

# 2

## GETTING STARTED: THE PRACTICALITIES OF DOING RESEARCH

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### **AIMS OF THIS CHAPTER**

In this chapter we describe the practical 'nitty-gritty' of doing research and consultancy in healthcare settings. In particular, we address issues related to five aspects of carrying out research or consultancy:

- (i) Working with colleagues.
- (ii) Obtaining funding.
- (iii) Obtaining ethical approval.
- (iv) Managing a project.
- (v) Reporting results and dissemination.

### **WORKING WITH COLLEAGUES**

Research, teaching, training and consultancy frequently involve working both with other psychologists and professionals from other disciplines. Colleagues may enter the working relationship with different sets of values, adhering to different ethical or professional codes and research practices, necessitating a negotiated agreement concerning joint working.

The number of collaborations and working relationships a psychologist may be involved in at any one time can be considerable. Multiple roles may bring conflict, for example, the conflicting demands of being both a practitioner and researcher, or acting as a consultant and an employee and working for a variety of clients, who could be individuals, groups or organisations, patients, health care staff, managers or policy-makers. In all of this there will be challenges about drawing boundaries and managing finite amounts of time and energy. Good communication skills are of key importance in managing the challenges inherent in all of these situations.

*Team working*

Your work may lead you to become a temporary or 'permanent' member of a variety of teams, for example, teams of researchers, care providers, consultants, evaluators, or a combination of these. For each group, it is important to clarify your status. Is the group of your own formation, or have you been asked to join an already existing group, for example, as a consultant or as a trainer contributing your own particular knowledge and skills? Are you perceived by others as a leader, organiser, or as an 'agent' of the person who was instrumental in arranging your membership of the group, for example, a consultant might ask you to collect data in a clinic, but may not have informed any other members of the team? Might the position of the person who asked you to join the team oblige you to weight your view, or can you act freely and independently? How does your agenda fit it with the priorities of others in the group? It will be helpful to clarify your role (for example, as researcher, trainee, trainer, evaluator, observer, consultant), the timescale of your involvement, and the agenda and objectives of others within the group at an early stage. If you cannot perceive or negotiate your role, you probably do not have a useful place in the group and may well be wasting your and everyone else's time.

Each person should have a clear function in relation to the project. However, some functions may need to be shared, and roles should be 'understudied' in case of absence or other difficulty. Ideally, the successful completion of the project should never depend upon the continued involvement of any one individual, but in practice this is hard to realise. Downie and Calman (1998) warn that research projects can alter relationships within a team and may divide loyalties. Whenever possible, decisions concerning the project should be made collectively. Ongoing, regular communication with all those involved is vital for the life and progress of the project.

*Organising research*

It is often necessary to 'sell' a proposed piece of work to colleagues and other members of staff. Persuasion may be needed at several different levels in the organisational hierarchy, and the message will need to be tailored to appeal to each audience. It is sensible to go through the following three stages: firstly, to explain the rationale for the proposed project; secondly, to listen and respond to the reactions of others to the initial ideas; thirdly, to present and defend a more detailed proposal and, lastly, to get agreement and commitment (Robson, 2002).

Even if the aims of the project have been agreed, there are likely to be different agendas for the people engaged in the work. Differences in opinion and conflicts of values and interests are inevitable throughout the life of a project. The protocol for the research may require participants to change their working routines. These changes may be considered irksome

or in some cases even morally wrong by some of the people involved, especially if there are team members who do not fully share or own the vision and aims of the project, or who do not feel fully involved. There may be conflicting priorities within the team, for example, in response to time pressures; some health care workers may feel that it is more important to offer high quality standard care than to collect a full set of data. It may be necessary to compromise the research design or the choice of measures in order to maintain the goodwill of colleagues and to provide the best conditions for participants. Once again, communication and interpersonal skills are absolutely crucial.

#### *Acting as an advisor or consultant to a project*

The task of advisor or consultant is to 'give away', trade or sell one's knowledge, skills and experience. This may be in an informal or more formal capacity and does not necessarily involve payment. One's participation may be a favour, for the goodwill that will be generated, or it may be paid for in kind. In order to avoid the dangers of misuse and misapplication inherent in the giving and receiving of advice, it is important to seek an early clarification of your status and to agree this status with all members of the group. Do your 'clients' have sufficient knowledge, skills and experience to use the advice appropriately? Are they sufficiently committed to the proposed activity or is the choice to seek advice merely tokenism? In relation to research advice, a whole series of issues needs to be explored with a view to ensuring that the research sophistication of the group is sufficient to carry the project through successfully. These issues include the research agenda, possible methodologies, likely methods of reporting, informed consent and confidentiality.

Tension between the values of those involved in a project may be more acute in the case of paid consultation. There may be issues concerning the topic of the proposed project, the methods to be employed or the ways in which the results might be used. Research workers cannot morally detach themselves from the design or results of research in which they have been involved (Downie & Calman, 1998). Advisors and consultants must take full responsibility for the implications of both the process of the research and the outcome. This may necessitate withdrawal from a project at an early stage.

When acting as an advisor or consultant, one's involvement is going to be time limited. Some thought and discussion should be given to the likely time commitment and to the point at which withdrawal is appropriate. There needs to be a set of boundaries that are respected by all parties. The aim should be to produce a self-sustaining team of researchers or practitioners who are self-motivated and powered from within. To act as an effective manager of change, a psychologist will need a sophisticated understanding of the change process and the likely barriers to change that will be erected, both from within a team and from outside it (Ovretteit, 1998).

## OBTAINING FUNDING

### *Funding is essential*

Health and clinical psychologists generate a significant proportion of the research in the field of psychology, perhaps about one-fifth of the total. However, research is an expensive activity and there is no recipe that will automatically result in funding. This means that you, your supervisor or your research team will need to invest considerable efforts in securing the necessary resources for your project or accept that you may not be able to carry out the work – at least, not beyond a preliminary or pilot stage. Normally, in colleges and universities, doing research is a requirement of any academic post. For example, in the United Kingdom, university departments are rated for the quality of the research that they do in a national Research Assessment Exercise. The ratings of research quality are made by a panel of experts from across the psychology discipline. Of key significance to the national and international reputation of a department is the amount of research funding that it has obtained over a five-year period. Therefore applying for research funding is a core activity for health and clinical psychologists in academic or research posts. Research grants also generate additional posts in the form of research assistantships, fellowships, doctoral studentships and post-doctoral grants and research bursaries.

Not all research projects require special funding. The primary asset for some projects is *staff time*. Since research is part of any academic's job description, the time involved in carrying out research is available up to a reasonable level free of any specific charge to the research project. The institutions involved will also normally allow staff members to carry out printing, photocopying and computing and use existing equipment for the purpose of research. Consequently pilot projects are often carried out using existing infrastructure and resources. However, when extra staff, computers or other equipment are needed, or if the printing, photocopying and postage costs are going to be high, specific sources of funding will need to be identified and a funding application made. Depending on the nature of the employment contract that a psychologist has, the preliminary 'leg work' usually has to be undertaken in addition to normal activities. Researchers have to make an early assessment of whether their motivation is sufficient to carry them through the conflict, drudgery and slog involved in the vast majority of projects (Robson, 2002). Almost always it is the best policy to play to your strengths and develop projects that use the expertise that you, your supervisor or team members have already developed to some degree. In this case it is less likely that you will be frustrated or surprised by barriers and problems that may lie hidden behind the well-constructed plan that you have prepared for your project. A sensible rule of thumb for all planning exercises is to work out how long it will take to complete everything you have to do and then double it. Otherwise you can

expect to be working at evenings and weekends 'like there is no tomorrow'. It is a common experience to discover that the submission deadline for a research proposal is only a few days away, in which case 'tomorrow will be too late'.

### *Sources of funding*

Once the focus for the research has been carefully chosen, the next step is to identify the most promising sources of funding. Alternatively, it is possible to turn this process around, identifying potential sources of funding and then tailoring your pet project to fit the source's priorities. Whichever way around your idea develops, competition for support from the major funders is always going to be fierce. To increase the chances of financing a project it is worth thinking broadly about different possible sources. In addition to large public sector funders (for example, government departments, research councils and international bodies such as the European Commission) and major charities, local sources of funding may also be available, such as Hospital Trust funds, local government departments, benefactors and private companies. The possibility of obtaining funds from charities specifically concerned with the focus of your proposed research is worth considering, as is sponsorship by pharmaceutical companies.

Each potential funder will have its own agenda and set of priorities, which may include negotiating tangible signs of their sponsorship and possibly also defining the form of dissemination of your findings. The quid pro quo for accepting funding from a source may well be an enforced restriction on publication of the research findings. This is an issue that must be negotiated at the time the funding is being agreed and accepted. There is always a strong preference on the researcher's part for no strings to be attached to the findings, but if one is carrying out a project funded by local or central government, or for commercial organisations that will have a stake in positive rather than negative reports, this will seldom be the case. The researcher and the funding body both have an interest in clarifying publication rights before the funding is allocated and the project begins. Then the decision about whether to accept funding must be based on ethical and pragmatic considerations. If one holds out for no restrictions, one could lose the funding altogether. Yet if one accepts the restrictions, one's ability to disseminate the research findings may be severely limited and subject to the approval of the sponsoring body. Nobody can decide this issue except for the research team members, taking into consideration the full context of the organisations, values, ethics and politics that come into play.

If a major funding body is to be approached, a useful first step is to trawl brochures and websites in order to establish the current funding agenda of each body, the amount of funding available, the preferred beneficiaries of the research and the kinds of applicants the funders are seeking to encourage. Do they, for example, entertain bids from academics, practitioners,

charities or user groups? Might the bid be enhanced by a team of applicants that includes the favoured elements? Usually the answer to the latter question is 'yes' and you will be wise to include such people in your team. Applying for research funding, like research itself, is a pragmatic exercise that combines interpersonal skills, ethical awareness, political nous, scientific method, logic, intuition and sheer dogged determination, not necessarily in that order.

### *Developing a research proposal*

Once target sources of funding have been identified, a detailed proposal should be developed according to the guidelines offered by the funding body. Many funders ask for an initial outline submission to ensure that the proposed research falls within their remit or terms of reference. Typically, a research officer employed by the funding body considers this initial submission. If the outline is approved, applicants are invited to submit a detailed proposal. This proposal may be sent out to **referees** for review, with the subsequent funding decision made by a committee in the light of the reviewers' comments. It is helpful to establish the detail of this process in order to tailor the application appropriately. Some grant giving bodies consult external referees, others do not. Which circumstances apply? If reviewers are consulted, how many reviews will be sought? Do applicants have a chance to suggest potential reviewers? What is the likely expertise of the reviewers and the members of the committee making the funding decisions? What is the timescale for the final decision on funding?

In order to develop a proposal that is worthy of funding, many detailed decisions about the proposed research must be made at this early stage. Do not underestimate how much effort and time is involved in this process! A suitable project team should be assembled and consulted concerning the details of the project and the proposal. Many funding bodies favour the inclusion of a statistician, a practitioner and an applicant with experience of successfully achieving and administering grants. The latter is invaluable in terms of support when the going gets tough at this and any subsequent stage of the project. It is also useful to solicit advice from others who have previously applied, whether successfully or unsuccessfully, to the particular funding body.

Funders often provide detailed application forms for completion. These forms vary and they can sometimes be idiosyncratic and fiddly to complete. Having Acrobat Reader on your computer will be essential. In a few cases, typewriters may have to be used because the forms are not yet available electronically, although this practice is becoming a rarity these days. Better still, you can retype the funding body's forms in word-processor format, checking first that this will be acceptable to with the funder. Common elements include a summary of the proposal, the aims and anticipated outcomes/benefits, a detailed justification for the resources requested together with a budget statement, curriculum vitae and signatures from all

applicants, and additional signatures from representatives of the host institution(s). Applicants are often given the opportunity to submit the bulk of the research proposal using their own chosen format, with the requirement that certain elements (for example, timescale, milestones and ethical considerations) are included. There are usually space or word limits on funding applications.

When working on the detail of the structure and content of the application, it is worth considering Robson's (2002) advice that a good proposal is well organised, clearly expressed, understandable and appealing from the perspective of an intelligent (and quite possibly disinterested) layperson. Imagine the reviewers posing a series of questions. Is the context of the research clear? What is the problem or issue to be investigated? Is there a pressing need for research at this point in time? Are the aims and objectives achievable? Is the research question well articulated, informed by relevant theory and located in the literature? Are the proposed design and methodology appropriate? How will participants be recruited and is the sample size justified? Is the proposal ethical? How will the research be monitored and progress checked? What are the important milestones? How will the interests of the various **stakeholders** be represented? Are the likely outcomes/benefits clearly articulated and persuasive, and is the research worth any possible upheaval? Are the requested resources sufficient? Does the research represent value for money? How will the results be presented and disseminated?

In addition to the detail required by the funding body, many institutions now require that all applications are subject to internal scrutiny. This may be limited to the head of department or specialty, who may be required to approve the nature of the research and to confirm that facilities are available to carry out the work, and a representative from the relevant finance department to confirm that the budget calculations are correct and that sufficient funds to cover resources (for example, the use of facilities, staff time) are included in the bid. In some institutions, the application may additionally require a 'round' of signatures including the chief executive, head of section, faculty, department or school, a representative from the research support unit, the institution's finance director and a representative from the executive of any collaborating organisations. All this takes time, and may well result in further frustrating delays while changes are made to the application.

### *Pricing and timing*

In bringing the project planning to its final conclusion, the aim will be to design a study or set of studies that can be completed within a fixed timescale and for an agreed price. In these respects a research project is no different from hiring a builder to make an extension to your house. Just like a builder, the researcher needs to calculate estimates that are achievable and make reliable predictions of what will happen in reality without the need

to cut corners or work through the night to get the work finished on time. If the estimates are wrong, your team members will become overloaded and disgruntled and your paymaster unimpressed at your lack of reliability and management skills. If your first project fails, they will be disinclined to entrust you with another.

There are two tools that are very useful in the planning and budgeting of projects. The first is **cash flow analysis**. In cash flow analysis income and expenditure are plotted on a monthly basis for the lifetime of the project. The computer package Excel is well suited to this purpose. You need to identify all sources of expenditure and plan what these will be month by month over the course of the project. You will also need to ensure that all employment costs are included, that salaries are on the appropriate scale points, that you allow for recruitment costs, salary increases, national insurance, superannuation, payments of any part-time staff or participants, the cost of equipment, consumables, printing, postage, travel and institutional overheads, if the sponsor allows you to charge for these.

When all of the necessary items have been included you will be able to obtain the total price for the project and also break this down into annual or quarterly amounts. This information will be needed in some form by the grant-giving body, which may negotiate the figures with you with the aim of reducing some of the costs.

The second is the **Gantt diagram**, another useful tool for planning projects. Like cash flow analysis, it uses a spatial arrangement to represent time across the course of the project, plotting activities that need to be carried out at different stages in their logical order with time estimates and deadlines for each one. Box 2.1 contains a simple example of a Gantt diagram prepared for a two-year research project consisting of three studies.

Box 2.1 A Gantt diagram for a two-year project that includes three studies

The activities that need to be completed are placed in a sequence of two- or three-month blocks. In a more complex case, several overlapping activities may be plotted across time blocks, in different lines or rows of the diagram. For example, parts of the report writing could be started before the data analysis is completed, or study 1 could be designed while the research assistant is being recruited.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Yr 1	Recruit and train research assistant			Design and pilot study 1			Collect data for study 1			Analyse data for study 1	Write intermediate report	
Yr 2	Design and run study 2			Analyse data for study 2			Design and run study 3			Analyse data for study 3	Write final report	



## MANAGING A RESEARCH PROJECT

Unlike the role of advisor or consultant which often demands a high level of input in the initial stages of a project tailing off into a watching brief as work progresses, managing a research project requires a consistently large investment of time and effort from start to finish. After the considerable effort involved in producing the initial proposal, gaining ethical approval and launching the research, it may be tempting to take more of a back seat as data collection progresses. However, for most projects, responsibilities change rather than reduce, and many issues require attention at all stages (Ovretreit, 1998).

### *In the early stages*

Pilot the proposed methodology and allow all those involved in the research time to adapt to new ways of working and to express any concerns. Ask participants about the experience of being involved in the research, and be prepared to tweak the protocol in response to feedback. Check on estimates of the number of participants, particularly if the research is taking place in a health care setting. If you are undertaking quantitative research, you will need to carefully estimate the number of participants that you need to recruit into your study using **power analysis**. This is a method for calculating the sample size that is necessary to give you an acceptable chance (90 per cent or more) of finding an effect if an effect is really there (see Chapter 10).

The need to have a high powered study must be balanced against the time constraints and problems that will be encountered in recruiting your participants. Clinicians are prone to overestimation of the numbers of patients presenting with a particular problem or condition. This combined with patients' reluctance to participate in research can create serious problems so allow plenty of time to collect your data. Essentially, make a realistic estimate of a number of weeks or months, then double it.

### *During the project*

Be prepared to regularly monitor the concerns and issues of all those involved in the research process. Check on progress towards milestones (for example, is recruitment of participants proceeding as expected?). Involve those parties who are interested in the outcomes of the research in appropriate ways; offer interim reports whenever possible. Explore the fate of previous projects and make a note of any useful information which may affect whether the results are implemented (Ovretreit, 1998). Seek advice on how best to influence decision-makers and prepare the likely channels for dissemination.

Finally, when the dust settles, it is helpful to stand back at the end of the process, to adopt a self-critical stance and to assess the experience gained

during the research. What lessons have been learned for future studies and for one's own professional development? How could the process be improved next time?

### **OBTAINING ETHICAL APPROVAL**

Ethical issues should be considered at every stage of the planning process. Issues that should be addressed early in the proceedings include whether all those involved or impacted by the research or consultancy know what they are letting themselves in for, and whether they have the possibility of opting out. How will the results be used? Will those who are able to act upon the findings be 'good guys' or 'bad guys' (Robson 2002)? How will the participants find out about the results? It is also important to discover at an early stage how and when formal ethical approval for the proposal will be sought.

Some funding agencies require ethical approval to be obtained before an application is submitted. Others are content that funding can be offered subject to ethical approval being achieved before the research begins. Either way, obtaining ethical approval from non-psychologists means that you must satisfy an **ethical committee** composed of people from different backgrounds, often including the general public, that the benefits posed by your research to the participants and to other members of society outweigh the risks and costs, that you have minimised any potential harm, and that you have ensured that participants are provided with the information and time they need to give genuine informed consent to take part. Applicants will also be required to demonstrate that the research is methodologically sound (as it is unethical, as well as wasteful, to carry out poor quality research), feasible, and will not have a negative impact on the context in which it is carried out (for example, take up too much time or resources of busy health professionals). This is likely to involve providing extensive detail of the proposed measures and procedures, methods of recruitment (including the advertisements and letters you will employ to contact patients or other participants), how data will be safeguarded and confidentiality will be preserved. Often supporting evidence may be necessary, such as the signatures of clinicians, managers and/or data protection officers who must approve and accommodate your research, providing insurance, space and access to patients. The process is likely to be lengthy and can cause considerable delay to the anticipated start date for a project. Once again, the uninitiated would be advised to double the amount of time they anticipate the process will take!

#### *Conflicting values*

Because of its focus on the health care practices of people, research in health and clinical psychology is riddled with decisions, choices and practices

requiring justification in moral and ethical terms. There really is no such thing as a 'value free' researcher. Psychologists should critically evaluate whether their own values, those of the stakeholders, or those of the discipline of health psychology are unreasonably imposed on the client or participant. The research questions and measurement tools may be value laden and/or more relevant to some sections of the population than others. A research paradigm or theory may lay emphasis on the current preoccupations of psychologists, health care providers or policy-makers. For example, the desirability of changing health behaviours in a particular way, the public taking responsibility for their own health behaviour, or providing patients with detailed information about their condition may seem worthy to the researcher, but may be counter to the beliefs and values of the participants. There is a particular need to be sensitive to cultural variations and to be aware that ways of working which may seem self-evident in one culture may be at odds with another (Francis, 1999).

Researchers must consider whether the investigation is likely to improve the current situation or whether it could lead to an exacerbation of existing problems. If the investigation indicates that change is desirable, is that change in fact possible, or will one's involvement merely serve to increase the dissatisfaction and disillusionment of those involved?

#### *Inclusion/exclusion criteria*

Careful decision-making is called for when deciding who should be included in a study and who should be excluded. Once again, a series of questions may be helpful. Do all members of the study population have an equal chance of participating? What about the less articulate or vociferous and those typically excluded from health care research because of complicating factors: the young, the elderly, illiterate people, those for whom English is not a first language, those with multiple presenting problems? Are these decisions driven by the needs of potential participants, or by research questions and methodology favoured by the researchers? It is a requirement of all health research in the United States that the participants include people from ethnic minorities, or if not, that this decision is explained and justified. This is a sound principle for health research everywhere. It ensures that the sample will contain people from groups that have hitherto been neglected or forgotten.

#### *Informed consent*

Despite a general consensus that informed consent is necessary and desirable before participating in research, Ward (1995) offers a reminder that the concept raises a 'sigh of despair' among some health care professionals who perceive the whole process as a tedious ritual necessary to defend themselves from patients with unrealistic expectations and from predatory lawyers. In the turmoil of preparing proposals and applications for ethical

approval, psychologists might be forgiven their own occasional sigh of despair. However, Lansdown (1998) in discussing the use of informed consent for children reminds us that 'Informed consent . . . is more than just a legal obligation . . . it also has a moral basis fundamental to human relationships; the recognition of individual autonomy, dignity and the capacity for self-determination'. Evidence from psychological research on patient consent indicates that the majority do not understand and do not remember what they have consented to do (Ley, 1988).

In their efforts to cover every eventuality, many ethical committees have now produced detailed and lengthy proformas for patient information and for informed consent. Some potential participants will welcome these; others may be bewildered or irritated and will ask for an oral summary. In some cases, researchers may be required to produce their own patient information and informed consent sheets. Careful thought needs to be given to how the information will be framed. What verbal and nonverbal messages will be offered to participants? Detailed consent forms may be seen as unnecessarily legalistic and 'binding' and once the participant has agreed to take part, she or he may find it difficult to withdraw. Despite reassurances to the contrary, participants may feel that they have to commit to the whole project because otherwise their care will be compromised, they will be thought of in a negative light, they will be breaking an agreement (informed consent) or letting the researchers/staff down. Many people receiving health care are motivated to help out of gratitude to staff and because they wish to contribute to improvements in health care for others. It is important not to abuse, take for granted or take advantage of their goodwill by making light of the more onerous aspects of participating in the research, or by downplaying any opt-out clause.

### *Confidentiality*

Seasoned researchers will know that it is one thing to commit to maintaining **confidentiality** as part of a funding proposal, yet another to maintain high standards in the course of the research and in the reporting of results. Although now it may be second nature for researchers to devise methods of coding data omitting unnecessary identifying characteristics, other issues remain. For example, most researchers when faced with a decision whether or not to collect a particular piece of information will gather it 'just in case'. However, as Downie and Calman (1998) point out, it is not acceptable to collect as much information as possible 'for the sake of it' but, on the contrary, researchers should decide which information is strictly necessary for analysis at a later date.

Researching as a member of a team can raise additional issues of confidentiality as there may be conflicting views concerning the amount and type of information necessary and how this material should be used. What happens if information comes to light during the research that is relevant to the care of a participant and you feel the care team should know about it?

Downie and Calman (1998) suggest agreeing a set of **confidentiality rules** within the team designed to optimise the anonymity of the participants. What types of information have to be shared and with whom? Who must, should, could, shouldn't know?

#### *Concluding comments to this section*

The process of obtaining funding and ethical approval can be daunting for the inexperienced. Navigation through the various 'hoops' requires considerable effort and commitment akin to a complex initiation rite. However, once the successful applicant has passed these tests, she/he can be reasonably confident that the research is ethical, worthwhile and well conceived. There will also tend to be a snowball effect, as the applicant's confidence grows stronger and a track record of successful funding is established. On the other hand, the unsuccessful applicant will almost certainly be disappointed and, if the process appears unfair, feel aggrieved. Some applicants feel that the process is akin to a lottery. Hopefully, however, the researcher will not become bitter and broken by the grueling experience. As the gap between the submission of the proposal and the final verdict on funding is frequently lengthy, the intervening time can usually be used to identify other funding sources and to plan how subsequent proposals can be tailored to the requirements of other funding bodies. If the outcome of the first application is a rejection, any feedback from the reviewers can be swiftly taken into account when making the next submission. The golden rule is to not to give up, but to apply, apply and apply again.

## **REPORTING RESULTS AND DISSEMINATION**

#### *Providing information to participants*

Most researchers subscribe to the ideal that, whenever possible, the results of research involving the general public should be offered to the participants. However, the reality may be different. Francis (1999) notes that, for a variety of reasons, some research is never written up. Reports are often prepared under time pressure at the end of a funding period, and priority may be given to final submissions to funding bodies or sponsors and articles for fellow academics. When information is made available to participants, great care should be taken in relation to the content and framing of that information. What if the results conclude that care is substandard? Will this raise unnecessary fears in patients, many of whom may previously have been content with the care provided and some of whom may still be receiving treatment? Suppose the results relate to risk factors for disease and the results conclude that behaviour change is desirable to reduce risk, how will this impact on the participants?

Marteau and Lerman (2001) posed a series of questions in relation to people who may be offered information about their genetic susceptibility to potentially preventable diseases. How should the risk information be framed? Will offering the information be enough to encourage them to change aspects of their behaviour? Research suggests that more help will be required and it may well be that information alone merely serves to increase distress.

Finally, Francis (1999) noted that psychologists should resist the temptation to stray beyond the actual findings of the research and to provide a 'grand finale' to a project by offering unsubstantiated opinions, advice or conclusions.

### *Disseminating results to stakeholders*

The research manager has a responsibility to ensure that the results of research reach all stakeholders in the project. Different groups are likely to be concerned with the content of the reports and how the information is presented. Sponsors and funders will have a view of how they would like to feature in the reports. Participants and colleagues may also be concerned with how they are represented. A strategy should be developed to disseminate the findings to relevant people in the most effective way at the most appropriate time. Ask the questions 'who is this particular report for?' and 'what am I seeking to achieve in reporting to them?' and invest time in mastering appropriate report writing styles. Recognise that different channels and methods of presentation will be necessary to target participants, decision-makers, practitioners and academics. For example, how can information be presented for practitioners in ways that allow them to act on the findings? Be prepared for the fact that due to long time lags between deadlines for the submission of abstracts and actual conferences, and between the submission of manuscripts and eventual publication, efforts to disseminate information are likely to be necessary for a considerable period of time after the project has been completed. Your funding body, on the other hand, will require a full report as the project is drawing to a close. Further discussion of dissemination may be found in Chapter 11.

In writing reports of research, Robson (2002) suggests that a clear distinction be made between findings, interpretations, judgements and recommendations. It is particularly important to clarify which findings are directly informed by the research, and which are subject to speculation. It is also useful to consider what kinds of evidence will appeal to the various interested parties. Whenever possible, the wording and content of recommendations should be negotiated with the people who are likely to make use of them, as interested parties will be more likely to act on findings they 'own' than those foisted on them by an outside researcher (Robson 2002). Ovreteit (2000) suggests staging a workshop to allow those involved to ponder the options.

Box 2.2 *A clinical study in a hospital setting with a multidisciplinary research team (Manyande et al., 1995)*

The five basic research processes described in this chapter can be illustrated by an example of a multidisciplinary clinical study. The study was concerned with the preoperative rehearsal of active coping imagery in preparing patients for abdominal surgery. The five processes are briefly described in turn.

### **Working with colleagues**

The study was part of a series carried out over several years with a team that changed over time. The setting was St Mark's Hospital, London, specialising in abdominal and bowel surgery. This study required very careful planning, co-ordination and communication across a team of nine people across five different areas of health care and three institutions. The procedures required careful vetting for the ethical issues involved and the study would have been impossible but for the collaboration of a clinical psychologist, a health psychologist, two nurse researchers, three surgeons and two anaesthetists working as a team. The research study was part of a PhD project carried out by Anne Manyande at University College London under Peter Salmon's supervision. DM was consulted concerning the design of the intervention that consisted of active imagery rehearsal of the subjective, sensory and somatic effects of the anaesthetic and surgical procedures associated with the operation.

### **Obtaining funding**

No special research funds were sought specifically for this project, which was made possible by the provision of staff and facilities in the participating organisations. Careful planning was necessary to ensure that all parties were able to devote the agreed time and resources for the duration of the study.

### **Obtaining ethical approval**

Ethical approval was sought from the relevant NHS Trust. The reason for using an active imagery technique for rehearsing the effects of the procedures on the body was ethically justified. The rationale stemmed from the theory of Janis (1958) who hypothesised a U-shaped association between fear before an operation and outcome. Janis' U-shaped curve suggests that both low and high levels of anxiety are associated with a worse outcome, while medium levels of fear are associated with the best recovery. However, more recent research suggested a linear relationship not a U-curve, with the lowest levels of anxiety predicting the best outcomes, with the ability to surrender control possibly being more adaptive than a controlling style (Johnston, 1986). This conflict left the issue of whether active rehearsal of bodily sensations would have a positive or a negative influence on outcomes unresolved. Hence the need for the study. All participants were required to give their fully informed consent. The study design was a randomised controlled trial with a control treatment consisting of cognitive information about the quality of the hospital and the staff.

### Managing the project

The project required careful management on the part of the research team leader, Peter Salmon. Among the many necessary tasks was to obtain agreement of the study design and to ensure that the study was well controlled. Key issues in managing the project were agreeing to the number of conditions that would be included and the number of participants that would need to be recruited and allocated to each condition. One of the major risks to the successful completion of the study was the difficulty in recruiting a sufficient number of participants to yield a statistically powerful study. Ideally, a third condition, consisting of audio-taped relaxation training, shown in an earlier study to be associated with increased circulating cortisol and adrenaline levels (Manyande et al., 1992), would have been included. This would have enabled a comparison of relaxation, active imagery and information preparation in a single trial. However, the research team leader knew that this would be impossible to achieve in the time available because of the slow recruitment resulting from the exclusion criteria and other factors. This was proven by actual experience because only 51 participants were recruited, an insufficient number if distributed over 3, rather than 2, experimental conditions. Other important issues revolved around the recruitment procedures carried out by nursing staff on the ward, ensuring that these were carried out in a systematic, consistent and ethical manner.

### Reporting results and dissemination

The results of the study were fed back to the major stakeholders. The study was published in a leading peer-reviewed journal, *Psychosomatic Medicine*. The abstract briefly summarised the study in the following words:

In a controlled trial of abdominal surgery patients, we . . . tested the effects of a preoperative preparation that used guided imagery, not to reduce anxiety, but to increase patients' feelings of being able to cope with surgical stress; 26 imagery patients were compared with 25 controls who received, instead, background information about the hospital. The results showed that state-anxiety was similar in each group, but *imagery patients experienced less postoperative pain than did the controls, were less distressed by it, felt that they coped with it better, and requested less analgesia*. Hormone levels measured in peripheral venous blood did not differ on the afternoon of admission, before preparation. *Cortisol levels were, however, lower in imagery patients than in controls immediately before and after surgery. Noradrenaline levels were greater on these occasions in imagery patients than controls.* (Manyande et al., 1995; italics added to highlight key points)

Since publication, two other clinical studies used similar active imagery techniques with equally positive effects. At the University of Innsbruck, Doering et al. (2000) used a videotape preparation of patients before hip replacement surgery. This study involved 13 members of 4 departments: psychological medicine and psychotherapy, orthopaedics, anaesthesia and general intensive care, and psychiatry (8 MDs, 3 PhDs, and 2 MSs!). Reduced stress and lowered analgesic medication after surgery occurred in patients prepared with the videotape.

At Mount Sinai Hospital in Toronto, Esplen and Garfinkel (1998) used a guided imagery treatment to promote self-soothing in bulimia nervosa. A



randomised controlled trial compared patients receiving six weeks of individual guided imagery therapy with a control group of untreated bulimia nervosa patients. The imagery group showed a substantial reduction in bingeing and purging, improvements on measures of aloneness and the ability of self-comforting.

The three studies suggest that active mental rehearsal is a helpful preparatory tool prior to surgery or as a part of psychotherapy.

Although all those involved in a successful research project are generally fired up by the findings, researchers must be realistic about the lack of impact their work usually has. Several writers have reached the somewhat depressing conclusion that in the face of resistance to change and innovation, research has relatively little influence on practice. In spite of a lot of rhetoric about evidence-based practice, implementation of research findings is disappointingly slow. Investing in the involvement and ownership of the research by relevant practitioners from inception to completion, helping practitioners decide how to act upon the findings and subsequently working with them to help them change their routines seem likely to be the most effective strategies to counter this phenomenon (Ovretteit, 1998). However, all these strategies require continued effort well beyond the completion of the project.

## SUMMARY

Five key processes in research and consultancy have been described. Firstly, the role of working with colleagues and developing a strong team, who share a common vision and plan for the project. Secondly, how to approach the obtaining of funding. Thirdly, obtaining ethical approval. Fourthly, the management of the project. Fifthly, the importance of dissemination. We have highlighted the importance of careful planning, good communications with all involved, taking into account the needs and the rights of the participants, and of the funding body, and the consequential responsibilities that fall on researchers to carry out research that is well-conceived, meaningful and ethical. These principles were illustrated with a clinical research project involving a large multidisciplinary research team on a new method for preparing patients for surgery.

## RECOMMENDED READING

- Francis, R. (1999). *Ethics for psychologists: A handbook*. Leicester: BPS Books.  
Robson, C. (2002). *Real world research* (2nd edn.) Oxford: Blackwell.

**REVISION QUESTIONS**

- 1 In addition to the careful use of research methods, what else must a researcher be able to do?
- 2 What differences are there between 'research' and 'consultancy'?
- 3 Who are the 'stakeholders' in a research project?
- 4 What are the main issues that need to be addressed in obtaining ethical approval for a research study?
- 5 List as many methods for disseminating the results of a research project as you can think of.