaviors' which students will need to have acquired for success in their studies. I found Schutz's more abstract notion of 'stock of knowledge at hand' (Schutz, 1962) less useful than I first thought in coming to an understanding of the way supervisors were explaining their courses of action with reference to their students' unique, historic and potentially alterable learning characteristics. The difficulty arises, perhaps, from Schutz's concern to understand how people explain the actions taken by someone else. In the case studies, the supervisors were intent on explaining their *own* actions to change key cognitive characteristics of their students.

Heider's concern was also to understand to what, in the observed person, an observer attributed success or failure (Heider, 1958), but the supervisors were explaining their own actions as intervening agents. As supervisors, attribution was but one step on the way to a possible necessary intervention and the first step towards thinking about *how* to intervene in order to change things. Bloom's (1976) concepts, on the other hand, of 'cognitive behaviors' and the underlying assumptions, that these characteristics are unique, crucially important and alterable, seemed to cover very adequately the ways in which supervisors talked about their students' personal learning characteristics, in relation to the actions they took. Such concepts are distinctive both as describing specific cognitive characteristics of the particular students which provide 'because' explanations for supervisors' actions and also as providing taken for granted 'in order to' explanations of what all successful PhD students need to achieve. It is the 'gap' between the observed cognitive characteristics of individual students and the necessary cognitive characteristics of any successful student that is the common feature of the ways in which these student characteristics were mentioned. On this basis, I formulated one generalisation across my six case studies to represent the ways all the supervisors explained the account they were taking of their students' cognitive characteristics.

Generalisation 1: The case study supervisors take account of the gaps between their students' cognitive characteristics and those they see as necessary to the successful completion of the tasks in which their students engage.

Students' affective characteristics

Having shown some of the ways in which supervisors talked about their students' cognitive characteristics, and the second order concepts developed in response, I now examine the ways they talked about their students' 'affective characteristics' (Bloom, 1976). Supervisors talked in very positive terms about the determination, confidence, conscientiousness, interest and ambitions of their case study students. However, even for these students, the supervisors realised that there were times when they could become anxious, disillusioned, or disenchanted with themselves and their projects (Hockey, 1994b; Delamont et al, 1997a). Such disaffection could interfere with student progress and affect the quality of their work. The supervisors talked about a number of sources which they thought contributed to student disaffection (Rudd, 1985). First, where a student was thoughtful, reflective and conscientious, the student could become anxious about whether they had done enough or whether they had taken sufficient account of issues likely to arise, for example, in connection with their preparation for fieldwork (Delamont et al, 2000). The CSC supervisor in Education talked about his student's personal dispositions: "she's a student who is very conscientious..very reflexive..she sometimes expresses it in a bit of anxiety" (CSC: 2). The psychology student in CSB was also worried, this time about

getting the boundaries right between her views and attitudes and the scientific view...anything where she can quantitatively turn the handle.. then she feels more comfortable with that (CSB: 10).

Second, disaffection could arise from students' encounters with particular tasks. Some supervisors pointed to student frustration or demoralisation when they could not see a clear way forward, were stuck or could not see an end in sight. For example, in CSB, the student felt overwhelmed by the amount of information and data she was

collecting as part of her literature search (Delamont et al, 2000). Her senior supervisor pointed out that:

that's natural.. everybody goes through that..even organised and efficient people like L start to feel it's running them rather than the other way round (CSB: 3).

The supervisor in CSF, International Relations, mentioned the demoralising effect on the student of drafting and redrafting chapters where there is no end in sight:

you've got to bear in mind that it becomes demoralising if people are drafting and redrafting and redrafting and they don't see a product out of it..even if they're getting to the thesis eventually..and no doubt it's good for the thesis..but it can be pretty demoralising (CSF: 4).

Third, in explaining the courses of action they had taken, some supervisors talked about the nature of PhD study, for example, the scope of the project, its length, the related amount of time the students spend on the work, the very specialist topic of their research where few others share the students' interest and enthusiasm apart from their supervisors, and, in one case, the nature of the discipline (Delamont et al, 2000). The CSC supervisor in Education summed up what other supervisors were saying about student motivation in connection with both the nature of the task and the situations and circumstances within which students engaged with it:

I'm conscious that I'm always trying to keep up students enthusiasm for what they're doing..I think it's very easy for students to become a bit disillusioned..they're living with their project all the time and I guess one of the things they come to the supervisor for is a bit of social contact with somebody else who can also get enthusiastic about their project..be interested and see possibilities in it..as anyone who has done a PhD..in our area knows..the kind of feeling of..have I made any progress..[feeling] isolated and just going round in circles (CSC: 12).

One supervisor, the only one to do so, introduced an academic discipline source. She thought that students might more easily become disenchanted with a History thesis:

I think when you are doing historical work..it can get to seem rather petty..irrelevant..it wouldn't be true of a sociology student because generally they're working on current issues..if you don't think its going to be of much..relevance..then it's very disheartening (CSD: 3).

Fourth, some students experienced pressure as a result of the processes or outcomes of the supervisors' assessment of their work (Phillips and Pugh, 2000). For example, with reference to critique of the student's written work in CSC:

about the emotional..affective side..of being supervised...there's a danger that these [meetings] turn into evaluation sessions where the student feels themselves to be under pressure with their work being evaluated..and of course there has to be an element of that in the sessions but it can become dysfunctional (CSC: 12).

On the matter of a third year student redrafting chapters, the CSD supervisor pointed out the 'depressing' effects on students of having to redraft or rewrite as a result of assessment before going on to a new chapter: 'it's quite depressing to have to go back immediately and do it all again' (CSD: 2). Fifth, with respect to home circumstances (Rudd, 1985; Burgess et al, 1994), this same supervisor mentioned adverse personal and external factors as affecting student progress:

sometimes you find out about personal reasons for a student getting stuck..most of my students at some time or another have had family or financial difficulties (CSD: 3).

Sixth, student attitude (Delamont and Eggleston, 1983; Wright and Lodwick, 1989) was an important factor to the International Relations supervisor in CSF in taking account of student characteristics. He described his case study student as 'having the right attitude' and went on to describe his student's characteristics in this respect (Hill et al, 1994):

attitude matters far more than other factors in the PhD..he's got the self confidence to develop ideas and talk to them..he understands his relative inexperience and so takes guidance very easily and gracefully..but he's not so flexible that you're constantly anxious about over influencing him..if you're saying something that doesn't make sense to him..he'll come back to you..so he's got the right attitude..and he asks good questions.. in the end that's what a good researcher does (CSF: 7).

There were some situations where student attitudes raised issues (Hockey, 1996a). In one situation, where the student's personal characteristics were generally described positively, the CSB student's views on one matter raised an issue. The student, in her second year of study, had previously worked in community health care. She had embarked on a statistical study despite earlier suggestions from her supervisors that a qualitative study might be more appropriate given the questions she wanted to ask. In the context of joint supervision, the second supervisor talked about her expectations: "given the sorts of questions she wanted to address..one obvious possibility was that she would go and do intensive..in depth interviews and she really shied off that" (CSB: 10). The senior supervisor explained that the student wanted her analysis to be statistical because she felt the objectivity normally associated with statistical research would help lend authority to her findings. This was important to her where some of her findings might contradict the views of professional colleagues with whom she would want to maintain a working relationship and rejoin at some later stage. In this situation, her two supervisors were concerned to respect her views, turning their attention to helping her to adopt her preferred methods.

In a second example, the CSD supervisor talked about how she and her case study student negotiated the student's project topic together (Hockey, 1996a). She contrasted this process of negotiation with other cases where the students had

the bit between their teeth..[saying] this is what I want to study.. and you say to them..that will be difficult..[they say]..that is what I want to do..so we do it..once or twice it's worked out quite well (CSD: 4).

A third example (CSE), concerned similar 'strong views' but in this case, the student was in the third year of a Social Theory thesis, almost at the point of completion, and 'argued his case':

he has very strong views about what is and what is not the right ways of doing things..he is very autonomous and he will stick to his guns..we don't often disagree but if we do then he will argue his case (CSE: 2).

In a fourth example, the supervisor mentioned one past student whose 'strong views' had posed him with an insoluble problem. The student was described as having "very firm views" (CSC:10) leading to his seeming reluctance to suspend prior assumptions or to entertain new ways of looking at things which the supervisor believed were fundamental to his doing interpretive research successfully:

he was very able in many ways..and had very firm views about everything..including the situation he was researching..and I found it very hard because I couldn't break through to get him to open up and to consider alternative interpretations and ideas.. and of course..if you're supervising..you rely on taking people into sets of ideas and ways of thinking that they haven't entertained before..I was unhappy that the agenda he was setting was not rigorous..my job was to help him become more rigorous and to move on in that way (CSC: 10).

Affective characteristics were a constant consideration in the ways supervisors reflected on their own practices. I now address the question of what patterns there may be in their practical considerations of the issues and how these patterns may best be understood.

Commentary on affective characteristics and proposed generalisations

As for 'cognitive characteristics', Schutz's (1962, 1964) and Heider's (1958) concerns were not directed towards supervisors' attempts to intervene. Bloom's (1976) concerns with his definition of the concept of 'affective characteristics' was more relevant to student needs and, therefore, with what supervisors had to do for a student to learn. He conceptualised student affective characteristics in terms of possible differences between students in approaching a particular task or set of tasks, some with interest, confidence and a desire to learn, and others less so, and he observed that:

For a student to learn..he should have an openness to the new task, some desire to learn it and learn it well, and sufficient confidence in himself to put forth the necessary energy and resources to overcome difficulties and obstacles in the learning, if and when they occur (Bloom, 1976: 74).

Supervisors talked about their students in terms of their helpful affective characteristics which made the task of supervision less demanding, for example, they described their students as 'conscientious', 'flexible' (but not too flexible), 'open' to alternative ways of thinking, and having the 'right attitudes'. Some students they had supervised previously, however, lacked these attitudes and, as a result, the task of supervision was more demanding. Six different kinds of factors were identified by the case study supervisors as impinging on students' 'affective' states and, although largely implicit in what the supervisors were saying, they indicated the need to monitor the situation in order to maintain an optimal 'affective' state in their student. They talked, for example, about the sources of student disaffection and how student 'anxiety', 'disillusionment', or 'self doubt' could arise Rudd, 1985; Delamont et al, 1997). These sources included cases where the student's thoughtfulness and reflective

nature predisposed her towards anxiety; of student uncertainty and confusion due to gaps in their abilities and experience; of pressures arising in the face of critique of their work; of disenchantment with their projects where the nature of the task itself was especially difficult, and of the loneliness many students experienced during the course of their studies (Delamont et al, 2000).

There are parallel and contrasting features of students' 'affective' characteristics with their 'cognitive' characteristics. In both cases, sensitivity to student characteristics is directed towards minimising a gap. But, whereas in the 'cognitive' case that is the long term goal, in the 'affective' case, it is a constant need. In each case, it is both a 'because' and an 'in order to' motivation for supervisors. On this basis, it was possible to formulate one generalisation across my six case studies to represent the ways in which the supervisors explained the account they were taking of their students' affective characteristics.

Generalisation 2: The case study supervisors take account of the multiple threats to their students' necessary affective states (including their dispositions and views) from the nature of specific tasks and the overall enterprise, from external factors like home life, and from the supervisors' necessary provision of critiques. They are sensitive to both enduring and temporary affective states in order to at all times minimise the gap between the ideal 'affective' state and the alternative states that can arise.

SECTION 2 Supervisors' conceptions of relevant characteristics of the context

In Section 1, I was concerned to represent the ways in which the case study supervisors talked about their students' personal characteristics. In explaining their courses of action, I found that what was said could be represented under two main headings: 'cognitive characteristics', including the knowledge, skills and understandings which their students had or had not acquired, and their 'affective characteristics', including confidence, interest and enthusiasm. Two generalisations were developed to represent how the case study supervisors talked about these. In Section 2, I report on the ways the supervisors talked about relevant characteristics of the *contexts* of which they took account in their supervision, including any constraining or facilitating effects these had on their courses of action (Hockey, 1994a, 1996a).

All the case study supervisors talked in terms of different types of support for students built in to departmental provision for all PhD students and thought relevant and helpful to their supervision activities (Becher et al, 1994). These included departmental policies and practices in relation to: joint supervision (Pole, 2000); team working (Becher, 1993); research training (Henkel and Kogan, 1993); PhD requirements (Becher and Trowler, 2001); review and upgrading arrangements (Phillips, 1994); and, related in part to these policies, the changing nature of the PhD (Henkel and Kogan, 1993; Hockey, 1991).

In two of the case studies, students were routinely supervised by two supervisors, or in one case by three (Pole, 1998; Parry et al, 1997). The CSA and CSB supervisors talked about these arrangements as having a number of different purposes and

benefits, including the provision of adequate coverage of the student's topic and allowing less experienced supervisors to gain more experience, and, in one case, it was a response to institutional requirements that a supervisor has a PhD. In CSA (Geography), all three of the first year PhD students participating in the case study were supervised by at least two supervisors. One of these students was an ESRC CASE student. CASE studentships are subject to ESRC requirements for collaboration between the university department and the collaborating organisation which also provides a supervisor. In this case, the student had three supervisors, one from the organisation, and two from the university department. The supervisor talked about the circumstances of this joint supervision partly in terms of expediency:

there was a formal requirement for two supervisors...my colleague is finishing his PhD this year and he's not allowed to supervise alone (CSA: 5-6),

and partly in terms of meeting external requirements: "it's for an ESRC CASE award" (CSA: 5-6) and partly in terms of the necessary expertise required to cover the student topic. Having two supervisors in this case increased not only the range of expertise available but also the range of contacts which students could use to gain access to data. In the same department, and with reference to the second of the three students, joint supervision entailed a senior supervisor and a junior one. The senior was an expert 'on the region and culture'; the junior's expertise was 'on the methodological side'. In the case of the third student, the second supervisor was a colleague in another university:

I'm the principal supervisor and [my colleague] is the second supervisor..[the student] goes to see [him] once a month..and meets me once a week..he [my colleague] comes to our research support unit meetings..which are held every six months (CSA: 5-6).

In the second case study where joint supervision was the norm (CSB, psychology), unlike the practice of joint supervision in CSA (where only one supervisor was present at the four supervisions observed), both supervisors attended all the observed supervisory meetings. One described herself as the principal supervisor with expertise and experience in both research and supervision and the other described herself as an experienced professional researcher, contributing a range of technical and methodological expertise and experience, and, in addition, seeking to gain more experience in PhD supervision. In particular, the senior supervisor talked about her own contribution to joint supervision in terms of providing “a sense of what are likely to come up as issues for them [students]..these wouldn’t necessarily [occur to] somebody who had a research career” (CSB: 4-5). The second supervisor perceived her role as helping the student to “realise there are a variety of methodological tools available” (CSB: 5). It appeared that three heads were better than two when problems arose.

As well as fulfilling functions of direct benefit to students, for example, providing supervisory expertise in different aspects of projects, especially where they crossed traditional disciplinary boundaries (Pole et al, 1998), joint supervision also served as a training ground for new or inexperienced supervisors (Delamont et al, 2000). It could also be necessary in upholding departmental and ESRC requirements, first in relation to departmental requirements that principal supervisors should have a PhD and, second, to conform with the requirements of ESRC CASE funding (ESRC, 1997). No constraints were mentioned in either of these cases with the possible exception that in CSA it was mentioned that two students had to travel considerable distances to meet their joint supervisors.

Research team working

One case study supervisor worked in a department which actively fostered a culture of team working in research, internally or externally funded, research personnel and research students (CSA, Geography). This supervisor saw joint supervision as part of a culture of doing research and research team working in his department. Team working arrangements were thought to facilitate students' work in a number of ways as well as having other advantages (Pole et al, 1998). Some examples with reference to a third year student included:

they're getting strong guidance from us because we have a body of work that we've done.. from which they are choosing the elements and getting advice (CSA: 6);

in team working...having people you can turn to in your research group..is valuable to [students]...take the instance of...a research migration modelling project funded by [a Government Department]...he [the student] hasn't done very much on migration modelling.. but with a bit of luck..he can pick up most of that stuff from the project and embed it in his [PhD] model...it [the funded project] might actually give him some money for another three months at the end of the year when his studentship is finished..and he's writing up (CSA: 7).

The supervisor went on to say that, in these situations, the students could also benefit from a saving of time, for example, when time consuming data processing could be done by paying undergraduates from project money for use by the project researchers and by the PhD students involved.

Research training

Only in CSC (Education) did the supervisor talk in any substantive way about connections between formal research training and his own supervision activities. His

student held an ESRC research studentship award, was funded over a three year period, and was now in her second year. It was departmental policy that all students had to complete its one year MPhil in Educational Research successfully if they wished to go on to do a PhD. As part of that course, at the end of the first year of her award, his student had to submit a research project, a dissertation in the form of a pilot study, prefaced by a literature search, and rationales for the approach and techniques adopted. This would then, as the supervisor explained, be the foundation for a doctoral project. One salient outcome of the research training and the dissertation was that students became more aware of alternative approaches:

they become very eclectic.. and they have not quite learned that you can be eclectic but you need to be careful about the internal consistency and coherence of a research design...but..it's very good because it has got them out of the rut of thinking about one particular way of tackling the project..and this has made them much clearer about what they're doing and why they're doing it..and..of course..they do become more sophisticated about the relationships and contradictions between different approaches..so what happens..is that we get mixed method type studies in the first year and mixed method proposals..which generally is good although it does mean that you have to be very careful in that these can become very ambitious doctoral proposals and you have to be careful that they are realistic within the time available (CSC: 6).

A related outcome of the training in research was that student thinking became more sophisticated, and one of the effects on his student was that “she wasn't satisfied with the way she was conceptualising the research” (CSC: 1). Whereas it had been anticipated by the supervisor that the student would be well into her research by the middle of the second year, the gain from having completed a literature search and pilot study in the Master's year had been virtually cancelled out by the student's reconceptualisation of her thesis in the second. This had implications for the supervisor's courses of action in helping the student to manage her project and her time.

The CSF supervisor (International Relations), involved in setting up formal research training in his department, talked about his commitment to the PhD as an 'apprenticeship' which he defined as a training for research which went beyond requirements for the success of students' theses (Bowen and Rudenstine, 1992; Hockey, 1995a). The department operated a strong policy on students submitting their theses on time (Clark, 1993). Much research in his area was policy orientated so this fitted in well with the need in policy research for researchers to pay heed to the diverse pragmatic demands of funders as well as to quality and, crucially, to complete reports on time. This had implications for aspects of his supervision, especially regarding student project and time management skills (Wright and Lodwick, 1989).

PhD review and upgrading meetings

All the departments in which supervisions were observed required review meetings (Phillips, 1994; O'Brian, 1995). As described by the CSF supervisor,

what happens is that every year..[there are review meetings] at strategic points...M had one just a few weeks before..I set that up..many years ago..there are four people in the room..the supervisor..the student and two other members of staff..one of whom has got some familiarity with the area..with the topic..and one responsible for the welfare of PhD students..they're obviously a back stop in case things are going wrong..you don't just have the reassurance from the student and the supervisor..someone else is there asking questions..they take about an hour and you have to prepare written material..for the performance..and to some extent the supervisor is being scrutinised as well..although..obviously we're too polite to mention it..it's still good to have a structured eye asking basic questions (CSF: 10).

In another example, a review meeting had the specific function of conferring official PhD status (Phillips, 1994) and, in CSC, was conducted half way through the series of observed supervisions. This meant that a major part of two of the supervisions

observed were related to the student's preparation for that event, including receiving guidance from the supervisor on what should be included in her report, advice on how she should prepare for the meeting itself and reassurance that she had done enough already to impress the committee. Given the departmental requirement that students successfully complete a Master's degree in research before beginning PhD studies, where the student would normally have completed their literature search, research design and so on, this was the student who had reconceptualised her Master's dissertation, and the supervisor used the impending upgrading meeting to encourage the student to write up her new ideas and plans:

if she'd stuck with her original plan she'd have had an end-of-year review very quickly..in September..and there wouldn't have been a need for her to do much more writing..really just to draw up a structure for the thesis and a plan for her work..but because she had shifted to a new set of ideas..I wanted her to...to write something coherent about her new conceptualisation of it (CSC: 7).

The supervisor thought that the upgrading meeting and its requirements provided a useful discipline, prompting the supervisor and student to take stock and to look ahead: "it focuses your attention as supervisor.. and the students' attention ..on what one might call the longer term strategic thinking" (CSC: 8).

Thesis completion requirements

There was one contextual feature which all the case study supervisors talked about which was the institutional requirement that PhD students complete their thesis within a three year period. One implication of this mentioned by supervisors was their closer attention to project and time management (Becher et al, 1994; Hockey, 1996a). As many students were thought inexperienced in this respect by their supervisors, this sometimes meant that a more directive approach from the supervisor was thought

necessary on occasion, for example, where the supervisor thought the student had done enough on one task and needed to move on to another: “you need to bring things to a closure where your experience tells you that its going to go that way anyway” (CSF: 10).

All the case study supervisors preferred an open-ended approach (Hill et al, 1994) where advice and help could take the form of suggestions rather than telling the student what to do:

I’m always conscious of the danger of the supervisor writing the student’s thesis for them..and I give guidelines and suggestions..but..all the students are very different (CSA: 4).

Such an approach, it was thought, could help the student to take their own decisions, establish ownership of the project, and foster independence (Acker et al, 1994b). The introduction of stricter time limits meant the striking of a delicate balance between openness and direction in ensuring that the student stayed on course for successful completion within the time allocated (Delamont et al, 2000). The issue of balance is raised again in Section 3 where I examine the ways supervisors talk about anticipated outcomes and in Section 4 where I examine how supervisors talked about how they sought to achieve this balance.

Nature of academic work

Writing was singled out by four of the case study supervisors as inherently difficult (Phillips, 1983), in one case, not just for students but also for professional researchers: ‘we have to write for a living..and it’s hard..it’s really hard’ (CSB: 12).

In the context of the frequency of meetings, the CSF supervisor talked about pressure of time in his job where he had many responsibilities over and above supervision (Hill et al, 1994):

there is a pressure [of time]..obviously you're juggling lots of resources and it's very difficult to manage that..it's about getting the right balance between meeting really often..so that you're genuinely in a relationship in this research rather than..occasionally marking..seeing whether it's up to scratch..which isn't a sufficient relationship..and at the same time not over-committing yourself on the time you can give to this relationship..to the students this is their whole waking life..me..I have four [PhD] students..I have a hundred and one different research projects..I have two research fellows..I have got administrative responsibilities..I'm round the world half the time..I teach..but I have less than the average because I bring in research revenue so the dept employs more lecturers to cover..and so it is a pressure..it's difficult (CS F:10).

The supervisor in CSF was the only supervisor to mention external constraints impinging on his supervision and , in particular, with reference to meetings with his student.

Changing nature of the PhD

There were three ways in which the supervisors talked about the changing nature of the PhD. First, several supervisors noted that there was far less time available to students now to complete their projects than there used to be. Second, one psychology supervisor thought that the range of thesis forms considered acceptable had expanded, and third, in geography, theses were thought to be shorter now (Becher et al, 1994; Hockey, 1995). In CSD, the supervisor commented on changes in her own practice attributed to the introduction by the university of policies for completion influenced by the ESRC postgraduate funding policy for submission and on how that had facilitated time and project management for both supervisors and students: "that's one good thing that's come out of the new regulations..you can't go on for seven or eight

years..you have to finish” (CSD: 5); and “now we have very tight time constraints.and..so you look at the thing as a whole..so in that sense I think the tightening up has been a good thing” (CSD: 7), (but qualified the remark by saying: “I think three years is certainly unrealistic for anyone doing history” (CSD: 7)). This was the only hint provided by the case study supervisors that might suggest differences amongst case study disciplines in the length of time regarded as optimal by supervisors for completion of their students’ projects.

One supervisor in CSB commented generally on changing expectations for the form of a PhD (Hockey, 1995b). This comment followed a discussion in the interview about the supervisors’ advice to their student in the observed supervision about how she might deal with the various ‘bits and pieces’ of research and information she had collected prior to her main study:

I think increasingly.. in the quarter of a century that’s passed since then..people are more open minded now about what the format has got to be..in L’s case..it was going to be obvious that there were going to be some pretty unusual shapes (CSB:13).

That general views in the field of psychology about the expected form of the PhD were more flexible now, made it easier for the supervisors to help the student use, link and justify all the various data gathering exercises in which she had been engaged. In CSA (Geography), the supervisor contrasted the degree of difficulty at present with how it had been in the past; the task in those days was more difficult because theses were longer.

Commentary on contexts and proposed generalisations

Supervisors talked about relevant characteristics of the contexts within which their supervisions took place, and which influenced what they did, almost always in positive terms. Although it was clear from my observations that there were many types of resources readily available to students and supervisors, including library, networked computers and the Internet, and technical support, supervisors did not explain the presence or absence of material benefits as influencing what they did. They did talk about their departmental cultures, traditions, policies and related practices (Delamont et al, 2000) but not in terms which were generalisable across the case studies. For example, the CSA supervisor talked about the research culture as relevant to his courses of action. For the supervisors in CSA and CSB, it was the normal practice of allocating two or more supervisors. For the CSC supervisor, it was a research training Masters degree, and for the CSC and CSF supervisors, it was departmental requirements for monitoring and review meetings (although the CSD and CSE supervisors also mentioned these in passing).

It was therefore difficult to find generalisations for contextual factors which would apply across all the case studies. No doubt it was the case that, given different students or the same students at different stages in their research or on other days, different aspects of the contexts within which the supervisors worked might have become more or less salient for any particular activity in which the supervisor engaged. Outside of the interview, they might have thought of other contexts which were relevant to their actions but of which they did not speak in the interview. Also, knowing of my own previous connection with the ESRC Postgraduate Training Division may have influenced them in what they chose or chose not to say. Thus the

salience of contexts to these supervisors may vary depending on specific situations and circumstances. What was clear was that the supervisors were using features of the context to full advantage.

One shared aspect of the contexts in which supervisors worked was departmental regulations about the time allowed to students to submit their completed projects. The issue of time was talked about in relation to the management of projects and timescale for completing certain tasks, en route to completion of the project and to issues of striking a balance between open ended approaches and directive approaches in their supervision activities (Burgess et al, 1994). However, these issues are as much to do with supervisors helping students to participate and contribute, proactively and confidently, in the processes of defining, planning, conducting and writing up their research as they are to do with externally imposed constraints of time and the need to manage that time. This reflected the supervisors' overall concern that their students should become competent and independent researchers with ownership over their projects (Acker et al, 1994b). The issue of open ended approaches versus directive approaches is raised again and developed further in Section 3 where I examine the ways supervisors talk about their anticipated outcomes, and also in Section 4 where I examine the ways they talk about the courses of action they took relevant to these outcomes. With caution, my third and fourth generalisations are as follows:

Generalisation 3: The case study supervisors' expert practice actively used as learning resources features of the context in which their supervisions take place, including those aspects of institutionalised policies and practices for supervision,

research, research training and monitoring and review procedures, and the nature of higher degree work;

Generalisation 4: External requirements and departmental arrangements provided a largely taken for granted and accepted framework within which the task of supervision was defined, rather than being of major significance within the processes of supervision.

SECTION 3 Supervisors' conceptions of the relevant characteristics of anticipated outcomes

In Sections 1 and 2, I reported how the supervisors explained their courses of action with reference to 'because' motives, that is, their students' personal characteristics, cognitive and affective, and the contexts, which influenced their observed activities. This section is about how supervisors construed the *anticipated outcomes* of the activities in which they engaged. Six 'second order' concepts were identified related to anticipated outcomes: first, 'cognitive' outcomes, reflecting supervisors' concerns that their students' develop relevant knowledge, skills and understandings (Henkel and Kogan, 1993); second, 'affective' outcomes, reflecting supervisors' concerns that their courses of action should promote or maintain student motivation and counteract disaffection (Delamont et al, 1997a); third, 'progress' outcomes, reflecting supervisors' concerns to help their students progress through the work, especially with reference to time and project management (Wright and Lodwick, 1989); fourth, student 'autonomy' outcomes reflecting supervisors' concerns that their students should develop independence of thought and action and have ownership over their projects (Hill et al, 1994); fifth, 'product' outcomes of courses of action directed

towards the students' production and completion of a product (Delamont et al, 1997a); and, related to product outcomes, 'assessment' and feedback outcomes where supervisors make opportunities to identify, reflect and comment upon their students' understandings and the defensibility and clarity of their ideas (Hockey, 1997); and sixth, 'relationship' outcomes where the end in view is the development of the types of relationships believed to be most conducive to achieving all the other kinds of outcomes envisaged (Pole et al, 1997).

Cognitive outcomes

All the case study supervisors talked about cognitive outcomes in terms of bringing about necessary or desirable change or development in their students' cognitive characteristics. They talked mainly about learning outcomes which supervisors 'wanted', 'hoped for' or were 'trying' to bring about through taking the actions they took: 'we *wanted* her to think'; 'I *hope* she thinks more clearly' or 'we were just *trying* to solve the problem'. As Schutz (1962) theorised (Chapter 2), the supervisors explained their 'in-order to' motives cautiously in terms of outcomes they hoped for rather than outcomes they fully expected. It would seem that there are so many interacting factors that, even if similar actions in the past have had the expected result, there is always the chance on the occasion at hand, that things will not work out exactly or even approximately, as planned.

The case study supervisors also explained their courses of action in terms of wanting their students to 'develop'; 'know'; 'consider', 'engage with'; 'see', 'understand', 'find out', 'recognise', 'be able to', 'achieve' or 'appreciate' something. They talked about cognitive outcomes in two ways; first, in general terms which, it could be

argued, were relevant to most social science disciplines, stages of research, or students, and they were typically long term outcomes, for example: ‘synthesis and argument construction’; ‘alternative interpretations and ideas’: ‘intellectual values and standards’; ‘theoretical awareness’ and ‘longer term strategic thinking’. Second, more frequently in relation to specific supervisory activities, they talked about shorter term learning outcomes (Hockey, 1996a). In CSC, for example, the supervisor urged his second year student to approach the technical officer to book a tape recorder, transmitter and radio mike and to talk to him about the equipment and how to use it. He explained that the student needed to know this for her impending fieldwork so that she could explain it to the teachers whose classrooms she would be studying:

when you’re talking to a teacher..they want to know the pragmatics of it..what does it mean to have a radio mike clipped on..because..they don’t know what its like..so she needs to know in order to talk sensibly with them [teachers] (CSC: 1).

In CSB, for example, the second year student was worried about the implications of losing data in a statistical procedure in which she had to decide where to make a cut off point in her data. In advising the student to be explicit about the issue of where she would draw the line, the supervisor described herself as making a “learning point”:

“we were just trying to solve that specific problem for her..we also used it as a kind of learning point.. as long as you specify how you did it..somebody else will be able to reproduce it” (CSB: 10). One generalisation that can be made across the six case studies related to cognitive outcomes, is as follows:

Generalisation 5: Supervisors anticipate in their expert practices that they can reasonably hope to change their students’ cognitive characteristics in both the long term and the short term.

Affective outcomes

Concerned to sustain student interest and enthusiasm for their work (Hockey, 1994), supervisors explained the anticipated outcomes of their actions in 'affective' terms. Some examples of the different kinds of affective outcomes anticipated by supervisors as a result of their courses of action included: "people get reassured" (CSB: 2); "students find it less threatening" (CSB: 6); "reducing the levels of pressure and anxiety" (CSC: 13); "it gives confidence" (CSC: 5); "it maintains student enthusiasm and motivation" (CSC:12); "the student feels comfortable" (CSF: 4). In several cases, the supervisors saw the outcomes of certain kinds of student activities, which the supervisors had initiated, as motivating for students, for example:

I'd involved her in reviewing a paper or two for the journal I edit..on this particular issue of building confidence..when all the reviews come in..we circulate them amongst the reviewers..so..she was able to look and to see that her review was as helpful and as perceptive as the reviews of much more experienced peers..because it was an area that she knew..she'd studied it very thoroughly (CSC: 5).

In a second case, related to the student's involvement in an externally funded project, the benefit to the student of having shorter term goals for his writing than the PhD itself was explained in affective terms: "it becomes demoralising if people are drafting and redrafting and redrafting and they don't see a product out of it" (CSF: 9). One generalisation related to affective outcomes that can be made across the six case studies is that:

Generalisation 6: Supervisors anticipate that, through their expert practices, they can reasonably hope to influence their students' affective characteristics.

Progress outcomes

All but one of the supervisors (the CSE supervisor whose student had virtually finished his writing up) talked about the timescale for the PhD, referring frequently to their own demands, and, occasionally, the demands of others, that the thesis be completed on time and to factors likely to influence how much time it would take (Delamont et al, 1997a; Wright and Cochrane, 2000). Thus most outcomes in this category referred to supervisory activities intended to facilitate, encourage, help or direct the student towards making progress or to move on in their work and to make efficient use of time. For example, the CSB supervisor talked about her anticipated outcome for her action in stopping the flow of discussion between the student and her two supervisors every now and again to sum up what had been said in terms of key points, to take stock of where they had reached and to take any necessary decisions:

it's saying..can we just take stock..where did we get to in that one..and they'll say..ah..well...yes we do need to decide..so it's partly a way of making sure that things get done (CSB:7).

This supervisor illustrated the need for some structure and discipline in their supervisory meetings (Becher et al, 1994) to ensure that their talk remained focussed and that decisions were made in the interest of maintaining progress.

Referring to the 'rules' for the clarity of communications between him and his student, drawn up with his students right at the start of their studies (Delamont et al. 1997a), the CSF supervisor was concerned that he do everything he could to avoid time wasting. One example he gave of time being wasted was where a student did not understand or misunderstood what the supervisor was saying, and vice versa, making

it necessary to set up the conditions whereby he could assess his students' understanding of key points:

[I say] now tell me what I've just said to you from your point of view...it's very important to get that feedback..not least because you can then pick up quite quickly if they're framing it in a sensible way ..internalising is good and you want people to come up with different frames..but you don't want people to misunderstand or miss something in their internalisation..so much of it is about preventing people wasting time (CSF: 7).

Here the supervisor took account of his student's cognitive characteristics in his anticipated outcomes related to progress.

The CSC supervisor raised another factor which could impede progress: "its very easy just to drift from week to week..being interested in what you're doing..then the problem is you're running out of time" (CSC: 8). Becoming too immersed and too interested in the specific detail of what one is doing (Becher et al, 1994; Delamont et al, 1997a) could lead, therefore, to a failure to recognise that time was passing by. This supervisor also talked about progress outcomes in terms of the need for supervisor's direct intervention to help students maintain progress:

you have to encourage some students to get in there..do it now..work some things out afterwards..the time has come when you have to dip you're toe in the water and go for it (CSC: 4),

especially because

the expertise you have in anticipating what needs to be done and timescale is..rather critical..to the student..because they've never managed a project..it is very important as a supervisor that you do that (CSC: 8).

Thus the supervisor was taking account of students' cognitive characteristics as well as their affective characteristics in these examples.

Also in this category were outcomes associated with particular shorter term objectives related to progress (Hockey, 1996a). These included the outcomes of supervisory activities to ensure that students successfully accomplished one task necessary to their success on a subsequent task, for example: to ensure the students' successful negotiation of access to statistical data, to a location or to respondents in order to do their fieldwork (CSA, CSB, CSC, CSE and CSF). To exemplify from one case where the supervisor asked to see the student's draft letter of introduction which she was going to send out to the schools to which she wanted to make an initial visit:

I was concerned that she was just making it [an introductory letter] too complicated..and in fact it was going to work against her ever being in a position of being able to visit the schools..they [teachers] are not usually interested..it's not so important for them..to have that all spelt out and thought through..particularly on paper..you have to be quite clear with people about what would happen in full if they were to participate and what the expectations would be..but its much easier to do that when people know you and you know them..she was trying to do it all in one introductory letter (CSC: 5).

Although the outcome of the supervisors' request that the student's letter should be redrafted, was not explicitly stated, he left us in no doubt of the consequences should the student be unsuccessful in gaining access to the schools: "it was going to work against her ever being in a position of being able to visit the schools" (CSC: 5).

Generalisation 7: Supervisors anticipate that through their expert practice they can promote satisfactory progress of the student through their work, avoiding wastage of time.

Autonomy outcomes

All but the CSE supervisor (whose student was nearing submission of his thesis) talked about the outcomes of their activities as directed towards giving their students control, or a measure of control over what they did, how they did it, or the direction in which they wanted to go (Burgess et al, 1994; Hockey, 1994a). They wanted their students to develop independence, creativity and to take control of their own projects. Some talked about their students' affective characteristics in terms of their being proactive, knowing clearly what they wanted to do, or "stick[ing] to their guns" (CSE:2) (Delamont and Eggleston, 1983), and, in such cases, supervisors tended to say less in terms of 'autonomy' outcomes. On occasion, students who were very enthusiastic and proactive were seen to require some reining in by their supervisors (Hockey, 1996a). At times supervisors compared their case study students with other students. In some cases they found it necessary to adopt more proactive and directive approaches in response to students who wanted more autonomy than was justified by the quality of their arguments. In others, it was a question of spelling out clearly to students how exactly they should be taking more responsibility for certain aspects of their work or its management.

The CSC supervisor, with reference to students setting the agendas for supervisory meetings, talked in terms of his expectations that students would prepare an agenda in advance, especially where no written work was submitted (Hill et al, 1994). Some students found it easy and others found it difficult. In encouraging those who found it difficult, his anticipated outcome was

to help those students become more autonomous..capable of setting the agenda..playing a more active role particularly as the year goes on..it's about their

managing their supervisor..helping their supervisor..to manage their project (CSC: 9-10).

The CSF supervisor talked about the ways he used his understandings of what the student was doing or thinking to provide guidance in such a way as to foster 'ownership':

half of these supervisions are very much about my trying to guide M..having tuned in to where he's going..I'll try to find a framework and draw him enough into the conversation so that he owns that framework as much as I do (CSF: 7).

In more specific terms, these supervisors explained how they tried to make it easier for students to contribute to discussions, for example, by coming up with 'half thought out ideas' or 'ideas off the top of the head'. The CSC supervisor wanted to make it "clear [to the student] that you are thinking on your feet..then its easier for them to say..well..hang on..but what about this and what about that..you actually then get a more genuine discussion about the issue" (CSC: 10). In CSF, the anticipated outcome was also to make it easier for the student to contribute or challenge what the supervisor was saying in terms of whether or not the student thought the supervisor's contribution was a useful one:

they don't feel it's rude to come back and say..well..that idea of yours..I didn't really like it..[laughs]...but it's also to allow it to be open ended (CSF: 10).

Generalisation 8: Supervisors anticipate that through their expert practice, and taking account of the cognitive and affective characteristics of their students, they can help them to develop independent thinking and ownership of their projects.

Product outcomes

In addition to talking about ‘cognitive’, ‘affective’, ‘autonomy’ and ‘progress’ outcomes, supervisors explained their courses of action in terms of getting the student to produce something, for which my ‘second order’ concept is ‘product’ outcome. These ‘products’ tended to vary according to the stage of the student’s work, for example, the CSA supervisor, whose students were in the first few months of their studies, talked about his request for reading lists and a timetable for the reading (Welsh, 1979; Hockey, 1996a):

I asked him to do a plan for doing a set of reading..so to do that..he has to do a search of the bibliography..look at some of the main texts..and get clues as to the important things to look at..then you make a list of reading to be done..read it then check it off (CSA: 3).

The supervisors in CSC and CSB talked about chapter outlines, headings and sub-headings which they had asked their second year students to prepare at the earlier stages of their studies. In CSC, the supervisor asked the student to: “draw up a structure for the thesis and a plan for her work” (CSC: 7). Two reasons for his request was to help the student anticipate what the thesis would look like and to make the task of writing easier by having such a framework (Hockey, 1996a):

the chapter by chapter structure..so that even if it changed..this was about starting to develop S’s appreciation of what she was working towards..the finished product...I’m emphasising now that everything she writes potentially is going to fit into one of those slots..and she’s very conscious that she writes slowly..she doesn’t find expressing herself in written words very easy..so it’s going to be rather important that she’s got that structure and she’s thinking about..well..this bit can go in there and..oh..I could write a bit there in that chapter..so that was important (CSC: 8).

The CSD supervisor also talked about a chapter outline, emphasising how it might change but also how it served an ‘affective’ purpose:

of course the outline you start with at the end of year one..and the table of contents at the end may look very different..that's about version four..it keeps being refined..but again psychologically it's very good because they can tick off..and it's something to hold on to...it's also part of the writing process..especially when it's as detailed and refined as she has it (CSD: 2).

The CSF supervisor showed how such outlines go through a process of change as students' thinking became more sophisticated and how this process interacted with the quality of the discussion:

it's important for the students to have a framework and a structure which they feel comfortable with but then having done some writing and some research pretty soon they want to break out a bit and so you restructure in that context..as their own interests change and secondly...you've got to give people some time working on it before you can get to a realistic conversation which they can contribute to realistically (CSF: 2).

The CSC, CSD and CSF supervisors are also taking account of how students' interests and the level of their thinking changes over time. In the case of the CSD supervisor's third year student, an overseas student, the supervisor was requesting one draft chapter a month. The supervisor's actions in the three supervisions observed were related to the assessment and feedback of the student's draft chapters. Although the supervisor did not talk about her reasons for asking for these drafts, the following quotation shows what she did on one occasion. She explains some of the decisions she made in her feedback to the student:

part of it is just the complexity ..if there were a few words out of place I could attempt to see what she meant..part of it is she is not English speaking..a lot of this is about the English..there were some places where I thought it wasn't the English but the thinking behind it that wasn't clear..then I gave it back to her..also it's like teaching a child to cook..if you do all the cooking they'll never learn..and also..it's invasive..it's bad enough when she gets her chapters back looking like chicken pox..red all over..ninety percent of that is the English..so I think it's the level of complexity of the problem which makes the difference in what I do..if it's just a slightly awkward expression then I can fiddle with it..if I

find I can't really follow what she's doing then it goes back to her and if I feel it's going to be really difficult then we discuss it (CSD: 3).

Other 'products' which supervisors talked about included notes taken by the student (as opposed to 'polished drafts') to record thoughts, ideas, or issues as an aide memoire (CSB); a request to the student for a short paper clarifying a concept being used in a draft chapter (CSD), and departmental requirements for reports and timetables for six monthly reviews of the student's work or upgrading reviews (CSC, CSF) and for records of supervisory meetings (CSA, CSB). In two individual cases, at the supervisors' initiative, one student wrote a short report for an external funder (CSF) and another wrote reviews for a number of articles submitted to an academic journal (CSC). In a third case, a student submitted an article for publication in a journal on her own initiative (CSB).

Supervisors' explanations in terms of the outcomes of courses of action were directed towards the students' production and completion of a 'product' for which their anticipated outcomes could be one or another of all the different categories of outcomes exemplified in this Section, cognitive, affective, progress, or student autonomy. Product outcomes of *assessment* and feedback were never made explicit in these terms although it was clear from my observations, especially in CSD, that supervisors do make opportunities to identify, and reflect and comment upon their students' understandings and the defensibility and clarity of their ideas through their written work (Hockey, 1996a).

Generalisation 9: Supervisors, in their expert practices, take account of the cognitive and affective characteristics of their students, change in these characteristics over time, and departmental requirements in their demands for written products.

Relationship outcomes

All the case study supervisors at some point talked about the types of relationships with their students (Hockey, 1994b) which had implications for their courses of action. One context in which relationship outcomes were raised by supervisors was in relation to 'disagreements' or 'contestation' (Hockey, 1996a). In CSE, with a third year student about to submit his thesis, these were construed in terms of academic debate: "disagreement with him about how to interpret his case study would be something where we might enjoy an accepted disagreement..I used it as a basis for debate" (CSE: 3). Another supervisor talked about rules for contestation, made clear to his students very early on:

a supervisory relationship is..a hierarchical one..and that should be frankly acknowledged..there [are] rules for contestation..I encourage students to contest although in the end I know more than they do (CSF: 9).

Thus, where 'push came to shove', students were expected to respect the greater expertise and experience of their supervisors in resolving disagreements.

In the context of decision-making, the CSA supervisor explained his actions as: "leading from behind" (CSA: 9) where he could react to what his students decided to do rather than the other way round (Becher et al, 1994). That way the student was responsible for making the decisions while the supervisor was responsible for pointing out the implications of these decisions for what the student wanted to

achieve. He saw his position, at least with his first year students, as engendering the type of relationship where “the students are much happier..it is much easier...more enjoyable..when they are in charge” (CSA: 3). A fourth supervisor (CSE) talked in a similar way about promoting his role as a neutral one. His preference was that students would be “pursuing their line of research and using me as a sounding board rather than my being a director..telling them what to do” (CSE: 3) (Pole et al, 1997).

In some contrast to the way the supervisors in CSA, CSE, and CSF talked about leading from in front or behind, the supervisor in CSD talked about equality and collegiality in the relationship as a desirable outcome, if not the anticipated one (Salmon, 1992). She described her relationship with her third year student as being “..like equals..because it’s true..by this stage they are becoming colleagues as well as students..some of them anyway” (CSD, p3).

In CSC, the supervisor contextualised: “signaling to the student that sometimes you’re thinking things through with them..working together” (CSC: 10) and “doing some kind of collective..collaborative thinking” (CSC: 13). In CSB, where the student was described as particularly bright, proactive and well motivated, anticipated relationship outcomes were not raised in relation to the activities talked about in the interview.

Generalisation 10: Supervisors’ seek, as desired outcomes, working relationships with their students which emphasise clear bases for resolving disagreements and for providing guidance in ways that preserve student independence.

SECTION 4 Supervisor strategies and tactics

In the previous three sections, I reported on the ways the case study supervisors talked about and explained their courses of action as having been influenced by students' 'cognitive' and 'affective' characteristics, the contexts, and their anticipated outcomes. In this section, I examine the *courses of action* taken by supervisors in order to achieve their anticipated outcomes, taking account of the contexts and of their student characteristics.

In the analysis of how supervisors explained their courses of action, I found it was possible to make four generalisations across the case studies. First, all the supervisors talked about broad sets of knowledge, views, values or ideas rooted in previous experience which they held about supervision or research, and which influenced what they did (Schutz's 'stock of knowledge at hand'). These came into play with all their PhD students in terms of what they wanted them to achieve. As such, they may be considered as principled, 'forward looking', and not dependent on particular student needs or contexts. I have called these broad kinds of courses of action arising from such sources 'strategies' (Hockey, 1996a).

Second, within these broad, principled strategic approaches, supervisors adopted shorter term 'tactics' (Hockey, 1996a) which I defined as courses of action related to the particular needs or problems of individual students in specific contexts, taking into account, for example, their personal characteristics, the nature of the subject matter, the stage of their research, and external demands. Third, there were pervasive concerns amongst supervisors to achieve a balance in their strategies and tactics

between a directive approach and the more open ended approaches they viewed as best promoting student independence and ownership of the thesis (Acker et al, 1994a).

Fourth, in taking these courses of action, there were considerations arising from the interactive nature of supervisors' 'because' and 'in order to' motives and the courses of actions they took were normally directed towards the achievement of several different kinds of anticipated outcomes at the same time. This section is organised around these four generalisations. For each generalisation, several examples are provided of the supervisors' strategies or tactics showing how such generalisations are relevant and interactive. The sub-sections are headed: *Strategies*, *Tactics*, *Student autonomy versus supervisory direction*, and *Multiple concerns in supervisors' choice of strategies and tactics*.

Strategies

The supervisor observed with three first year students talked about helping students to establish a focussed 'direction' for their research at the early stages of their studies by encouraging wide reading:

at the start when they're not quite sure what direction they want to take..they've got a broad topic and they need to narrow it down..so..they spend the first semester doing a lot of reading..that's what I want them to do..and exploring what topics they might be interested in..and the methodology they want to adopt..so..at first I let them follow their nose really (CSA: 3).

In describing his 'philosophy', or principles, the supervisor made an analogy between the strategy he used on walks with his children and his overall approach to supervision:

I remember taking my children for walks..walks were hell if I was at the front saying ..this is the way we go..well..[they would say] why are we doing this?..so I solved that problem by just handing them a map..as soon as they were old enough..and saying..its up to you..they were much happier..it was much easier..we would have a much more enjoyable day when they were in charge..so that's what I do with my students (CSA: 3).

The same supervisor went on to demonstrate how his 'philosophy' worked for one student (described as a good student, now in his third year) who, at an earlier stage, had approached the supervisor for help in using a quite complex geographical model for his thesis developed by the supervisor himself a decade before. This was not a model which the supervisor was pushing the student to use but: "at that stage he was ready..he could appreciate the methodology..saw the need for it..he was very skilled at computer programming..and took my programmes..deconstructed them..took what he wanted and used them" (CSA: 7). In using his third year student as an example, the CSA supervisor showed how previous experience related to the building up of a 'stock of knowledge at hand' (Delamont et al, 2000).

A second example of strategic thinking is related to the way the CSF supervisor construed an apprenticeship as a training in research and his role as a supervisor in 'accelerating efficiency and learning'. These two types of strategic thinking had a bearing on a tactical decision to involve his student in an external project:

one of the elements of an apprenticeship is that people should begin to write out things early for other people to read..not just their supervisor..in his case..I'm involved in a project in West Africa involving two or three projects..one of them had a requirement for someone to write a fairly empirical piece using an atheoretical approach about just what the problems are and how they work..so he [the student] produced that..and there was an output..it was never designed to be a chapter of his thesis..the research in it can be used in his thesis but it would have to be worked in different ways..so that's one philosophy I've evolved with him..the other thing..one of the challenges for a supervisor with drafting PhDs..is to accelerate efficiency and learning so you've got to bear in mind that it becomes demoralising if people are drafting and redrafting and redrafting and they don't

see a product out of it..even if they're getting to grips with the thesis..and no doubt it's good for the thesis..you can spend quite a bit of time wondering if you should rewrite something from scratch or amend what's there..and I try to find strategies..because I personally hate being inefficient..I hate writing something and then finding that it's got to be reworked..I don't mind going through lots of revisions..but restructuring profoundly..I'm happy to do that if I can do something with what I've written..so I try to ensure that students have got elements like that..I've done that with all of my students...it also means that they have to start tightening things up pretty much for an external audience but in a much less theoretically demanding context like in these empirical studies ..so that was one philosophy for getting him drafting (CSF: 4).

The CSF supervisor in the example above was drawing from his own past experience and preferences as a researcher (Delamont et al, 2000) as well as on his experience as a supervisor concerned to take account of the 'affective' state of his student, in this case, an avoidance of a demotivating situation.

Tactics

Tactics have been defined as the courses of action taken by supervisors in direct response in a specific context to a specific student need or problem (Hockey, 1996a). In one case where students were required to do an MPhil in research methods prior to embarking on a PhD, the timescale over which students could read and decide on the topic for their dissertation (a form of pilot study for their PhD research) was expected to give the students a head start to their completion of a PhD within three years:

before the introduction of this course..students tended to come in and quickly adopt a kind of preferred model..of the design of the study and the method..often from something they'd read...this course has made them much more thoughtful..more aware of a range of approaches to educational research (CSC: 6).

However, being more thoughtful and having a wider range of options to choose from had the unintended effect of the student wanting to reconceptualise her project in her

second year when she should have been doing fieldwork. Having talked over alternatives with her supervisor, the student was asked to do some more reading in areas relevant to her new thinking:

S. [the student] decided that this was more interesting than her original conceptualisation..and that meant that over the summer..I got her to go away and do a little bit of reading..I didn't want her to do an exhaustive review of the literature because I wasn't at that stage sure whether or not this idea would take..but I wanted her to do a bit of reading..so she did some reading on teachers' implicit theories..teachers' thinking...I wanted her to..not clearly at as great length as in the [MPhil] thesis but to write something coherent about her new conceptualisation of it..so we returned to the exercise that students do in the first term of the educational research course..conceptualising the research questions..developing the argument for your strategy..and talking about the kinds of assumptions that are involved in it..so the good thing is that..having done it once..in the first year..she kind of knew what the rules of the game were..so she was able rather more quickly to do that in relation to her developed proposal (CSC: 7).

Part of his tactic of asking the student to read around her new ideas (but not too much), and to write up her reconceptualisation, was linked to her formal research training on which he was relying to off-set the time she would need for the extra work. In a second example of 'tactics', the CSF supervisor was concerned about the way his third year student was approaching a small case study. The student had completed his thesis six months in advance of his submission date and wanted to use the time gainfully in adding a case study to his theoretical study to show how the theories he had developed work in practice. The supervisor was using questions to alert the student to possible problems with his approach.

V.'s thesis is actually a very sophisticated theoretical analysis..he has taken a theoretical approach which is one that I broadly share..but I felt when he got to the case study..there was a risk that he would simply interpret what was going on in that particular struggle solely in terms of his own theoretical apparatus..which he brings to bear from the outside..so as to speak..my feeling was that he was being insufficiently sensitive..to the diverse ways in which the actors involved would have seen events..and the way in which their ways of interpreting what was going on were themselves shifting during the course of time..that seemed to

me something that if the case study was to be taken seriously he would need to get more deeply into..and I was..rather worried that when he'd been over to Turkey..he had collected a lot of textual materials but he hadn't actually interviewed..people on either side of the dispute..I thought there was a risk..if he didn't have that interview material..that..secondary material which he'd got..would not give him a purchase on the more hermeneutic dimensions..so it seemed to me that there was just a risk that..he would simply be able to infer the theoretical approach he already had about what was going on..in the case study..not actually looking closely at how that struggle was experienced by the people that had gone through the experience..I thought that was important for him to engage with..and so I was just pushing it by means of questions..trying to encourage him to take these aspects seriously..tell him what he should be doing..[laughs] (CSE: 1).

This example demonstrates how the supervisor was using his own expert knowledge to bridge the gaps in his student's expertise and experience of case study approaches. Consideration of the possible motivational effects of his challenge to what the student had done were implicit in the supervisor's choice of tactic, questions rather than direction.

In CSA, the supervisor asked his first year student to draft a chapter outline in preparation for making a start on his literature review and a 'conceptual' chapter. He explained his tactics for that particular student in the following terms:

he had worked with migration data on projects but he's not studied that as a field in his geography degree..he won't have taken my courses because he was on the physical geography side..so there's this background of literature that tries to explain the phenomenon of migration..why people move from one place to another..what kinds of people move..what consequences that has for the places they move from and the places they move to..all these issues he really doesn't have a background in..even although he's done a lot of work on information data..he's mainly written on the methodology and the information science side of it..he hasn't written on the substantive side..that's generally my role or [my colleague's] role..he's quite skilled at writing now..although he needs a bit of a push..he's one of these technically gifted students or research assistants..writing is not their forte..they've elected into this high tech field away from the synthesis and argument construction which you have to learn if you're doing substantive research..that's the thesis area that he has to catch up on (CSA: 2).

The context and the student's 'cognitive' and 'affective' characteristics were all considered in addressing how the gap between what the student could do now and what he needed to be able to do in future, could be closed.

Strategies and tactics related to autonomy and direction

Much attention in the literature has been paid to the tensions between the knowledge creation and research training purposes of the PhD (Delamont et al, 2000), and the issue at this point is how the case study supervisors' courses of actions and how they explained their actions might provide some understandings of how such tensions are worked out in practice. The nature of the balance struck by these supervisors was perceived to depend on a number of different factors. Among these factors were the personal characteristics of their students which could facilitate or constrain supervisors' achievement in this respect. Some examples were provided earlier from the supervisors' past experience of students who had been resistant to their help and advice in whatever form it had been given (Section 1). The case study students were, in contrast, willing and able to take help and advice. For example:

I find it very easy to work with her..she's relaxed..in terms of our talking..she has her own anxieties about some aspects of her work..but I find it very easy to talk to her..because she's thoughtful..because she anticipates..that's very helpful..it makes the job of supervision easier (CSC:4).

Even so, there were times when the supervisors found it difficult to maintain the balance they ideally sought (Hockey, 1994b; 1996a), for example,

it's a difficult balance because on the one hand..one of the roles of a supervisor is to continue to push and to get people to do hard things early so that they can discover what they want to do..but on the other hand..you don't want to push too much..people have different ways of working so it's a difficult balance and you're constantly trying to tune in (CSF: 3).

In the same case study, in the context of the supervisor explaining why he had directed his student to stop one task and move on to another, the supervisor talked about the PhD as inherently difficult, a 'struggle' for PhD students where "there's no risk of [the supervisor] making it too easy for them" (CSF: 10). While he preferred in general to leave a task as open-ended as possible, there were times when "you need to bring things to a closure where your experience tells you that its going to go that way anyway" (CSF: 10). He defended a directive approach in certain situations:

I think one of the main things about a supervisor is to make sure if they [students] are wasting time they know why it's good for them..[laughs]..and if you're not clear why it's good for them then..you stop them doing it..life being short (CSF: 10).

Some supervisors talked about specific occasions when their students needed a more direct approach, a 'push' (Burgess et al, 1994; Hill et al, 1994). For example, in the context of managing the thesis and time, and achieving an appropriate balance between an open and directive approach, the supervisor in CSC talked about his student's need to achieve a balance between thinking and action. He very much appreciated that his student was thoughtful and wanted to have everything well thought out in advance before launching herself into her fieldwork,

but there comes a point when you have to encourage some students to get in there..do it now..and work some things out afterwards..[you say] you've done a good job..basically you've got a good set of ideas and a good structure..as good as it's likely to get..go and do it now...yes.. you'll learn some new things..yes.. we'll be able to come up with a better structure afterwards..but the time has come when you have to dip your toe in the water and go for it (CSC: 4).

In another case, the student needed a "push" when it came to writing (CSA:2).

In offering ideas, help and advice in this learning process, supervisors were concerned that their students establish ownership over conclusions drawn or decisions taken (Hill et al, 1994). One strategy they used to present an idea of their own was to preface their contribution by a comment like “off the top of my head” or “I just want to put this on the table”. This supervisor made a distinction between those ideas of his own which had been well thought out and which he knew would be useful to the student and those which were offered spontaneously and to which he might not have given a great deal of thought:

I don't fake it..if this is something being seriously considered..and this is an effective viewpoint..then I would say it was that..but then..explicitly say..you have to consider this..it's your thesis..but on the other hand I tend when I am in doubt..even if I have reflected on this problem..and I'm still not quite sure..it's much better to give the ideas but then down play them so if they don't feel it's rude to come back and say..well..that idea of yours..I didn't really like it..[laughs]..it's to allow it to be open ended (CSF: 10).

In the next example, the CSC supervisor said similar things:

what I tend to do is to actually think out loud..so you would have an idea in your head..part of what one is able to do for the student is to make [that idea] public..it goes back to this business of what do they learn about managing a project..it's not very helpful if you're doing it for them..inevitably however..you have to initiate certain processes and issues..one way you can help them to learn about it is..by thinking out loud..I have the impression that I often say things to students like..oh well..off the top of my head..or..what I'm thinking at the moment..is (CSC: 10).

In addition, he made an observation on the tendency of many students to assume that supervisors were the ultimate authority. They might be in many matters, as suggested by the CSF supervisor above, but this factor could constrain participation of the student, and the CSC supervisor showed how he attempted to get round it:

the other thing is that there's a danger that the student will think that everything you say has been very carefully thought through..and is a definitive statement..so

its quite important to make it clear..that sometimes you're kind of thinking things through with them.. but by making the thought processes public..it also makes it easier because..if you make it clear that you are thinking..in some respects..on your feet..then its easier for them to say..well..hang on..but what about this and what about that..you actually then get a more genuine discussion about the issue (CSC: 10).

“Making the thought processes public” was also regarded by this supervisor as a learning situation where the student could pick up the criteria applied by the supervisor about important ways of thinking about the issues at hand:

I suppose my model of learning is that you're trying to create a sort of shared space..[where] we're doing some kind of a collective..collaborative thinking about the project.. which I hope has some benefits..in that the kinds of criteria..the kinds of ways of thinking I'm using are coming out..at other times I'm conscious that it is a different model..it is me..I think this and I think that..and we're not opening up these issues so much for discussion..although I do try to make sure that the student has the opportunity.. to pick something up and make an issue of it..because that's probably a good guide to what's going to be useful for them to think about and to learn about (CSC: 10).

But there were clearly times when the supervisor had to raise or push those things he knew were important, especially when there was an issue of time involved:

sometimes I get the balance wrong but in general I get it right...a supervisor who always asks you what you think..that leaves every choice to you..is not accelerating the process adequately..life is finite and so..you need to bring things to a closure where your experience tells you that it's going to go this way (CSF: 10).

There were several aspects of the supervisory process where the case study supervisors took matters into their own hands and one of these was in moving the students on through their research (Delamont et al, 1997). Many of the strategies and tactics talked about by the case study supervisors were related to maintaining a steady rate of progress throughout the students' studies. This involved at least two kinds of considerations, first, the relative inexperience of students and the need for the

supervisor to look ahead on their behalf, and the need to help students to maintain the level of interest and enthusiasm they needed to make progress on their own behalf (Welsh, 1979; Hockey, 1994a): “the goal obviously is to get a thesis done in three years I certainly want to keep up their interest and their enthusiasm..because otherwise they’ll never finish” (CSD: 5).

Two supervisors talked about the difficulties for them personally in maintaining an appropriate balance between openness and being directive (Hockey, 1996a). In one case, the supervisor wanted a more passive, reactive role for his supervision:

I know what my own personal weaknesses are..the things I can and can’t do easily.. and that makes me suitable to supervise him [the case study student] but probably less suitable to supervise other sorts of students..I mean students who are not clear about what they want to do..[I: what makes it so difficult with someone not clear about what they want to do?].because it casts me much more in the role of a teacher.. and somebody who is directing..and its not a role I’m happy in..I feel the appropriate thing really is for them to be pursuing their own line of research and using me as a sounding board rather than my being a director telling them what to do (CSE: 3).

In the second case, talking at students rather than with them, could upset the balance:

I think..its very easy to start talking at students...not just when you’re supervising them but..you know..when you’re doing any kind of teaching..and we all have that vice..and so..I suppose that I have rather deliberately developed some sorts of habits or strategies. .whereby..I try to make sure I can’t do all the talking (CSC: 9).

In explaining their courses of action related to the balance to be struck between direct and open approaches, the case study supervisors talked mainly in strategic terms indicating the relevance of these activities to all their PhD students. ‘Because’ motives included considerations of students’ personal dispositions, affective and cognitive, and their preferred ways of working. ‘In order to’ motives for ‘open’

approaches, for example, 'thinking aloud' included provision of opportunities the students needed to talk, to think for themselves, to defend their own ideas and to learn the criteria their supervisors used to evaluate ideas, theirs or their students. 'Because' motives relating to directive approaches included students' 'cognitive' and 'affective' characteristics, for example, arising from student inexperience or reluctance to engage with a task. 'In order to' motives relating to directive approaches included prevention of time wasting and acceleration of progress.

Multiple concerns in supervisors' choice of strategies and tactics

The examples provided in the previous sub-sections and below demonstrate how the supervisors combined, and took account of, different interacting 'because' and 'in order to' motives in the strategies and tactics they adopted. In one example of a *tactic*, the supervisor involved his student in reviewing papers for an academic journal he edited, mainly in response to his student's need for confidence:

I'd involved her in the reviewing..a paper or two for the journal I edit..because I see that..well..it's a number of things..the fact that..on this particular issue of building confidence..what we do is..when all the reviews come in..we circulate them amongst all the reviewers..so she was able to look and to see that her review was as helpful and as perceptive as the reviews of much more experienced peers..because it was an area that she knew..she'd studied very well and so on..so it did that job as well as getting her inside what is involved in academic writing..what kind of academic criteria are applied so that when she comes to do it..with her that's part of the agenda..building up the professional confidence (CSC: 5).

Not only was it anticipated that the student's need for confidence building would be met by his course of action but this was combined with other benefits. It was anticipated that the same tactic would have the additional benefit of helping the student become more familiar with the academic criteria used by 'more experienced

peers' and, as the student found writing difficult, writing reviews on articles which were particularly relevant to her area of study was considered one way of helping the student to practise her writing.

In the next example, the same supervisor was thinking back to a situation where the student had been spending too much time on her report for her upgrading session. He explained, first, in terms of the various considerations of which account had to be taken, and second, in terms of a number of different anticipated outcomes of his direct intervention to move the student on to the next important stage of her work, her fieldwork:

we were on the tail end of developing that [a paper for the Review Committee]..and we'd looked at a number of drafts together..and there reached a point..this business of saying.. right.. you've done enough...and also..I'm going to leave it to your judgement.. because..again..that could have gone on longer but not with any great profit..I think..and certainly she had reached a point where she needed just to say..that's it..so that brought that to a close..and I suppose I was making a judgement there that we'd moved far enough..that if we continued in this mode..we weren't going to move so much that it was going to be a productive use of time..and that in any case..there'd be movement [later] as a result of doing other things..so we were in a good state..both to go for the registration review but also to move on to the other pressing question which was the need within this year to do quite a substantial amount of fieldwork (CSC: 7-8).

The 'because' motives were that there could be a more productive use of the student's time and that the student had done enough already to satisfy the review committee and pass her upgrading, and the 'in order to' motive was that, almost certainly, the student would learn much in the near future which would enable her to return to her plans later to make any necessary adjustments.

The CSD supervisor explained the strategy underlying her advice to her student, in the context of commenting on draft chapters, that was, not to take account of her

comments right away but to move on to drafting the next chapter. She explained her advice as follows:

partly this is because you get stale and you get so tangled up in what you've been doing..but also because with such a major piece of work..you have to see it as a whole..its almost like a sculptor who roughs out the general shape and then goes back and brings out the detail..also you begin to see this problem of things in the wrong place..but you can't see this until the whole of the work is roughed out..unless it was really hopeless..then you would have to do it again and then go on..it's also psychological..it's quite depressing to have to go back immediately and do it all again..but at her level I don't think she'll have to do a huge amount of work ..inevitably there's repetitions in a piece of work that long and one of the things a supervisor should do is point those out..so that's the strategy..its not that different from writing a book..it is a book (CSD: 2).

In explaining her strategy, the CSD supervisor drew on her previous experience of students' 'cognitive' and 'affective' characteristics and situations in general and her ideal conceptions of what a thesis is, to inform her advice to the student. She also drew on her summing up of her students' capabilities to estimate the chances that her strategy would work in this situation. Her 'in order to' motives anticipated the student being able to determine where the work was repetitious.

These examples begin to demonstrate the very complex nature of the case study supervisors' professional expertise. Very infrequently did supervisors explain their courses of action in terms of a single 'because' motive or a single 'in order to' motive. Rather they took into account several different interacting 'because' motives and/or 'in order to' motives in determining the most appropriate course of action to pursue in the situation (Brown and McIntyre, 1993).

Generalisation 11: Supervisors' expert practices involve standard 'strategies', which are developed from their ideal notions of necessary and/or desirable ends in view. As

such, they are conscious and principled elements of their ‘stock of knowledge at hand’ which are followed irrespective of the needs of individual students or contexts and which can be more easily shared.

Generalisation 12: Supervisors’ expert practices involve ‘tactics’ which are adopted in response to the particular needs of particular students at particular times in particular contexts. As such, their ‘stock of knowledge at hand’ goes beyond the principles of which they are more aware and their tactics are but semi-conscious and less easy to gain access to, involving as they do a more complex set of understandings of how to take account of individual student needs.

Generalisation 13: Supervisors’ expert practices involve strategies and tactics for striking an appropriate balance between supervisor direction and more open-ended approaches. An appropriate balance depends on considerations of students’ personal dispositions, affective and cognitive (for example, student inexperience or reluctance to engage with a task), the context and students’ preferred ways of working.

Generalisation 14: Supervisors’ expert practice is characterised by courses of action which tend to take account of more than one ‘because’ motive, and especially of student cognitive and affective needs, and/or of more than one ‘in order to’ motive, so that courses of action tend to result from interactions between different ‘because’ motives and different ‘in order to’ motives.

SECTION 5 Conclusions

My aim in this analysis was to generate 'scientific' concepts, Schutz's notion of 'second order' constructs, from the 'first order' constructs which the supervisors used in talking about their activities. 14 tentative generalisations (second order constructs) were formulated to represent in the abstract those things which supervisors were aware of taking into account in their courses of action and where the underlying rationale or logic seemed common to all the case study supervisors.

One of the most important findings to emerge from my analysis of supervisors' explanations of their courses of action was that students' 'cognitive' and 'affective' characteristics were construed as temporary, that is, they were regarded by supervisors as characteristics which could be changed through the appropriate supervisor or student actions. The evidence suggested that there were parallel and contrasting features of students' 'affective' characteristics with their 'cognitive' characteristics. While in both cases, sensitivity to student characteristics was directed by supervisors towards minimising a gap, in the case of 'cognitive' characteristics, minimising a gap was the long term goal. In the case of 'affective' characteristics, it could be a constant and immediate need, and, in each case, it was both a 'because' and an 'in order to' motivation for supervisors.

In talking about their students' characteristics as 'alterable', the case study supervisors construed their students' 'cognitive' and 'affective' characteristics as gaps to be bridged. Their construals were distinctive in that they were quite unlike the way Brown and McIntyre (1993) reported the ways their school teachers construed teaching and learning in classrooms, and not at all like Schutz (1962, 1964) and

Heider (1958) who were not concerned either with educational enterprises or to explain how a person construes his or her own actions. Bloom's theories about teaching and learning in classrooms, however, took as their point of departure the ideal situation of a one to one tutorial from which he derived principles to inform classroom teaching and learning. I will discuss the broader theoretical implications in my concluding chapter.

I fully expected that the case study supervisors would have something to say about the constraining effects of the context or environment within which they supervised (Hockey, 1994b). This was the case for Brown and McIntyre's classroom teachers (1993) and in other studies where PhD supervisors have been interviewed (eg Becher et al, 1994; Burgess et al, 1994; Hill et al 1994). In the case study situation, supervisors talked about contexts (salient to them at the time) as mostly facilitating. So, for example, joint supervision, review meetings or research training could be used, in one way or another, to promote or enhance student development and progress. Helping students to cope with the inherent difficulties of doing a PhD, and especially constraints of time, could also present these supervisors with opportunities to press home important learning points thus effectively incorporating potentially constraining features of the environment into potentially useful aspects of their own strategies and tactics. The implications are pursued in the concluding chapter.

In relation to supervisors' 'in order to' motives, achieving a balance between supervisor direction and student autonomy and ownership of their projects, supervisors identified three conflicting goals: one concern with the quality of the thesis; a second concern that the thesis should be the student's own work; and a third

concern that the student maintain satisfactory progress. In seeking to resolve the tensions, a balance was sought by supervisors between helping the student to meet criteria for the work and making progress and addressing concerns for student autonomy and ownership (Hockey, 1996a). The balance struck depended crucially on individual students' 'cognitive' and 'affective' characteristics. The more capable and confident students were not a problem, but those who lacked capabilities and confidence and needed more help, and those who were over-confident and needed reining in, required more care in achieving an appropriate balance.

In addition to 'autonomy and ownership' outcomes, supervisors talked about a range of different types of 'in order to' motives, including 'cognitive', 'affective', 'progress', 'product' and 'relationship', many of which were short term goals. Supervisors' frequently sought to realise several such outcomes through one course of action. Most impressive to an 'observer' were the ways in which the case study supervisors combined their summing up of their students' needs and wants in an apparently effortless set of actions intended to meet a variety of different outcomes and student needs at one and the same time. The various different constituents of their courses of action were so seamless, flexible, economical and fluent as to make the actions taken seem quite simple and obvious, not just to me as an observer but, apparently, also to the supervisors themselves.

In the concluding chapter, I revisit the student survey analysis to examine the extent to which and the respects in which the case study supervisors' courses of action were directed towards satisfying the kinds of student needs identified; and to identify and discuss any issues and dilemmas raised. I also pursue the idea of supervisory activities

as distinctive and as similar or different from school teaching, and examine the relative usefulness of my theoretical and conceptual frameworks. Future questions for research are identified and education and policy implications of the study are discussed.

CHAPTER 8 UNDERSTANDING PHD SUPERVISION IN THE SOCIAL SCIENCES: CONCLUSIONS AND IMPLICATIONS

The aim of this study was to learn more about the things that expert supervisors do well and which are especially appreciated by PhD students. It was concluded from the review of the literature (Chapter 2) that the thesis could usefully contribute to two main aspects of the supervisory processes: the establishment of the nature and relative frequency of felt needs identified by students which had been, or could have been, met by their supervisors; and research which focussed on observed interactions between students and their supervisors. I argued (Chapter 3) that students were best placed to make judgements about what they most needed or wanted from their supervision and that supervisors were best placed to judge the possibilities and problems of meeting student needs as well as achieving their own goals and those of their departments, institutions and external bodies. This assumption led to the design of a mixed method study, involving a student postal survey and six case studies where I observed supervisions and interviewed the supervisors involved. In this conclusion, first, I want to represent the several different kinds of understandings which I gained from the data analysis, and from the processes of designing and carrying out the research, and second, to examine the implications for policy, including: formal research training; supervisors' responsibilities; and initial and continuing development for supervisors. There are a number of issues which have not been addressed in this research, and I conclude with some ideas about useful future research with the potential to build on my work.

Access to supervision

The responses from students to the questionnaire, and from supervisors, to my request to observe some supervision sessions and ask them questions about what they were doing, were very encouraging. Students remarked on how useful they thought such research would be and the response rate of 52% was not unsatisfactory. The quantity and quality of these responses reflected the high motivation of ESRC students to contribute to this study. I expected that recruiting supervisors for my case studies would be more difficult because of the nature of the demands I was making on supervisors' time, my past connection to the ESRC, or factors stemming from the private nature of supervision and the possible sensitivities of supervisors and students to the presence of an 'unknown' observer with a tape recorder. However, supervisors as well as students thought the project was interesting and worthwhile and indicated their willingness to participate. Some commented from their position as PhD examiners that many student theses had suffered as a result of poor supervision and anything which would help alleviate that condition was welcomed. As they frequently used tape recorders to conduct their own research, the tape recorder seemed of little account.

It was clear that all the supervisors approached were pleased that past students had written so positively about their own supervisory practices (as Brown and McIntyre (1993) found with their teachers and this, I believe, was a most important factor in their placing me firmly in the position of 'learner', adopting a relaxed acceptance of my observation and questioning, and last but not least, making careful reflections on their supervision activities to provide as full an account of what they were doing and why as they could manage in the hour or so allocated for interview. That supervisors

were willing and able to reflect usefully on their own practices is very encouraging for taking forward phenomenological and craft knowledge research approaches to PhD supervision, a development encouraged by Delamont et al (2000) and Hockey (1997).

Relationships between the student survey and the supervisor case studies

Earlier I described the connections to be made between the student survey and the case studies (Chapter 4). For the purpose of formulating my conclusions, I review briefly the nature of the relationships which existed between the two studies conducted several years apart. Two quite different approaches were adopted. The student survey of students' felt needs constituted a large sample from a clearly defined national population (students holding ESRC research studentship awards). The sample, broadly representative of the ESRC categories of social science disciplines, age and gender, was sufficient to allow some confidence in generalisations about student needs. In contrast, there were only six case studies, representing seven supervisors and eight students in different disciplines and each at one particular stage in their studies where no basis for generalisation to a wider population could be claimed (Gomm et al, 2000). Case study supervisors were selected on the basis of the survey findings, so 'good' supervisors were defined by students responding to the survey questions in wholly positive terms. The expectation was that the case study supervisors as 'experts' were likely to be sensitive to student concerns and therefore to view successful supervision in quite similar terms to survey students (Welsh, 1979), and this assumption needed to be checked. The primary purpose of the case studies was *not* to compare the criteria applied by the case study supervisors with those applied by the student respondents. If that had been the intention, then two comparable surveys would have been more appropriate. Instead,

the primary purpose was to go beyond criteria for successful supervision and to ask how such success can be achieved.

Relationship between student and supervisor criteria for successful supervision

In checking my expectations that the criteria applied for successful supervision by supervisors would broadly reflect those applied by student respondents to the survey, there were six especially prominent aspects of successful supervision which students wanted and which the case study supervisors delivered. These are identified and discussed below.

Diversity of student felt needs

Student responses to the survey showed a clear tendency for students to explain the value they placed on their supervisors' activities and dispositions in terms of meeting their 'personal needs' (Welsh, 1978; Hockey, 1996a, 1997). These were many and diverse, including both 'cognitive' and 'affective' needs (Bloom, 1976). Students had many needs in common, but some varied. For example, in relation to critiques on written work, some students wanted their supervisors to engage in a gentle, more 'coaxing' approach to critique which would help build their confidence whereas others wanted a tough objectivity (Acker et al, 1994a; Hockey, 1997). In their relationships with their supervisors, some students wanted a higher degree of informality while others welcomed more formal arrangements. In relation to their supervisors' management activities, some students wanted more intervention and direction than others (Delamont et al, 1998). So the success of their supervisors depended in large part on their perception of the needs of individual students and a

consequent tailoring of approaches to meet these needs (Hockey, 1996a; Lindén, 1999). The terms in which the 'because' motives for the supervisors' courses of action were expressed showed without doubt that a major aspect of the ways they construed their task was to tune in to the cognitive and affective characteristics of their students, to identify the needs and problems, and to respond appropriately to meet these needs.

Supervisor direction versus student autonomy

Commentators and researchers have raised the issue of tensions between the processes of supervisors giving adequate direction on all the different aspects of students' work while also enabling students to grow into autonomous researchers and to allow them to present their theses honestly as their own original research (Hill et al, 1994; Delamont et al, 1997a; Phillips and Pugh, 2000). From survey respondents' view points, good supervisors were those who responded most sensitively to their individual preferences and we have seen how these varied considerably from student to student on the question of how much or how little intervention or direction they wanted (Acker et al, 1994a; Hockey, 1997). Those who valued a great deal of freedom to explore and to make their own mistakes stressed the role of the supervisor as responsive to their initiatives, making themselves available to provide guidance and support if or when the student needed it (Hill et al, 1994). They pointed out that such responsive support fostered feelings of independence and ownership over their theses, confident in the knowledge that their supervisor was standing by. Others, at least in the short term, appreciated a more structured, directive approach where the structure and pressure was applied by the supervisor (Burgess et al, 1994).

The evidence from the case studies shows that the case study supervisors were well aware of their students' preferences and aspirations in these respects and that developing student independence and ownership over their projects was an important consideration (Acker et al, 1994a). Providing support on the students' terms was not perceived as problematic by the case study supervisors whose students were described as receptive, thoughtful, conscientious, self motivated and making good progress. The tension arose more frequently for the case study supervisors (though not exclusively) in relation to past students who were perceived to lack capabilities and confidence and consequently to need more direction, or where past students were over-confident and needed some 'reining in' (Delamont and Eggleston, 1983; Hockey, 1996a). However, even for the case study students, there were times when the supervisors consciously considered how they might adjust preferred approaches to deal with a particular situation or issue (Becher, 1993; Hockey, 1997). As several supervisors remarked, much depended on the individual student and their needs changed over time (Burgess et al; 1994). Thus they relied on a constant 'tuning in' to evidence which allowed them to infer at any particular time the nature of their students' needs, 'cognitive' and 'affective', in coming to decisions about whether or not to intervene and, where intervention was the answer, what the most appropriate form of intervention might be, given their students' personal characteristics.

Criteria and standards for the work

All students shared a concern that the outcome of their studies should be the completion of a competent and worthwhile thesis. It was therefore considered crucial that they learn the necessary standards in relation to their practices and performance (Becher, et al, 1994). For this they relied on their supervisors' feedback in discussions

and comments on written work, frequently referring to their supervisors as the only ones sufficiently interested, involved and knowledgeable to provide this. Crucially, they needed to know the strengths and weaknesses in their thinking, ideas, writing and so on if they were to learn of the criteria and standards expected, for example, by external examiners, and, in this respect supervisors were regarded in a quality control or validating capacity. However, there could be a degree of uncertainty for supervisors about the match that would be achieved between the criteria they applied and those applied by examiners (Phillips, 1994; Hockey, 1995a).

While a notable feature of student responses to the survey was that the most frequent form of explanation for valued supervisory activities was in terms of student needs, a striking exception to this general emphasis was in relation to 'comments on written work'. The supervisors' activities most valued were critiques which were: 'thorough', searching, comprehensive, challenging, in-depth, accurate, 'objective' and especially 'constructive' (Delamont et al, 1997a; Hockey, 1997), and the explanations were most frequently couched in terms of resultant improvements in their work and getting to know the standards being applied. Earlier I defined 'outcome' explanations (Schutz's notion of 'in order to' motives) as forward-looking, proactive and as suggesting that the 'outcomes' valued were within the power of the person to achieve (although always subject to unknown variables) (Chapter 4). Students referred to three kinds of critiques, those which pointed out weaknesses, those that pointed out strengths and weaknesses and those which showed how students could build on their strengths and deal with their weaknesses. As most students placed most value on the latter, the predominance of forward looking explanations strongly suggests that it is their supervisors' constructive criticisms which not only convey appropriate standards for

the work but also the kind of hopeful prognoses and advice which students can take as strong evidence that their supervisors are prepared to help them in achieving success in their projects (Burgess et al, 1994).

The case study supervisors also placed a high priority on the production by their students of a competent and worthwhile thesis. In explaining their 'in order to' motives, they referred to 'outcomes' which they wanted or hoped to bring about through the course of actions taken. They talked, for example, about the long term 'cognitive' characteristics which students needed to meet the academic standards which would be applied to the final product, and about the shorter term 'cognitive' characteristics which students needed to acquire on the way (Hockey, 1996a). Thus the case study supervisors shared with students their experience of the academic standards and criteria to be applied and the importance accorded to their needs thereof.

Bridging the gap

Students most frequently explained their personal needs with reference to 'cognitive' and 'affective' characteristics which they lacked, for example, knowledge of a research technique, writing skills, or a positive academic self image which they knew they would need to carry out aspects of their work competently and confidently (Becher, 1993). Thus they were defining their needs primarily in terms of bridging gaps. Like students, the case study supervisors also construed their students' 'cognitive' and 'affective' characteristics as but temporary states to be changed by student or supervisor action and as gaps to be bridged.

Lack of concern with external constraints

There was a striking lack of concern or awareness amongst students with how their supervisors might be able to deliver what they wanted and what constraints might be encountered. The predominant concern was with their own personal needs. Similarly, the case study supervisors rarely mentioned constraints on their courses of action, only how they used possibly constraining contexts to advantage (but see Hill et al, 1994). It was concluded that, to some extent, the focus for research, the design, and types of questions asked may have influenced the ways in which students and supervisors construed their responses and, had the emphasis for the research been different, for example, focussing on problematic issues rather than on good practice, the responses might have been correspondingly different. Another simpler explanation for supervisors' lack of concern with contextual constraints is that there are relatively few constraints on what supervisors do in their meetings with students, a matter to which I return later.

Lack of concern with learning beyond getting a PhD

There were few responses from students which might suggest they regarded the processes of getting a PhD as the first stage to becoming a competent researcher or as anything other than being directed towards the award of a PhD. Supervisors too were focussed on the tasks at hand with the ultimate goal, a successful and worthwhile thesis. Only one of the case study supervisors explained a course of action as, in part, preparing his student for a future career as a researcher on externally funded projects. This suggests that both students and supervisors regard the award of a PhD more as a

necessary entry qualification for broadly based academic work than as a broadly based training for research work (ESRC, 1996; Becher and Trowler, 2001).

The nature of supervision: theoretical and conceptual frameworks

The study is situated within the tradition of educational research where the focus is on making the normally implicit craft knowledge of professional workers more explicit (Schön, 1983; Eraut, 1994). Such research is often conducted using ethnographic approaches and these have sometimes been criticised, especially in the context of educational research, as lacking in rigour (Atkinson and Delamont, 1985; Hammersley, 1992). In addressing this issue, I drew on the phenomenology of Alfred Schutz (1962, 1964) who was clear and uncompromising on the conduct of phenomenological research (Chapter 3). To capture the essence of what students and supervisors were saying, I added concepts used by Heider (1958), an attribution theorist, and by Brown and McIntyre (1993) on the basis of their empirical study of classroom teachers' craft knowledge. Later, I added concepts borrowed from the educational theorist, Bloom (1976), and I want to convey some of the understandings I gained about the relative usefulness of these different frameworks for interpreting the findings of my phenomenological research into supervisors' expert and professional practice.

An important consideration for the development of categories and sub-categories for the student survey (Appendix 2) and for generating 'second order' concepts from the explanations case study supervisors gave for their courses of action (Chapter 7), was that they be true to what students and supervisors were saying and that they would stand the test of being recognised as such by the students and supervisors who

originated them (Schutz, 1962). While many of the organising concepts used by Schutz (1962, 1964), Heider (1958) and Brown and McIntyre (1993) proved useful in these respects, some things that students and supervisors said would have been severely distorted by reliance on these concepts. After I had developed 'second order' concepts which did reflect what students and supervisors were saying, I reflected on the differences between these and the concepts offered by Schutz (1962, 1964) and Heider (1958), and I concluded that the limitation of the latter concepts arose in three different ways. First, Schutz (1962) was concerned with representing how one person explains what a significant other is doing and Heider (1958) is concerned with how one person explains the success or failure of the other to do something. With particular relevance to the supervisor case studies, neither Schutz (1962) nor Heider (1958) are concerned with how that person construes his or her own actions. Second, Schutz (1962) and Heider (1958) are not concerned to explain such construals in situations where that person uses his or her understandings over time in coming to decisions about how to accomplish changes in the other's behaviour as happens in an educational setting. Third, Heider (1958) is not concerned with construals informed over periods of time, only with immediately perceived observations and evaluations of one-off performances. The 'second order' concepts, which I found to be necessary for the very different specific kinds of social interaction with which supervisors are concerned, were much more action orientated and much more focussed on the specific long term project of supervision.

In finding a conceptual framework which did not distort what supervisors were saying about their courses of action relating to their perceptions of student learning needs and their own anticipated outcomes, I found the educational theories of Bloom (1976),

concerned with teaching and learning in classrooms, more relevant. These start from the ideal situation of a one-to-one tutorial from which Bloom (1976) derives concepts and practical principles to inform classroom teaching and learning. Although his principles proved difficult to implement effectively in classrooms (Slavin, 1987), his concepts of student 'cognitive' and 'affective' characteristics and 'alterability', proved powerful in analysing supervisors' explanations of their actions, and provided a helpful supplement to my existing frameworks.

Taking these issues into account, there are implications for phenomenological research studies focussing on professional practices in educational settings. Caution and sensitive discrimination are necessary if one wants to adopt Schutz's and Heider's abstract concepts in these situations to avoid distortion in the researcher's 'second order' representation of 'first order' constructs (Robson, 1993). In considering the theoretical and conceptual framework provided by Brown and McIntyre (1993) (based on Schutz's phenomenology), I hoped that there might be potentially useful similarities between supervision and classroom teaching, also bearing in mind the more obvious differences. There were some similarities but also some differences, including a few I had not expected. Most obviously, perhaps, because of the one-to-one situation in supervision and the voluntary nature of student involvement, supervision is less complicated by the need to manage large numbers of possibly unmotivated and immature students. Classroom teachers were reported by Brown and McIntyre (1993) as being concerned with goals (my 'in-order-to' motives) which sought to establish 'normal desirable states' of pupil activity as well as with progress goals. The teachers talked about the constraints on their achievement of these and other goals and the conditions of which they took account in their activities (my

'because' motives), and frequently included constraining material conditions. Supervisors, however, were concerned almost exclusively with what Brown and McIntyre (1993) called 'progress' goals and rarely mentioned external constraints, institutional or material, in the context of this research (but see Hockey, 1997), and one might conclude that supervisors are quite privileged and free to concentrate more than school teachers on their individual students' learning. Supervision may be regarded as a distinctive form of teaching shaped in no small part by the conditions in which it is carried out.

Thus supervisors talked rather more than Brown and McIntyre's school teachers (1993) in terms of minimising gaps between what students knew or could do and what ideally they needed to know, and be able to do, for success in their research. There were similarities in terms of the goals towards which both teachers and supervisors aspired but here it was a matter of relative emphases, for example; both supervisors and teachers were concerned with goals of student learning, engendering student interest and enthusiasm, promoting progress and products, and establishing appropriate relationships with their students (Phillips and Pugh, 2000).

Crucially, the case study supervisors construed their students' cognitive and affective characteristics as temporary and therefore capable of change. If this had not been so, and what students could or could not do had been explained in terms of innate ability, intelligence, or some other form of unchangeable condition, then supervisors would have had very different tasks from those which they portrayed, tasks in which an important emphasis would have been on working out what was possible or necessary for students within the limitations of their given characteristics (Hockey, 1995b). A

good illustration of the kinds of actions which might be taken by supervisors under these circumstances is of ‘rescuing and salvaging’ (Burgess et al, 1994).

The nature of supervision

In past debates about the PhD, there has been a lack of consensus about its nature (Burgess, 1997) and therefore some doubt about the nature of PhD supervision. In the literature on supervision (Chapter 2), at least three general conceptions of supervision were distinguished. These were: supervision as a research art or craft, providing an apprenticeship in research (Salmon, 1992); as a form of teaching craft (Brown and Atkins, 1990; Hill et al, 1994); and as management of students, projects and progress, much emphasised in institutional and departmental Codes of Practice for supervision (Chapter 2). Such an apparent lack of consensus cannot be helpful in leading less experienced supervisors to understand what they need to learn about the craft of supervision. While there are elements of each present in the ways the case study supervisors explained their practices, the dominance of their concerns to minimise gaps in their students’ ‘cognitive’ and ‘affective’ characteristics, and the congruence of their goals with those of classroom teachers, suggests strongly that expert supervision can be most helpfully construed as a form of teaching craft where what is to be learned is explicit and the intention is there to bring about learning. With one supervisor to one student (and sometimes more than one supervisor) (Hockey, 1997; Pole, 1998) such teaching can be regarded as approaching Bloom’s (1976) ideal conditions for teaching and learning, allowing supervisors to concentrate on individual student needs and on setting up the necessary conditions and opportunities to maximise benefits for students.

Supervisors explained their courses of action in ways consistent with views of supervision as 'teaching', that is, as teaching which takes place under conditions which allow supervisors to give more careful consideration to the identification of individual student needs, 'cognitive' and 'affective', than is possible under the conditions prevailing in classrooms or, indeed, in higher education lecturing situations. However, for these distinctive benefits to be realised, the frequency and quality of opportunities of one-to-one contact are necessary conditions. Whereas in the classroom situation, class sessions are timetabled and attendance is compulsory, supervisory sessions are more flexible, varying in their frequency, duration and formality to suit both supervisors and students. As student respondents described their supervisors' availability, they valued greatly the opportunities they had for one-to-one contact (Hill et al, 1994) (although they differed widely on what they regarded as the best arrangements for accessing their supervisors).

The craft of supervision

Supervision has been described in these conclusions as distinctive. There are similarities with classroom teaching but also major differences. One of these differences is the one-to-one relationships (Hockey, 1997) which are established between supervisors and their students, making it possible for supervisors to concentrate on individual students' strengths and weaknesses and to attend closely to helping students to bridge these gaps rather than having to attend mainly to setting up the conditions required as classroom teachers do for their teaching. Crucially, supervisors assumed that their students' 'cognitive' and 'affective' characteristics were temporary. Provided that they were responsive to their students' diverse needs

and preferences, that students were aware of the criteria being applied and had an idea of how to meet these criteria, there was little to stand in the way of a successful thesis. Of course, as Schutz predicted, there was always a degree of uncertainty for supervisors in achieving their goals, for example, unknown variables or unforeseen events which might arise. Student respondents and case study supervisors also shared a lack of concern about external constraints. On the one hand, students, with their emphases on their own personal needs, gave little indication that they were aware of the different kinds of considerations and dilemmas which their supervisors might have to take into account in responding to their needs. On the other hand, supervisors talked about how they used various institutional and departmental requirements to the advantage of their students. Neither students nor supervisors seemed to be thinking about what they were doing in the processes of a PhD as a preliminary step towards the students' research career. The production of a competent and worthwhile PhD was the predominant concern. The question now is about how much can be learned from the case study supervisors' explanations of their courses of action which might illuminate some of the complexities and dilemmas which supervisors face in taking account of diverse student needs.

The case study supervisors' courses of action sought to realise six key types of mainly short term goals, including: the development of students' cognitive understandings and skills, and the development and maintenance of the affective states conducive to student achievement of these; securing satisfactory student progress by helping students to focus effectively on relevant priorities; fostering student autonomy and ownership over their theses; helping students in developing useful shorter term

written products; and fostering the kinds of relationships within which the supervisors' goals were more likely to be achieved.

Supervisors' practices in these respects were guided by broad strategic principles which they held about supervision or research, not dependent on particular student needs or contexts and which came into play with all their PhD students in terms of what they wanted them to achieve (Hockey, 1996a). Within these strategic approaches, supervisors adopted shorter term 'tactics' which they used to address particular needs or problems of individual students in specific circumstances and in relation to specific student needs (Hockey, 1996a). These strategies and tactics drew on repertoires of what to do and what not to do, frequently exemplified through analogies with experiences they had had in the past, the 'contrastive rhetoric' noted by Delamont et al (2000). Not only were these tactics informed by particular student needs and by experience of what would or would not be likely to work but also they drew on a variety of available resources, including their own research, departmental contexts and arrangements for monitoring and review and so on, and on colleagues and other researchers as appropriate to the need at hand.

In summing up, it may be said that these case study supervisors were adept at making the best of a good situation. A one-to-one-teaching situation, one student willing, able and enthusiastic to learn, few significant constraints, and the opportunity for great flexibility in approaches to, and in arrangements for, student learning, provided the ideal context for student success in their PhD work. Nonetheless, in capitalising on the situation and the opportunities offered, highly skilled teaching was required from the case study supervisors, with sensitive and well informed judgements of what

students required and a sound strategic and tactical knowledge, all brought constantly into play (Hockey, 1997).

It is worth bearing in mind at this point that the conclusions drawn about the 'knowledge-in-use' of the supervisors in the six case studies are necessarily tentative and that, while I am confident of generalisations made from the student survey to a wider population of PhD students, and of generalisations across the case studies, any further attempts to generalise the case study findings to a wider population of supervisors without further research to confirm, extend or refute such generalisations might be unhelpful.

Policy implications

A number of questions were posed following my discussion of the policy contexts in which this project has been undertaken (Chapter 1). The first of these questions related to the ESRC requirements for formal training and the lack of coherence in establishing relationships between formal provision and supervision. It was thought that supervisors might construe their supervision activities and/or roles and responsibilities partly in terms of this uncertain relationship with formal training. With reference to the emphasis of the ESRC on research training for careers, the question was asked of what might be learned through this research about supervisors' complementary contributions as 'informal' education and training.

In only one case study was it clear that the research training undertaken by the student articulated in significant ways with the decision making involved in the processes of supervision and the courses of action adopted by the supervisor (CSC, Chapter 7). In

three other case studies, research training was mentioned in passing but I had no sense of it playing a part in the ways supervisors thought about their actions, roles or responsibilities. Nor did the anticipated outcomes of supervisors' courses of action gear into students' future careers as researchers, with the exception of a supervisor's action intended to alert the student to the criteria applied by external funders (CSF). The concerns of both students and supervisors were directed instead to what students needed to know or do in the shorter term to complete a competent and worthwhile thesis. There are, therefore, important implications for ESRC research training policy in terms of thinking through the part played by supervisors' contributions in an education and training for research.

If it is right to have concluded that PhD supervision is best understood as a teaching craft carried out under very good conditions, it would seem reasonable to think about all the processes involved in a PhD as a coherent and articulated taught programme aimed at the professional education of academic researchers in the social sciences (Bowen and Rudenstine, 1992; Becher, 1993). One element of that programme, on which the ESRC guidelines are already quite full, is the formal, broadly based training. If working with a supervisor to write a good thesis were conceived as the other and larger part of this taught programme, we should need to ask what the 'curriculum' for that part should be, and especially, how it should complement the formal training part. Even if we were not to question what supervisors and students seem to take for granted, that the main goal should be to produce a competent and worthwhile thesis, what we need to ask, and what the case study supervisors seemed to know, is what qualities of understanding, skill and autonomous academic judgement are, in general, necessary for the production of such a thesis. Alternatively,

the question might be asked in terms of the qualities of understanding, skill and judgement which should be developed through the production of such a thesis.

The processes of teaching involved in expert supervision are, as in any teaching, subtle, complex and, very clearly and necessarily varied according to the needs of individual students (Brown and Atkins, 1990; Hockey, 1994a; Lindén, 1999). It would be quite inappropriate to impose standardised criteria for the *processes* of supervision. From the evidence of this study, however, there does not seem to be any great divergence among supervisors in their ideas about the nature of the expertise and the qualities that their students should acquire. From the student survey, where the distribution of students across subject areas was very similar to the distribution of ESRC research studentship awards across subject areas, I could detect no differences between the way supervision was represented across ESRC subject areas. Six subject areas were represented in the case studies, and there were few signs that differences in subject substance, cultural traditions or arrangements for supervision made any difference to the ways in which the case study supervisors explained their courses of action (but, of course, such a generalisation would need to be tested over a wider population). This suggests that, although discipline-specific curricula should no doubt be differentiated as for the formal element of training, the same general approach could be used across all subject areas.

In view of the endemic tension between the two CVCP (1988) defined purposes for the PhD, bringing about an original contribution to knowledge at the same time as providing a research training for future careers (Chapter 1), there seemed to be a need to explore how good supervision might resolve the tensions between HEI

requirements that students take responsibility for the production of a creative and independent contribution to knowledge and supervisors' own contribution to education and training and/or the need to be directive. A further question was about the implications of the way supervisors resolve this tension for the relative responsibilities accepted by supervisors and students. As addressed earlier in this chapter (p255), supervisors' responsiveness to their students' initiatives, ideas and written work, through open-ended discussion and constructive suggestions, provided plenty of opportunities for students to take responsibility for their own work, always in the knowledge that the supervisor was there to give a guiding hand when needed. Where students were less sure, or lacking in the necessary knowledge or skills, the supervisors took a greater responsibility, taking more directive measures to 'bridge the gaps'. Thus, although this tension is real, it does not seem, as I had expected, to be a debilitating one. On the contrary, it seems that an important part of the supervisor's craft, as I have described it, is to make this tension a productive one.'

With reference to the ESRC's lack of clarity and coherence in describing its own expectations for supervision in the context of its research recognition and Guidelines initiatives (Chapter 1), I thought there might be something to be learned from this research about how supervisors construed supervision and the levels of responsibility supervisors might be prepared to accept for meeting their own criteria. The case study supervisors were cautious in their acceptance of responsibility for the actual outcomes of the courses of action they took (Becher et al, 1994). They explained these anticipated 'outcomes' realistically in terms of hopes or aspirations, and not as certainties. The nature of the responsibilities they accepted for appropriate actions varied in response to their assessments of student felt needs, for example, how much

responsibility their students seemed able or willing to take at any particular stage of the work.

Initial and continuing education for supervisors

According to the institutional and departmental Codes of Practice (Chapter 2), PhD supervisors are normally required to have a national, if not international, reputation in research and to have successfully completed a PhD before being allowed to supervise PhD students (Tinkler and Jackson, 2000). In addition, they may be asked to pair up with a more experienced supervisor before undertaking supervision on their own (Parry et al, 1997; Pole, 1998). Perhaps the most striking implication for PhD supervision of the policy initiatives reviewed related to the relative *absence* of any directly concerned with supervision. Policy-makers seemed well aware of the central importance of supervision (Chapter 2) but seem to have generally felt unable to take steps relating to the apparently implicit, private and, perhaps, taken-for-granted processes of expert supervision (Hockey, 1997). Little is said in these Codes of Practice, for example, about the need for supervisors to undertake some professional training for the job, and it is generally the case that supervisors learn on the job by trial-and-error (Hill et al, 1994). This seems to confirm that the dominant view of the supervisor/student relationship is as an apprenticeship in research (Becher et al, 1993) and not as teaching (Becher and Trowler, 2001). The notion of a mandatory training for supervision is therefore likely to be resisted, especially by experienced researchers.

One implication arising from my research is that there seems likely to be a vast untapped source of expertise amongst PhD supervisors in the social sciences waiting

to be used. Supervision is often regarded as a private affair and tapping the expertise of supervisors through observation and through supervisors' explanations of what they are doing may result in an opening up of supervision as an interesting and distinctive craft (and topic for research) in its own right (Hockey, 1997; Delamont et al, 2000). A second implication is that it may not be sufficient to give inexperienced supervisors general advice about how they should supervise, opportunities to observe other more experienced colleagues at work, for example, through joint supervision, and opportunities to exchange experiences with other supervisors (Hockey, 1997). More thought needs to be given to how novice supervisors can learn from the sophisticated, but largely tacit and taken-for-granted, expertise of experienced supervisors like those in the case studies. Neither simple observation nor generalised discussion can give them access to craft knowledge. It seems possible that novices could best learn about the craft by combining, as I did in this research, observation of experienced supervisors with subsequent conversations directed towards teasing out the considerations underlying specific judgements and actions. Such access to specific examples of expert supervision might be most fruitful when combined with explicit analytic guidance about the practical principles and considerations which generally inform expert supervision, together with analysis of the novices' own early experiences.

Future research

The understandings achieved from the research are substantial but this research is only a beginning and there are perhaps as many questions arising from the findings as have been addressed. The scope of the case studies, and therefore the extent to which generalisations can be made from the findings to a wider population, was limited by

the number undertaken, and I want to point out where I think research in the future could confirm tentative generalisations from the case studies and trends in the survey data or generate new understandings.

In search of principled, educative supervisory practice as the norm, much more research is needed into what supervisors do well and how they do it using many more case studies, in different disciplines, over a longer time scale and focussing on particular stages or aspects of a supervisor's work. There were important aspects of supervision which were not explored in this study, in particular, the processes involved in assessment of students' written work. Nor can anything be said as a result of this research about, for example, the influence of the substantive content of different disciplines, joint supervision or the nature of the students' topics on supervisor thinking about their courses of action. In particular, the tentative generalisations formulated as a result of the analysis of the case studies need to be explored in relation to a wider population of PhD supervisors in the social sciences through many more case studies or put to the test through a survey. The focus of this research was on the craft knowledge of expert supervisors and *not* on the craft knowledge of expert researchers. Future research might usefully focus on research craft knowledge and perhaps also on the relationship between the two.

REFERENCES

- Acker, S., Hill, T. and Black, E. (1994a) 'Thesis Supervision in the Social Sciences: managed or negotiated?' *Higher Education*, 28 (4): 483-498.
- Acker, S., Transken, S., Hill, T. and Black, E. (1994b) 'Research Students in Education and Psychology: diversity and empowerment'. *International Studies in Sociology of Education*, 4 (2): 229-250.
- Allen, D. (1981) *Research and Doctoral Training*. Report of Social Science Research Council Management and Industrial Relations Committee Seminars, Department of Social Administration, University of Manchester.
- Ashworth, P.D. (1979) *Social Interaction and Consciousness*. London: John Wiley and Sons.
- Atkinson, P. (1995) *Medical Talk and Medical Work*. London: Sage.
- Atkinson, P. and Delamont, S. (1985) 'Bread and Dreams or Bread and Circuses: a critique of 'case study' research in education', in M. Shipman (ed) *Educational Research, Principles, Policies and Practices*. London: Falmer, 373-440.
- Atkinson, P., Coffey, A., Delamont, S., Lofland, J. and Lofland, L. (eds) (2001) *Handbook of Ethnography*. London: Sage.
- Ball, S. (1984) *Postgraduate Learning*. Paper for the Teaching and Learning Support Programme. London: Economic and Social Research Council (ESRC).
- Bassey, M. (1999) *Case Study Research in Educational Settings*. Buckingham: Open University Press.
- Becher, T. (1989) *Academic Tribes and Territories*. Buckingham: The Society for Research in Higher Education (SRHE) and the Open University Press.
- Becher, T. (1993) 'A View from the Ground' in B.R. Clark (ed) *The Research Foundations of Graduate Education: Germany, Britain, France, United States, Japan*. Oxford: University of California Press: 119-145.
- Becher, T., Henkel M. and Kogan, M. (1994) *Graduate Education in Britain*, London: Jessica Kingsley.
- Becher, T. and Trowler, P.R. (2001) *Academic Tribes and Territories* (2nd edition). Buckingham: The Society for Research in Higher Education and the Open University Press.
- Becker, H. (1986) *Writing for Social Scientists*. Chicago: The University of Chicago Press.
- Benner, P. (1984) *From Novice to Expert: Excellence and Power in Clinical Nursing Practice*. London: Addison-Wesley.
- Bloom, B.S. (1976) *Human Characteristics and School Learning*. New York: McGraw-Hill.
- Bowen, W.G. and Rudenstine, N.L. (1992) *In pursuit of the PhD*. New Jersey: Princeton University Press
- Brown, G. and Atkins, M. (1988) *Effective Teaching in Higher Education*. London: Routledge.

- Brown, G. and Atkins, M. (1990) *Effective Teaching in Higher Education* (2nd edition). London: Routledge.
- Brown, R. (1994) 'The 'Big Picture' about Managing Writing', in O. Zuber-Skerritt and Y. Ryan (eds) *Quality in Postgraduate Education*, London: Kogan Page: 90-109.
- Brown, S. and McIntyre D. (1993) *Making Sense of Teaching*. Buckingham: Open University Press.
- Bryman, A. (1988) *Quantity and Quality in Social Research*. London: Unwin Hyman.
- Bryman, A. (2001) *Social Research Methods*. Oxford: Oxford University Press.
- Bryman, A. and Cramer, D. (1994) *Quantitative Data Analysis for Social Scientists* (2nd edition). London: Routledge.
- Burgess, R.G. (1984) *In the Field*. London: Routledge.
- Burgess, R.G. (ed) (1985) *Strategies of Educational Research: Qualitative Methods*. London: Falmer Press.
- Burgess, R.G. (ed) (1994) *Postgraduate Education and Training in the Social Sciences*. London: Jessica Kingsley.
- Burgess, R.G. (1996) 'Trends and developments in postgraduate education and training in the UK', *Journal of Education Policy*, 1 (1): 125-132.
- Burgess, R.G. (ed) (1997) *Beyond the First Degree*. Buckingham: The Society for Research in Higher Education and Open University Press.
- Burgess, R.G., Band, S. and Pole, C.J. (1998) 'Developments in Postgraduate Education and Training in the UK', *European Journal of Education*, 33 (2): 145-159.
- Burgess, R.G., Pole, C.J., and Hockey, J. (1994) 'Strategies for Managing and Supervising the Social Science PhD', in R.G. Burgess (ed) *Postgraduate Education and Training in the Social Sciences*. London: Jessica Kingsley. 13-33.
- Byrne, D. (2002) *Interpreting Quantitative Data*. London: Sage.
- Charmaz, K. and Mitchell, R.G. (2001) 'Grounded Theory in Ethnography', in P. Atkinson, A. Coffey, S. Delamont, J. Lofland and L. Lofland. *Handbook of Ethnography*. London: Sage. 160-174.
- Clark, B.R. (ed) (1993) *The Research Foundations of Graduate Education: Germany, Britain, France, United States, Japan*. Oxford: University of California Press.
- Coffey, A. and Atkinson, P. (eds) (1994) *Occupational Socialization and Working Lives*. Aldershot: Avebury.
- Coffey, A. and Atkinson, P. (1996) *Making Sense of Qualitative Data: Complementary Research Strategies*. Thousand Oaks, CA: Sage.
- Collinson, J. (1998) 'Professionally trained researchers? Expectations of competence in Social Science doctoral research training', *Higher Education Review*, 31 (1): 59-67.

- Collinson, J. and Hockey, J. (1995) 'Sanctions and savings: some reflections on ESRC doctoral policy', *Higher Education Review*, 27 (3) 56-63.
- Collinson, J. and Hockey, J. (1997) 'The Social Science Training-Model Doctorate: student choice?', *Journal of Further and Higher Education*, 21 (3): 373-381.
- Committee of Vice-Chancellors and Principals (CVCP) (1986) *Academic Standards in Universities* (Reynolds Report). London: CVCP.
- Committee of Vice Chancellors and Principals (CVCP) (1988) *The British PhD*. London: CVCP.
- Connor, H. (1994) 'Doctoral Social Scientists and the Labour Market', in R.G. Burgess (ed) *Postgraduate Education and Training in the Social Sciences*. London: Jessica Kingsley Publishers: 167-181.
- Conrad, L. (1994) 'Gender and Postgraduate Supervision', in O. Zuber-Skerritt and Y. Ryan (eds) *Quality in Postgraduate Education*. London: Kogan Page. 51-58.
- Cooper, P. and McIntyre, D. (1996) *Effective Teaching and Learning*. Buckingham: Open University Press.
- Cresswell, J.W. (1995) *Research Design: Qualitative and Quantitative Approaches* (2nd edition). Thousand Oaks, CA: Sage.
- Cryer, P. (1996) *The Research Students' Guide to Success*. Buckingham: Open University Press.
- Cryer, P. (2000) *The Research Students' Guide to Success* (2nd edition). Buckingham: Open University Press.
- Deem, R. and Brehony, K.G. (2000) 'Doctoral Students' Access to Research Cultures – are some more equal than others?', *Studies in Higher Education*, 25 (2): 149-165.
- Delamont, S. (1989) 'Gender and British Postgraduate Funding Policy: a critique of the Winfield Report', *Gender and Education*, 1 (1): 51-57.
- Delamont, S. (2001) *Fieldwork in Educational Settings* (2nd edition). London: Falmer Press.
- Delamont, S. and Atkinson, P. (1995) *Fighting Familiarity: Essays on Education and Ethnography*. Cresskill, N.J.: Hampton Press.
- Delamont, S., Atkinson, P. and Parry, O. (1997a) *Supervising the PhD: A Guide to Success*. Buckingham: Open University Press and The Society for Research in Higher Education (SRHE).
- Delamont, S., Atkinson, P. and Parry, O. (1997b) 'Critical Mass and Doctoral Research: reflections on the Harris Report', *Studies in Higher Education*, 22, (3): 319-331.
- Delamont, S., Atkinson, P. and Parry, O. (2000) *The Doctoral Experience: Success and Failure in Graduate School*. London: Falmer Press.
- Delamont, S. and Eggleston, J. (1983) 'A necessary isolation?', in J. Eggleston and S. Delamont (eds) *Supervision of Students for Research Degrees*. Birmingham: British Educational Research Association (BERA). 23-46.

- Delamont, S., Parry, O. and Atkinson, P. (1997c) 'Critical Mass and Pedagogical Continuity: studies in academic habitus', *British Journal of Sociology of Education*, 18 (4): 533-549.
- Delamont, S., Parry, O. and Atkinson, P. (1998) 'Creating a Delicate Balance: the doctoral supervisor's dilemmas', *Teaching in Higher Education*, 3 (2): 157-172.
- Delamont, S. Parry, O., Atkinson, P. and Hiken, A. (1994) 'Suspended between two stools: doctoral students in British higher education', in A. Coffey and P. Atkinson (eds) *Occupational Socialization and Working Lives*. Aldershot: Avebury. 138-153.
- Denzin N.K. and Lincoln Y.S. (eds) (1994) *Handbook of Qualitative Research*, Thousand Oaks, CA: Sage.
- Dewey, J. (1922) *Human Nature and Conduct: The Nature of Deliberation*. New York: Modern Library Edition.
- Donmoyer, R. (2000) 'Generalizability and the Single Case Study', in R. Gomm, M. Hammersley and P. Foster (eds) *Case Study Method*. London: Sage. 45-68.
- Dreyfus, H.L. and Dreyfus, S.E. (1986) *Mind Over Machine*. New York: Free Press.
- Economic and Social Research Council (ESRC) (1989) *Research Training for the 1990s*. The Green Paper. Swindon: ESRC.
- Economic and Social Research Council (1991) *Postgraduate Training Guidelines*. Swindon: ESRC.
- Economic and Social Research Council (1993) *Board of Examiners for Research Competition 1993*. Report to the Training Board, 12 November. Swindon: ESRC.
- Economic and Social Research Council (1995) *Review of the Research Recognition Exercise*. Report to the Postgraduate Training Division. Swindon: ESRC.
- Economic and Social Research Council (1996) *Postgraduate Training Guidelines*. Swindon: ESRC.
- Economic and Social Research Council (1997) *Research Recognition Exercise: Subject Area Panel Guidance Notes*. Swindon: ESRC.
- Elton, L. (1994) 'Staff Development in Relation to Research', in O. Zuber-Skerritt and Y. Ryan (eds) *Quality in Postgraduate Education*. London: Kogan Page. 24-37.
- Elton, L. and Pope, M. (1989) 'Research Supervision: the value of collegiality'. *Cambridge Journal of Education*, 19 (3): 267-276.
- Eraut, M. (1994) *Developing Professional Knowledge and Competence*. London: Falmer Press.
- Filstead, W.J. (ed.) (1970) *Qualitative Methodology*. NY: Markham.
- Garfinkel, H. (1967) *Studies in Ethnomethodology*, Englewood Cliffs: Prentice Hall.
- Giddens, A. (1984) *The Constitution of Society*. Cambridge and Oxford: Polity Press and Blackwell Publishers Ltd..
- Glaser, B. and Strauss, A. (1967) *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago: Aldine.
- Gomm, R., Hammersley, M. and Foster, P. (eds.) (2000) *Case Study Method: Key issues, key texts*. London: Sage.

- Gomm, R., Hammersley, M. and Foster, P. (2000) 'Case Study and Generalization', in R. Gomm, M. Hammersley, and P. Foster (eds) *Case Study Method: Key issues, key texts*. London: Sage. 98-116.
- Gordon, T., Holland, J. and Lahelma, E. (2001) 'Ethnographic Research in Educational Settings', in P. Atkinson, A. Coffey, S. Delamont, J. Lofland and L. Lofland *Handbook of Ethnography*. London: Sage. 188-203.
- Gottlieb, N. (1994) 'Supervising the Writing of a Thesis', in O.Zuber-Skerritt and Y.Ryan (eds) *Quality in Postgraduate Education*. London: Kogan Page. 110-119.
- Grant, B. and Graham, A. (1994) 'Guidelines for Discussion: A Tool for Managing Postgraduate Supervision', in O. Zuber-Skerritt and Y.Ryan (eds) *Quality in Postgraduate Education*. London: Kogan Page. 165-177.
- Graves, N. and Varma, V. (eds) (1997) *Working for a Doctorate*. London: Routledge.
- Guba, E.G. and Lincoln, Y.S. (1994) 'Competing paradigms in qualitative research', in N.K. Denzin and Y.S. Lincoln (eds), *Handbook of Qualitative Research*, Thousand Oaks, CA: Sage. 76-90.
- Gundara, J. (1997) 'Intercultural Issues and Doctoral Studies', in N. Graves and V. Varma (eds) *Working for a Doctorate*. London: Routledge. 131-151.
- Hammersley, M. (1992) *What's wrong with Ethnography?* London:Routledge.
- Hammersley, M. and Atkinson, P. (1995) *Ethnography: Principles in practice* (2nd edition). London: Routledge.
- Hammersley, M. and Gomm, R. (2000) 'Case Study and Theory', in R. Gomm, M. Hammersley, and P. Foster (eds) *Case Study Method: Key issues, key texts*. London: Sage. 234-258.
- Hargreaves, D.H., Hester, S.K. and Mellor, F.J. (1975) *Deviance in Classrooms*. London: Routledge and Kegan Paul.
- Harris, M. (1996) *Review of Postgraduate Education*. Bristol: HEFCE, CVCP and SCOP.
- Hartley, J. (1997) 'Writing the thesis' in N. Graves and V. Varma (eds) *Working for a Doctorate*. London: Routledge. 96-112.
- Hartley, J. and Branthwaite, A. (1989) 'The psychologist as wordsmith: a questionnaire study of the writing strategies of productive British psychologists'. *Higher Education*, 18: 423-452.
- Hartley, J. and Fox, C. (2002) 'The viva experience: Examining the examiners'. *Higher Education Review*, 35 (1): 24-30.
- Hartley, J. and Jory, S. (2000) 'Lifting the veil on the viva: the experiences of psychology PhD candidates in the UK', *Psychology Teaching Review*, 9 (2): 76-90.
- Hartley, J. and Knapper, C.K. (1984) 'Academics and their Writing', *Studies in Higher Education*, 9 (2): 151-165.
- Heider, F. (1958) *The Psychology of Interpersonal Relations*. London: John Wiley and Sons.

- Henkel, M. and Kogan, M. (1993) 'Research Training and Graduate Education: The British Macro Structure' in B.R. Clark (ed), *The Research Foundations of Graduate Education: Germany, Britain, France, United States, Japan*. Oxford: University of California Press. 70-104.
- Hill, T., Acker, S. and Black, E. (1994) 'Research Students and their Supervisors in Education and Psychology' in R.G. Burgess (ed) *Postgraduate Education and Training in the Social Sciences*. London: Jessica Kingsley Publishers: 53-74.
- Hockey, J. (1991) 'The Social Science PhD: a literature review', *Studies in Higher Education*, 16 (3): 319-332.
- Hockey, J. (1994a) 'New Territory: problems of adjusting to the first year of a social science PhD', *Studies in Higher Education*, 19 (2): 177-190.
- Hockey, J. (1994b) 'Establishing Boundaries: problems and solutions in managing the PhD supervisor's role', *Cambridge Journal of Education*, 24 (2): 293-305.
- Hockey, J. (1995a) 'Change and the Social Science PhD: supervisors' responses', *Oxford Review of Education*, 21 (2): 195-206.
- Hockey, J. (1995b) 'Getting too close: a problem and possible solution in social science PhD supervision', *British Journal of Guidance and Counselling*, 23 (2): 199-210.
- Hockey, J. (1996a) 'Strategies and tactics in the supervision of UK social science PhD students', *Qualitative Studies in Education*, 9 (4): 481-500.
- Hockey, J. (1996b) 'Motives and Meaning amongst PhD Supervisors in the Social Sciences', *British Journal of Sociology of Education*, 17 (4): 489-505.
- Hockey, J. (1996c) 'A Contractual Solution to Problems in the Supervision of PhD Degrees in the UK', *Studies in Higher Education*, 21 (3): 359-371.
- Hockey, J. (1997) *A Complex Craft: United Kingdom PhD supervision in the social sciences. Research in Post-Compulsory Education*, 2 (1): 45-67.
- Jackson, C. and Tinkler, P. (2000) 'The PhD Examination: An Exercise in Community-building and Gate-keeping?', in I. McNay (ed) *Higher Education and its Communities*. Birmingham: SRHE and Open University Press, 38-50.
- James, W. (1890) *The Principles of Psychology*. (Vol. 1). New York: Holt.
- Johnston, S. (1997) 'Examining the Examiners: an analysis of examiners' reports on doctoral theses', *Studies in Higher Education*, 22 (3): 333-347.
- Jones, E., Kanouse, D., Kelley, H., Nisbett, R., Valins, S. and Weiner, B. (1971) *Attribution: Perceiving the Causes of Behaviour*. Chicago: General Learning Press.

- Lawton, D. (1997) 'How to succeed in Postgraduate Study', in N. Graves and V. Varma (eds) *Working for a Doctorate*. London: Routledge. 1-17.
- Lee, D. (1998) 'Sexual Harassment in PhD Supervision', *Gender and Education*, 10 (3): 299-312.
- Leiter, K. (1980) *A Primer on Ethnomethodology*. Oxford: Oxford University Press.
- Leonard, D. (1997) 'Gender Issues and Doctoral Studies', in N. Graves and V. Varma (eds) *Working for a Doctorate*. London: Routledge. 152-183.
- Leonard, D. (1998) 'Gender and International Graduate Studies', *Journal of International Education*, 9 (2): 26-34.
- Leonard, D. (2000) 'Transforming Doctoral Studies: Competencies and Artistry', *Higher Education in Europe*, 25 (2): 181-192.
- Lincoln, Y.S. and Guba, E.G. (2000) 'The Only Generalization is: There is No Generalization', in R. Gomm, M. Hammersley and P. Foster (eds) *Case Study Method*. London: Sage. 27-44.
- Lindén, J. (1999) 'The contribution of Narrative to the Process of Supervising PhD Students', *Studies in Higher Education*, 24 (3): 351-369.
- MacDonald, M. (1977) *The Curriculum and Cultural Reproduction II*, in *Educational Studies: a Second Level Course*, E202, Unit 19. Milton Keynes: Open University Press.
- Macdonald, M. (1997) *Craft Knowledge in Medicine: an interpretation of teaching and learning in apprenticeship*. PhD Thesis, Open University.
- Macmillan, A. (1995) 'All genned up and nowhere to go', *Times Higher Educational Supplement*, 15.9.95: 18.
- Marsh, C. (1982) *The Survey Method: The contribution of surveys to sociological explanations*. London: George Allen and Unwin.
- Maso, I. (2001) 'Phenomenology and Ethnography', in P. Atkinson, A. Coffey, S. Delamont, J. Lofland and L. Lofland *Handbook of Ethnography*. London: Sage. 136-144.
- Mason, J. (1996) *Qualitative Researching*. London: Sage.
- McAlees, R. and Welsh, J. (1983) 'The Supervision of Postgraduate Research Students: a review of recent developments', in J. Eggleston and S. Delamont (eds) *Supervision of Students for Research Degrees*. Birmingham: British Educational Research Association.
- McNay, I. (1995) 'From the Collegial Academy to Corporate Enterprise: The Changing Cultures of Universities', in T. Schuller (ed) *The Changing University?* Buckingham: The Society for Research in Higher Education and Open University Press. 105-115.

- McNay, I. (ed) (2000) *Higher Education and its Communities*. Buckingham: The Society for Research in Higher Education and Open University Press.
- Miles, M.B. and Huberman, A.M. (1994) *Qualitative Data Analysis*. London: Sage.
- Mitchell, J.C. (2000) 'Case and Situation Analysis', in R. Gomm, M. Hammersley and P. Foster (eds) *Case Study Method*. London: Sage. 165-186.
- Moser, C.A. and Kalton, G. (1971) *Survey Methods in Social Investigation*. London: Heinemann.
- Moses, I. (1985) *Supervising Postgraduates*. Higher Education Research and Development Society of Australasia (HERDSA) Green Guide No. 3. Sydney: HERDSA.
- Moses, I. (1994) 'Planning for Quality in Graduate Studies', in O. Zuber-Skerritt and Y. Ryan (eds) *Quality in Postgraduate Education*. London: Kogan Page. 3-13.
- Murray, R. and Lowe, A. (1995) 'Writing and Dialogue for the PhD', *Journal of Graduate Education*, 1, 103-109.
- Natanson, M. (1962) 'Introduction', in A. Schutz *The Problem of Social Reality*. London: Kluwer Academic Publishers: XXV-XLVII.
- Niglas, K. (2000) 'Combining quantitative and qualitative approaches'. Paper to the European Conference on Educational Research (ECER), Edinburgh, 20-24 September 2000.
- O'Brien, P.K. (1995) 'The reform of doctoral dissertations in humanities and social studies'. *Higher Education Review*, 28 (1): 3-19
- Oppenheim, A.N. (1992) *Questionnaire Design, Interviewing and Attitude Measurement* (2nd edition). London: Pinter.
- Parry, O., Atkinson, P. and Delamont, S. (1994) 'Disciplinary Identities and Doctoral Work', in R.G. Burgess (ed) *Postgraduate Education and Training in the Social Sciences*. London: Jessica Kingsley: 34-52.
- Parry, O., Atkinson, P. and Delamont, S. (1997) 'Research Note: The Structure of PhD Research', *Sociology*, 31 (1): 121-129.
- Pearson, R., Seccombe, I., Pike, G., Holly, S. and Connor, H. (1991) *Doctoral Social Scientists and the Labour Market*. ESRC Research Report. Swindon: ESRC.
- Phillips, E.M. (1983) *The PhD: Learning To Do Research*. PhD Thesis. University of London.
- Phillips, E.M. (1994) 'Quality in the PhD', in R. G. Burgess (ed) *Postgraduate Education and Training in the Social Sciences*. London: Jessica Kingsley. 125-146.
- Phillips, E.M. and Pugh, D.S. (1987) *How to get a PhD*. Buckingham: Open University Press.
- Phillips, E.M. and Pugh, D.S. (2000) *How to get a PhD* (3rd edition). Buckingham: Open University Press.

- Pole, C. (1998) 'Joint Supervision and the PhD: safety net or panacea?', *Assessment and Evaluation in Higher Education*, 23 (3): 259-271.
- Pole, C. (2000) 'Technicians and scholars in pursuit of the PhD: some reflections on doctoral study', *Research Papers in Education*, 15 (1): 95-111.
- Pole, C. and Lampard, R. (2001) *Practical Social Investigation*. London: Prentice Hall.
- Pole, C.J., Sprokkereef, A., Burgess, R.G. and Lakin, E. (1997) 'Supervision of Doctoral Students in the Natural Sciences: expectations and experiences', *Assessment and Evaluation in Higher Education*, 22 (1): 49-63.
- Pollner, M. and Emerson, R.M. (2001) 'Ethnomethodology and Ethnography', in P. Atkinson, A. Coffey, S. Delamont, J. Lofland and L. Lofland *Handbook of Ethnography*. London: Sage. 118-135.
- Robson, C. (1993) *Real World Research*. Oxford: Blackwell.
- Robson, C. (2002) *Real World Research* (2nd edition). Oxford: Blackwell.
- Rock, P. (2001) 'Symbolic Interactionism and Ethnography', in P. Atkinson, A. Coffey, S. Delamont, J. Lofland and L. Lofland *Handbook of Ethnography*. London: Sage. 26-38.
- Rudd, E. (1985) *A New Look at Postgraduate Failure*. Guildford: The Society for Research in Higher Education and National Foundation for Educational Research: Nelson.
- Salmon, P. (1992) *Achieving a PhD*. Stoke-On-Trent: Trentham Books.
- Sayer, A. (1992) *Method in Social Science: a realist approach* (2nd Ed). London: Routledge.
- Schofield, (2000) 'Increasing the generalizability of qualitative research', in R. Gomm, M. Hammersley, and P. Foster (eds) *Case Study Method: Key issues, key texts*. London: Sage. 69-97.
- Schön, D. (1983) *The Reflective Practitioner*. New York: Basic Books.
- Schön, D. (1991) *The Reflective Practitioner* (Revised edition). Aldershot: Ashgate.
- Schutz, A. (1962) *Collected Papers I: The Problem of Social Reality*. M. Natanson (ed). London: Kluwer Academic Publishers.
- Schutz, A. (1964) *Collected Papers II: Studies in Social Theory*. A. Brodersen (ed). London: Kluwer Academic Publishers.
- Sharp, R. and Green, A. (1975) *Education and Social Control*. London: Routledge and Kegan Paul.
- Shipman, M. (ed.) (1985) *Educational Research, Principles, Policies and Practice*. London: Falmer.
- Shipman, M. (1997) *The Limitations of Social Research*. London: Addison Wesley and Longman.
- Simons, H. (1996) 'The Paradox of Case Study', *Cambridge Journal of Education*, 26 (2): 225-40.
- Slavin, R.E. (1987) 'Mastery Learning Reconsidered'. *Review of Educational Research*, 57: 175-213.

- Smith, B. (2001) ' (Re) Framing Research Degree Supervision as Pedagogy' in A. Bartlett and G. Mercer *Postgraduate Research Supervision: Transforming (R) Elations*, Oxford: Peter Lang. 25-41.
- Smith, J.K. and Heshusius, L. (1986) 'Closing down the conversation: The end of the quantitative-qualitative debate among educational inquirers'. *Educational Researcher*, 15: 4-12.
- Spradley, J.P. (1979) *The Ethnographic Interview*. New York: Holt, Rinehart and Winston.
- Stake, R.E. (1995) *The Art of Case Study Research*. London: Sage
- Stake, R.E. (2000) 'The Case Study Method in Social Inquiry' in R. Gomm, M. Hammersley and P. Foster (eds) *Case Study Method*. London: Sage. 19-26.
- Strauss, A. and Corbin, J. (1998) *Basics of Qualitative Research*. London: Sage.
- Swinnerton-Dyer, P. (1982) Report to the Advisory Board for the Research Councils (ABRC) of the Working Party on Postgraduate Education. Cmnd 9537. London: HMSO.
- Tight, M. (1991) *Part-time Postgraduate Study in the Social Sciences*. A report. Swindon: ESRC.
- Tinkler, P. and Jackson, C. (2000) 'Examining the Doctorate: institutional policy and the PhD examination process in Britain', *Studies in Higher Education*, 25 (2): 167-180.
- Titchen, A. (1998) *Professional Craft Knowledge in Patient Centred Nursing and the Facilitation of its Development*. DPhil Thesis. University of Oxford: Linacre College.
- Torrance, M.S. and Thomas, G.V. (1994) 'The Development of Writing Skills in Doctoral Research Students', in R.G. Burgess (ed) *Postgraduate Education and Training in the Social Sciences*. London: Jessica Kingsley. 105-123.
- Vroeijenstijn, A.I. (1995) 'Government and university: opponents or allies in quality assurance?', *Higher Education Review*, 27 (3): 18-36.
- Weider, D.L. (1974) 'On meaning by rule', in J. Douglas (ed) *Understanding Every Day Life*. Chicago: Aldine. 107-135.
- Weiner, B. (1971) 'Perceiving the Causes of Behaviour', in E. Jones, D. Kanouse, H. Kelley, R. Nisbett, S. Valins and B. Weiner (eds) *Attribution*. Chicago: General Learning Press.
- Welsh, J. M. (1978) 'The supervision of postgraduate research students', *Research in Education*, 19: 77-86.
- Welsh, J.M. (1979) *The First Year of Postgraduate Research Study*. Guildford: The Society for Research in Higher Education.
- Welsh, J.M. (1981) 'The PhD student at work', *Studies in Higher Education*, 6 (2): 159-162.
- Welsh, J.M. (1982) 'Improving the Supervision of Postgraduate Students', *Research in Education*, 27: 1-8.

- Whitehead, A.N. (1946) *Science and the Modern World*. New York: Mentor-Book.
- Whittle, J. (1994) 'A Model for the Management of Research Degree Supervision in a Post-1987 University', in O. Zuber-Skerritt and Y. Ryan (eds) *Quality in Postgraduate Education*. London: Kogan Page: 38-50.
- Whyte, W.F. (1955) *Street Corner Society*. Chicago: University of Chicago Press.
- Winfield, G. (1987a) *The Social Science PhD*. The ESRC Enquiry on Submission Rates. The Report. London: Economic and Social Research Council (ESRC).
- Winfield, G. (1987b) *The Social Science PhD*. The ESRC Enquiry on Submission Rates. The Background Papers. London: ESRC.
- Wright, J.E. (1992) *Selection, supervision and the academic management of research leading to the degree of PhD*, PhD thesis, University of Nottingham.
- Wright, J. and Lodwick, R. (1989) 'The Process of the PhD: a study of the first year of doctoral study', *Research Papers in Education*, 4 (1): 22-56.
- Wright, T. and Cochrane, R. (2000) 'Factors Influencing Successful Submission of PhD Theses', *Studies in Higher Education*, 25 (2): 181-195.
- Yin, R.K. ((1994) *Case Study Research: Design and Methods (2nd edition)*. Thousand Oaks, CA: Sage.
- Young, M.F.D. (1971) 'An approach to the study of curricula as socially organised knowledge', in M.F.D Young (ed) *Knowledge and Control: New Directions for the Sociology of Education*. London: Collier-Macmillan. 19-46.
- Youngman, M. (1994) 'Supervisors' and Students' Experiences of Supervision', in R.G. Burgess (ed) *Postgraduate Education and Training in the Social Sciences*. London: Jessica Kingsley. 75-104.
- Zuber-Skerritt, O. and Ryan, Y. (eds) (1994) *Quality in Postgraduate Education*. London: Kogan Page.
- Zuber-Skerritt, O. (1994) 'Improving the Quality of Postgraduate Supervision through Residential Staff Development Programmes', in O. Zuber-Skerritt and Y. Ryan (eds) *Quality in Postgraduate Education*. London: Kogan Page. 77-89.

Chapter 2: Selection of University, Graduate School, Faculty, School and Department Supervisory Codes of Practice surveyed (applicable to postgraduate research supervision across all fields of study).

Institution:	Dated:	Title
Aberdeen	1997	Code of Practice: Postgraduate Research Students
Bristol	1997	University Statement of Good Practice for Research Students
Cambridge Graduate School	1997	Code of Good Practice for Research Students
Exeter	1996	Notes for the Guidance of Students Registered for Postgraduate Degrees, their Tutors and Supervisors
London School of Economics	1991	Code of Practice for MPhil/PhD Students and their Supervisors
Manchester	1996	Academic Standards: Code of Practice (3 rd Edition)
Salford	1997	Code of Practice for the Conduct of Postgraduate Research Degree Programmes
Stirling	1997	Guidelines for the Supervision of Postgraduate Research Students
University College of London Graduate School	1996	Code of Practice for Graduate Research Degrees
University College of Wales, Cardiff	1994	Academic Quality System Management, Part 2
	1996	A message to PhD students and their supervisors (from the Graduate Research Board)
York	1992	Notes of Guidance for MPhil/DPhil Students, Supervisors and Examiners

Chapter 2: Selection of University, Graduate School, Faculty, School and Department Supervisory Codes of Practice surveyed (applicable to postgraduate research supervision across all fields of study).

(continued)

Selection of Social Science Faculty/School and Departmental Codes of Practice:

Institution:	Subject:	Date:	Title:
Aberdeen	Economics	1997/8	Guidebook and Code of Practice for Postgraduate Study
Birmingham	Education and Development Administration	1997	Code of Practice on Admission, Monitoring and Assessment of Research Students
Exeter	Education	1997	Code of Good Practice for the Supervision of Postgraduate Research Students in the School of Education; Regulations Governing Degree of Doctor of Philosophy, Notes for the Guidance of Students registered for Postgraduate Degrees, their Tutors and Supervisors
Lancaster	History	1997	Code of Practice for Research Supervisors
Liverpool	Latin American Studies	Undated	Code of Practice for the Supervision of Research Students
London School of Economics	Sociology	1997	Recommended Good Practice for Research Students and Supervisors
Warwick	Continuing Education	1997	Supervisors
	Education	1997	Code of Practice on the Supervision of MPhil/PhD Students

Student Survey Design: Some notes on the category and coding system

The survey data consisted of the 318 usable responses to the four open-ended questionnaire questions:

- i) What do you most value about what your supervisor does for you?
- ii) Why do you value these things?
- iii) Is there anything else that your supervisor could do which would be valuable to you?
- iv) Why would these be valuable?

In order to answer the research questions (Chapter 4), analysis required quantification of what students said in terms of categories generated in response to the data. Thus, the system of analysis was developed on the basis of a random sample of thirty questionnaires, which was considered a feasible number and sufficient for identifying the initial general categories. These were then used for analysing the complete set of responses.

Questions 1 and 3 asked students for descriptions, Question 1 about valued 'positive' features of supervisors, and Question 3 about what was desired but not experienced (which I have called 'negative' responses). Questions 2 and 4 asked for explanations of why these things were valued. Category systems were first developed for Questions 1 and 3. Subsequently it was found that these same systems could also be used reliably, with negligible modification, for Questions 2 and 4.

Inspection of the responses showed that descriptions of what was valued related to two broad categories: *activities* in which supervisors engaged, and supervisor *dispositions*. The systems developed for categorising each of these are outlined below.

Description categories: What students' valued about their supervisors' activities

Under 'supervisory descriptions', five coding categories were developed which reflected the comments students made about:

'Reading and commenting on written work' (CW); 'Giving help and advice' (HA); 'Managing the thesis' (MAN); and 'Other' (OTH)

Reading and commenting on written work' (CW): mentions of supervisory assessments of the student's written work, described in such terms as 'comments on written work', 'critique' or 'feedback'.

Sub-categories:

General (CWGEN), eg 'he gives me valuable feedback'
Reading qualities (RQUL), eg 'close reading of my work'
Commenting qualities (CQUL), eg 'a searching critique of my work'
Focus of comments (FOCUS), eg 'comments on the progress/direction of my research'
Speed of return of comments (SPD), eg 'feedback on work within two weeks'
Form in which comments were made (FORM), eg 'oral and written'
Type of written work commented on (TYPE), eg 'various articles I have written'

'Giving help and advice' (HA): mentions of supervisory actions linked to help, advice, guidance, teaching, training, provision of opportunities etc.

Sub-categories:

Two-way discussion (DISC), eg 'we discuss the theoretical issues'
One-way provision of information (INFO), eg 'She has many practical suggestions'
Creating opportunities (OPPS), eg 'provides introductions and encourages me to talk to other academics in my field'
Adopting a cautionary role (CHKS), eg 'keeps me on track'

Managing the thesis (MAN): mentions of supervisory actions in terms of time management, setting of deadlines, shorter term objectives or targets for the work, and structuring of student contact.

Sub-categories:

Supervisor action (ACT), eg 'she helps to make sure I have a timetable'

Supervisor inaction (INACT), eg 'he does not chase me up'

Supervisor's management style (STYLE), eg 'she gives me space and time to develop my own ideas without leaving me entirely to my own devices'

Description categories: What students' valued about their supervisors' dispositions

Under 'supervisory dispositions', five coding categories were developed which reflected the comments students made about:

'Abilities' (ABS); 'Process' (PRO); 'Availability' (AV); 'Relationships' (REL); 'Other' (OTH).

Supervisors' abilities (ABS): mentions of skills, knowledge, understandings, awareness, experience, attitudes, or reputations.

Sub-categories:

Knowledge (KNOW), eg 'He knows more than anybody else about my subject'

Skills (SKILL), eg '[he has] skills as a researcher and a writer'

Understandings (UND), eg 'an awareness of the problems and pitfalls of research'

Experience' (EXP), eg 'based on the research he has done and on the large numbers of students..guided through a PhD in the past'

Reputations (REP), eg 'has a good reputation with past and present students'

Compensatory attributes (CATT), eg 'where the supervisor's expertise is less, [he] puts me in touch with those more qualified to comment'

Match' (MAT), eg 'a close fit between the expertise of my supervisor and the topic I am studying'

Process (PRO): mentions of supervisor attributes such as conscientious, enthusiastic, interested, encouraging, caring, honest or approachable.

Sub-categories:

Interested (INTS), eg 'has a genuine interest in my work'
encouraging (ENC), eg 'gives moral support and general encouragement'
Supportive (SUPP), eg 'provides a tremendous amount of support'
Concerned (CONC), eg 'empathy..and sympathy for my problems'

Availability (AV): mentions of availability, making time, open door, instant access.

Sub-categories:

Availability in general (AVGEN), eg 'I value his availability'
Formal time (FRM), eg 'gives regular supervision'
Flexible time (FLEX), eg 'always makes himself available when I request his help'
Amount of time (AMNT), eg 'not just a quick half hour'
Quality time (QUAL), eg 'sessions..not interrupted by phone calls'

Relationship (REL): mentions of rapport, trust, respect, collegiality, friendship.

Sub-categories:

Rapport (RAP), eg 'mutual understanding and respect'
Type of relationship (TYPE), eg 'I am treated as a colleague'
Qualities of relationship (QUAL), eg 'being approachable'

Explanatory categories: why students valued their supervisors' activities and dispositions

Under 'student explanations', five coding categories were developed for each of the main categories outlined for supervisor's activities and dispositions, reflecting student comments:

'Personal needs' (PNEED); 'External needs' (XNEED); 'Beneficial outcomes' (OUT); 'Evidenced by' (EVBY); and 'Other' (OTH).

Sub-categories:

Student cognitive entry characteristics (STCG), eg 'awful grammer and spelling'
Student affective entry characteristics (STAFF), eg 'increases my confidence'

Task difficulty (TD), 'difficult to stand back from ones own work'
Opportunity (OPP), eg 'there are few other people to discuss your work with'

Additional explanatory categories were often necessary for each of the main categories:

Supplementary explanatory 'outcome' categories: *Reading and commenting on written work*

Standards and criteria (STND), eg 'my work is validated by the supervisor as part of the academic establishment'
Improvement (IMP), eg 'told why and how I can improve the work'
Use of comments (USE), eg 'enables me to explore and emphasise new aspects of the research'
Product (PROD), eg 'I will produce a more academically rigorous thesis'

Supplementary explanatory 'outcome' categories: *Help and advice*

Qualities of the work (QUAL), eg 'helps my thesis hang together'
Progress in the work (PROG), eg 'one third of the thesis is written up already'
Student autonomy (AUTO), eg 'fosters independence'

Supplementary explanatory 'outcome' categories: *Managing the thesis:*

Student autonomy (AUTO), 'promotes independent study'
Ownership (OWN), eg 'I know that the thesis is my work and contains my ideas'

Supplementary explanatory 'outcome' category: *Abilities*

Supervisor action (SACT), eg 'My supervisor is very knowledgeable about my chosen area..[as a result] she often passes on articles etc. which is extremely helpful'

Supplementary explanatory 'personal need' category: *Process*

Relationship (REL), eg student need for 'the development of a friendly working relationship'

Supplementary explanatory 'outcome' categories: *Availability*

Discussion (DISC), eg 'to discuss ideas, problems and issues'

Help and Advice (HA), eg 'to chat informally, getting advice and encouragement in a relaxed atmosphere'

Supplementary explanatory 'outcome' categories: *Relationship*: none

Contexts

Under 'Contexts', five coding categories were developed: mentions of the contexts in which their supervisions took place; the presence or absence of contextual conditions facilitating or constraining what students did, including joint supervision, provision of good working environments by departments, and a student knowing the supervisor well from his or her undergraduate or postgraduate studies; supervisors' heavy work loads, poor departmental facilities, student poverty and the adverse effects of ESRC policies. Three sub-categories were created under the category 'context':

General (GEN), eg 'I have two supervisors..one to whom I am accountable and who is the specialist in my subject area. The second is there for additional support in a more pastoral role'

Facilitates (FAC), eg 'My supervisor was also my undergraduate tutor, so we have known each other for a long time'

Constrains (CON), eg 'he is always so busy that I feel I am taking up too much of his time'

Issues related to coding procedures

Across all the questions, the coding was complicated because the strategy adopted to collect the information left it open to the student to decide what they would say and how they would say it. This strategy had the clear advantage of allowing me to establish student relevancies, priorities and structures, but it also built in the potential

for misinterpretation by the coder. For example, some student responses were in note form with few explicit linkages between statements. In the absence of linking words, decisions about whether a sentence should be coded as a description or as an explanation were up to the coder. Others provided longer, more detailed accounts where the problems were related to the complexity of the syntax. Most of these were resolved by reorganisation, taking care to preserve the meaning. In the following example, the syntax confused the issue of what was valued and why:

I find my supervisor valuable because he does not pretend to be an expert on my subject but acts as well-informed "general reader", pointing out areas where I have assumed too much and not developed my argument beyond the implied (213: yr3).

The student's use of 'because', signalling an explanation, was misleading for coding purposes as it did not follow on from a particular valued activity or disposition. In this case, the sentence was reformulated to allow a coding as follows: 'My supervisor is not, and does not pretend to be, an expert in my subject area' - coded as a *disposition* of the supervisor. The beneficial *outcome* was that he 'acts as a well informed general reader, pointing out areas where I have assumed too much and not developed my arguments beyond the implied'.

Other issues arose with the explanations given by students in Question 4. Depending on the syntax used by the student, a need or outcome could be expressed positively or negatively and if, as a result of a supervisory action or inaction which was *not* valued, a need has *not* been met, that need could be expressed by the student as an 'outcome' rather than as a causal antecedent. One student wanted her supervisor to return her written work with comments more quickly. She explained that 'it can be demoralising and delay your progress if you have to wait a long time for feedback' If she had expressed this explanation positively (as in a response to question 2), it would have

read 'I value the speed with which my supervisor returns my written work with comments because it boosts morale and enables progress'. 'Boosting morale' would have been coded as a 'personal need', a causal antecedent, not an outcome. As a response to question 4, therefore, I coded 'it can be demoralising' as a 'personal need' and 'delay to progress' as an 'outcome', albeit a negative one, where the student was looking ahead to the state of her project in the future. To ensure that the coding of explanations was consistent across questions 2 and 4, all such responses were treated with similar care, transposing the negative form of a response into the positive form wherever the distinction between an 'outcome' and a 'personal need' was unclear.

Units of analysis for numerical coding

Descriptions

The main issue for coding descriptions was whether or not students included positive or negative descriptions to be placed into one or another of the categories provided: supervisor activities, dispositions or relationships. Where more than one response was recorded under the same category, these were recorded by *one* tick. All that was required for the purposes of the statistical study was to know *whether or not* student responses included *mention* of these categories. Each category ticked was given a separate line to allow for multiple explanations.

Explanations

Each instance of an explanation linked to a specific activity or group of activities in the same category (by the student explicitly or as interpreted by the coder) was coded in the following way. For each category ticked, explanations linked to *any* or all of the

specific activities mentioned by the student were listed opposite the ticked activity or disposition individually in a separate row under the appropriate category, 'Outcomes' (OUT), 'Personal need' (PNEED), 'External need' (XNEED) 'Evidenced by' (EV) or 'Other' (OTH). The purpose of coding every explanation was to determine whether or not patterns were identifiable between the *types* of activities mentioned and the various *types* of explanations to which these were linked.

Chapter 4: Student survey letter to ESRC research students

25 June 1993

Dear student

I am a part-time PhD student in the Department of Sociology at Warwick University. My thesis involves the study of the knowledge and thinking which good supervisors use in their supervision. The aim of the study is to elicit and understand good practices in PhD supervision with a view to its possibly being shared amongst supervisors, especially those with less experience.

First I need to define what is to count as *good* supervisors and *good* supervision, and this is where I need some help from experienced students. The ESRC has kindly agreed to my contacting you and other ESRC students for help.

My question to you is: what do you value most about what your supervisor does for you, and why do you value it? If for any reason you find this a difficult question to answer then an alternative question is: what ideally would you value your supervisor doing for you, and why?

The ESRC have asked me to say that you are under no obligation to them to respond to these questions, but, of course, it would be very helpful to me if you could. I realise how busy you will be at this time of year keeping up to schedule with your own studies so I have enclosed a stamped addressed envelope and a proforma with my name and address on it. If the proforma is folded appropriately, the name and address will show clearly in the envelope window. You should use the proforma to respond, providing as long or as short a response as you have time for.

Even if you feel too busy to respond to my question(s), it would be of help if you could return the blank proforma to indicate that you have received it. Returns should be made if at all possible by **31 July 1993**.

Please note that my thesis is focussed on the **positive features** of supervisors and supervision. I have therefore felt it unnecessary to stress anonymity or confidentiality. However, if for reasons of your own you wish your response to remain anonymous, or to be regarded as confidential, please make sure you tick the appropriate box **on the proforma**.

Thank you in advance for your help. I wish you every success with your own PhD project, and I very much look forward to hearing about your experiences or ideas of good supervisory practice.

Yours sincerely

Anne McIntyre

enc

GOOD PHD SUPERVISION

PROFORMA

FOR RETURN BY 31 JULY 1993 TO:

**Mrs Anne McIntyre
Department of Sociology
University of Warwick
COVENTRY
CV4 7AL**

Please tell me something in answer to some or all of the following questions:

1. What do you most value about what your supervisor does for you?
2. Why do you value these things?
3. Is there anything else that your supervisor could do which would be valuable to you?
4. Why would these be valuable?

If you can provide any concrete examples of good practices, these would be most welcome.

Please feel free to use the back of the proforma or extra sheets of paper if you need them.

I wish my response to be anonymous/confidential (Please delete the inappropriate response and place a tick in the box opposite).

PhD/PRO NO.

Chapter 6: letter approaching supervisors to participate in the case studies

6 October 1999

Dear Professor/Dr

I am a part-time PhD student in the Department of Sociology at the University of Warwick doing research on PhD Supervision in the Social Sciences. The primary aim of my research is to identify principles of good supervision and my aspiration is to help develop training and staff development activities for inexperienced supervisors.

In the summer of 1993, the ESRC agreed to my writing to all ESRC research students who had started their PhD studies in 1990, 1991 and 1992. One aim for this preparatory study was to identify students' criteria for 'good' supervision. I invited them to tell me about the activities of their supervisors which they had most valued and to say why these were valued. Many students seemed pleased to have the opportunity to comment positively and many of them named their supervisors.

My research has now reached the stage where I need the help and advice of at least six supervisors who have met all their students' criteria. I wondered therefore whether you, as one such supervisor, would be prepared to help by meeting with me for about an hour at a time of your choosing.

One thing I should mention is that I used to be an ESRC employee working in the Postgraduate Training Division (I retired in November, 1997). My PhD research is in no way directly connected to my previous job nor is it designed to inform ESRC decision-making (although it would be nice to think that, once completed, it would sensitise ESRC policies). The ESRC have insisted that all ESRC students and supervisors who are approached as part of my study should be clearly informed that they are under no obligation from the ESRC to participate.

If you are willing to talk to me, I would be very grateful for an indication from you of some dates and times most convenient to you for a meeting, preferably in late October or November. My e-mail address is: annemcintyre@compuserve.com. Alternatively you might prefer to use the enclosed proforma and stamped addressed envelope.

I know that protocols differ in universities and departments on the question of access of 'outsiders' to information provided by, for example, staff and students. I would therefore appreciate your taking the decision about whether or not to forward a copy of this letter to the appropriate authority (copy enclosed). I look forward to hearing from you.

Yours sincerely

Anne McIntyre

encs

Supervisor case studies: proforma accompanying letter of introduction

PhD Study: The Knowledge-in-use of Expert and Experienced PhD Supervisors in the Social Sciences

PROFORMA FOR SUPERVISORS

Please complete and return this proforma to:

**Mrs Anne McIntyre
Department of Sociology
University of Warwick
Coventry
CV4 7AL**

Please tick the appropriate response.

- I am unable to meet with you as you suggest.
- I am willing to meet with you. The following dates and times would be convenient for a meeting:

Date	Time	Place
i)		
ii)		
iii)		

Your name, title and address (if not correct on my correspondence)

Tel no:

E-mail:

Supervisor case study profiles: September 1999-March 2000

Case Study (CS)	Supervisor title	University	Subject	Gender	Student and year of PhD study
CSA	Professor	Midlands1	Geography	m	Owen (1) Peter (2) David (1)
CSB	Professor and professional researcher (joint)	Midlands1	Psychology	f/f	Lesley (2)
CSC	Doctor	South East	Education	m	Sara (1)
CSD	Professor	South East	History	f	Mora (3)
CSE	Professor	South East	Sociology	m	Vahdet (3)
CSF	Doctor	Midlands2	Politics	m	Mark (2)