

Planning activities

Research activities that are categorised as planning activities are largely those that take place prior to actual research taking place, and will be a major factor in the ultimate success (or otherwise) of the research. However, planning activities are also strongly linked with the overall organisation of a project and so have a significant effect on how well, or how poorly, a piece of research is conducted. Many problems which are encountered during the course of a piece of research can be attributed to poorly planned or organised research; where research integrity may be or has been compromised, this is particularly important to bear in mind. Poorly designed or organised research can be inherently unethical if it results in, for instance, the breaching of human subject regulations, the harm of human subjects, or if data is compromised due to poor research design or lack of planning and/or organisation. Although such problems of planning might not be done deliberately, careless or negligent research practices can be the cause of failings of research integrity just as much as deliberate misconduct. The principle of *rigour* thus applies not just to scientific or scholarly rigour but also to the way in which a piece of research is conducted and the way in which it is planned and organised:

- Defining and presenting research aims, purposes, and rationale;
- Research design;
- Adherence to regulations and compliance with legal and ethical requirements;

Just about everything in the course of a piece of research can be linked to the justification and rationale for conducting that research at the outset. This applies to the reporting of outcomes as well as to the design of a study. Shortcuts taken at this stage can threaten all aspects of a study, and it is vital that issues of an ethical and legal nature are considered at the earliest opportunity. All stages of a piece of research may have aspects in which the integrity of the researcher and the integrity of the study itself are challenged. Using the design stage of a project to consider what the challenges might be is essential *prior* to engaging in any practical research.

One of the trickier factors in planning projects is that the regulatory environment in which research takes place has increased in complexity over the past two decades. Although researchers are likely to be aware of important issues arising in their area of speciality, it is much less likely that researchers will be aware of changes or new complications in the regulatory environment which may affect the way in which they go about their work. For instance, data regulation is now highly complex: since all research will handle data of one kind or another, it is important that researchers are familiar with those aspects of data regulation to which their work may be subject and ensure that they do not breach any regulation in force. This could apply to the use of personal data from research participants, the use of secondary data, or it could be a matter of the way in which data is stored, secured, or disseminated. Whilst data is the area of research regulation that is most prominent, other aspects of research can also present similar difficulties. It is important that researchers ensure that they consider where this may be a factor and, if unsure about legal and/or ethical duties, that they take advice from those who are familiar with these areas.

The *Montreal Statement on Research Integrity* is particularly helpful in presenting a series of design and planning areas where lack of consideration of integrity issues may become a serious problem. Major areas of concern are where research is taking place with multiple partners, in collaboration between institutions, or across disciplinary, national, or sector boundaries. Without consideration of where likely misunderstandings might arise, or where responsibilities might be challenged due to

regulatory or cultural differences, such collaborative arrangements are likely to prove difficult without having explicit agreements in place before any actual research takes place. Thus it is important to establish:

- Clear and well-defined co-operation arrangements when collaborating in research groups, with other institutions, or with partners in other sectors.

It is also important to ensure that all members of a research group are supported adequately, depending on their experience. This is particularly important when:

- Working with, supporting and mentoring, novice or less experienced researchers;

By definition, novice researchers are less likely to have the knowledge and experience to be able to plan, predict, or deal with, issues that might compromise research integrity. Student researchers, in particular, are likely to need a greater degree of support and more senior and experienced researchers have a duty to provide support for researchers working on projects for which those senior researchers have ultimate responsibility. Part of the duty to provide support involves ensuring that sufficient planning and organisation within a team or group of researchers is in place so that the junior members of a group, including students, are aware of their own responsibilities and of the importance of research integrity.