

Ethical issues in research

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Everything has been said before, but since nobody listens we have to keep going back and beginning all over again.

(André Gide)

One of the important considerations a research student must attend to is the ethics of their research. This is a necessity at both a professional level and at an administrative level. Either at masters or doctoral studies, there are expected standards about the appropriate structure and method and reporting of research. There are also expectations at most universities for researchers to justify and pay attention to ethical considerations, because the university is the formal entity from which you engage in the research. In essence, you are the public face of the university in the way you research and in how people perceive the research.

Research is a complex process in which a number of stakeholders are involved. These include; yourself as the researcher, and, depending on your research area, may include the participants constituting the sample group, the corporate entity of a case study, the university community commissioning the research, the supervisor(s) advising the researcher, the examiners who review the thesis and the readers who have access to the findings after the research is completed. This list constitutes but a few of the stakeholders, and reinforces that there are a range of interests and concerns that demand judiciousness on the part of the researcher.

Ideally, you should complete your thesis so that you and the university remain in good standing with the participants and your findings contribute to the advancement of knowledge or professional practice. Failure to design your research with ethical protocols can harm participants and result in misleading or biased results, and leave you exposed to the criticism of examiners. It can also expose the university's reputation to ridicule and damage. Unethical research can also expose a research or university or research institute to legal action in some countries.

This chapter outlines the fundamental issues involved in an ethical research process. It begins with a simple overview of ethical thinking and its link with

the practice of research. Principles of ethical research are discussed, along with examples of ethical research problems. These basic principles are proposed as a starting point for developing proposals likely to satisfy university research ethics committees. The chapter concludes with an overview of the role of research protocols.

ETHICAL THINKING

In the Western tradition, the word 'ethics' is derived from the Greek *ethos*, and refers to character. It concerns itself with the moral dimension of what *ought* to be the right or good way to both operationalize the research process and report the findings. Ethics also concerns itself with processes and conclusions that are *just*, that is, legitimately give what is due or represent what is due to a participant, case study or point of view. Devising ethical protocols and research processes is a time-consuming part of the thesis, but a necessary one in building the researcher's credibility and balancing the divergent demands of multiple stakeholders.

I doubt there is an easy answer to determining the best means to practise justice in research. Both Aristotle (Book V of the *Nicomachean Ethics*) and Aquinas understood justice as related to the distribution of some public gain. In research, this means you, as investigator, should ensure there is a net gain from the study being pursued. John Rawls called for a social contract approach to justice, based upon two principles: reciprocity and fairness. This emphasizes dimensions of equality in the relationships one has. In research, it would be expressed in principles where all participants are treated equally and by mechanisms to ensure views or data are not misrepresented. The principle of justice raises legitimate expectations that persons participating will receive an appropriate benefit arising from the research.

The principled approach to ethics derives from the philosophy of Emmanuel Kant (1724–1804), who defined actions as morally correct because of the reason and duty behind them, regardless of the context in which they were made. This approach has its source in the religious foundations of the 'golden rule' (do unto others as you would have them do unto you) and many other religious and spiritual philosophies, which suggest certain principles as binding duties. Essentially, the approach is based upon a *principle* or *rule* or *guide*. Kant claimed principles are 'maxims', that is, universal principles that can be applied everywhere. He saw respect and treating people as *ends* in themselves (rather than a *means* to an end) and thus as binding obligations to living the ethical life. Kant used a reflective test to gauge the ethics of a decision: an act is likely to be ethical if you are willing to have the act become a universal law. In the research context, such a view places an obligation on the researcher to treat participants with respect and to seek the truth in data analysis and reporting of findings.

The utilitarian approach to ethics derives from the philosophy of J.S. Mill (1806–73), who understood the good consequence as a prime factor in deter-

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mining ethical worth. He saw the greatest utility of an action as creating the greatest happiness. Mill understood the golden rule of religious belief as promoting ethics because it was an ethic of utility: the greatest good of the greatest number. The focus is on outcomes, and as much as possible the overall good benefit of *all* stakeholders. According to utilitarians, a researcher's ethical obligation or duty in any situation is to act so that the outcome produces the greatest possible balance of good over evil.

It is very courageous to draw comparisons between Western and Eastern thinking about ethics, so the best that can be achieved is a very general guide. This is offered in this chapter because many postgraduate research scholars in European, Australian and American universities come from Asia, or alternatively study in Asia but in 'offshore' research programmes from a Western university. It is important for some understanding to be gained about the ethical expectations of research from the perspective of the degree-granting institution, because the ethical thinking of the university will be applied regardless of where it is studied.

Western culture generally regards thought as a separate function of a rational being. Eastern 'thinking' is more about *pondering* – fusing thinking, loving, feeling into some unity. The 'modern' Western approach dates back at least to the Renaissance and the Age of the Enlightenment and the superiority of reason. As a generalization, the Western mind proceeds in reasoning from the major premise to the minor premise, and then finally to a conclusion. Rationality dominates, and feeling is to be excluded in this so-called *scientific* exercise. In contrast, the Eastern person might proceed in reasoning from the assumption that nature and reality are rational, consistent and universal in scope. The mind, therefore, is not an object to control this but to *unwrap* the in-built laws for all mankind. The science of *I-ching* is based on relationship and coexistence and balance – hence the *yin-yang* of Eastern thought. A conclusion is not reached by the head, but by the whole psyche.

Hence, while Western and Eastern values may be similar, as a generalization, they emerge from different influences and from a different philosophical base. Using Chinese thinking again as an example, there are the philosophical perspectives of a humanist like Confucius, as well as the more structured legal perspectives of Han Fei Zi. What emerges are the common moral virtues of moral character, proper conduct, humanity, lifelong learning and balance in both work and relations with others. These virtues complement the ethical sentiments of the Western philosophical tradition.

Other sources of Eastern philosophy are based on the Buddhist Eightfold Path or Four Noble Truths, or the Sufi wisdom scriptures of Islam, or the Hindu writings of *Patanjali*, and so forth. Much of Western ethical thinking is infused with the Judaeo-Christian scriptures. But there is a common thread in ethical thinking of benevolence, tolerance, honourable action, right relationships and truth. These

are all sentiments incorporated in the ethical principles of university research ethics committees.

What does this mean for research? For the research student studying in a Western country or overseas research programme, it suggests that the ethical values of different traditions possess commonalities, except they derive from divergent roots. This means the ethical protocols can be developed along agreed lines of respect, privacy and honesty, but more likely the justification will reflect the philosophical thinking of the (Western) degree-granting institution.

RESEARCH AND ETHICAL ISSUES

There is an historical context to the increasing attention to ethics in research. The latter half of the twentieth century witnessed an increasing concern for formal ethical research guidelines. This came at the same time as the growing popularity and relevance of phenomenological research, otherwise known as qualitative research. The Nuremberg Code was developed after World War II, when the world had to come to terms with the medical experiments carried out by the Nazis, experiments of exposing soldiers to atomic blasts, and other questionable experiments resulting in substantial harm, or even death, to research subjects. The Nuremberg Code was an international effort to establish ethical guidelines for medical, scientific and social research. One of the primary principles that resulted from this process was that of *informed consent*. There appears, in today's twenty-first century, research activity that stretches the boundaries of ethical thinking. These include issues of medical research involving new drugs, the use of animals in research, embryonic and stem cell research, DNA profiling, protecting privacy in an Information Age, and so forth.

As a result of the Nuremberg Code, informed consent has become an essential part of research when there are human participants. Your research should ensure that people, as interview sample or as case interviewees, are informed of the study and its method and consent, either in writing or implicitly, to the dissemination of the findings. Such consent should not leave the participants willingly or unwillingly in a more vulnerable position.

Technology offers opportunities to engage in a whole range of projects that in the past were simply not available or possible. Databases for the collection and storage of information in quantitative and qualitative studies bring problems of security and unwarranted access that in the past were simply solved by a lock and key. Data can be manipulated far beyond the life of a project itself, raising potential problems of the invasion of privacy. Blood samples or human cell collections allow data at a later date to be reconfigured in genetic profiling. For example, many hospitals have for many years, as a course of normal procedure, taken blood samples from newborn babies for the noble intent of identifying and,

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if necessary, intervening in life-threatening illnesses. With advances in gene technology, such databases are a potentially excellent source of genetic research, even though the technology was not available for such research when blood sampling of newborn babies was commenced. This has led to ethical questions about access to data, and about the need for consent to data being collected. These are being debated at present and will continue to be debated as technology improves. Adequate ethical planning of research aims to try to address such challenging issues before they arise, rather than afterwards.

In some research, there are no participants and there is little chance to harm a person. For example, consider theoretical research in nuclear physics or the genetic manipulation of foodstuffs. This does not absolve such investigators from attention to ethics. Researchers also have an obligation to pursue the truth. Fraudulent or unethical research can damage university reputations and professional credibility. Ethical conduct in research is not a matter of etiquette but a question of the moral principles by which any researcher is guided. Even when no persons are studied, findings can be distorted, or double-dipping on submitting journal submissions can exist, indicating that there is a whole range of ethical dilemmas for researchers beyond the study of a person.

PRINCIPLES OF ETHICAL RESEARCH

There are values and principles that influence most research. Some overlap and can be subsumed under another category, but there is a pattern of consistency weaving through the language and practice. There is growing interest that the participants within your research project should know and agree to be involved, that your research findings will not harm them either physically or psychologically, and that your research design respect the integrity of the participants with confidentiality and anonymity if necessary. These values are provided as a guide for you to scrutinize your project and justify the judgements you will make. In the end, it is *your* thesis and it is *your* responsibility, as best as humanly possible, to adhere to these values. From these values, university research ethics committees select principles such as:

- informed consent
- honesty
- conflict of interest
- privacy
- nonmaleficence (principle of doing no harm).

This is not an exhaustive list, but gives an overview of some of the principles most universities expect research students to adhere to. You will be expected to

comply with such principles as best as humanly possible. Many universities will not allow the commencement of any data collection until the university research ethics committee is satisfied with your research plans. This is important, because from the very outset you should be aware of the impact such requirements will have on your research project. Any modifications you have to make to satisfy the university can have a carry-on effect in different ways: the sample, the cases, data collection, methodology, analysis, reporting and publication.

Each of these principles is discussed below in an effort to further explain the issues involved and to assist you in the design of your research project.

Informed consent

Research scientists who are used to stating formal hypotheses and deductive reasoning can be shocked at the range of ethical issues confronting the qualitative researcher. Informed consent derives from respect for the right of people to possess control over their lives. This means choosing whether to involve themselves in a pilot study or questionnaire or focus group or interview programme with full knowledge of any potential advantage or disadvantages to participants. Ask yourself if you have accommodated the possibility of someone withdrawing from your project and how you will deal with this in the final analysis and reporting? There are different ways to enhance informed consent, such as providing information to participants or a summary of the research aims. It could include an explanation of the research process and how findings will be used and reported, with details of disclosure and/or assurances of confidentiality, an option to withdraw, and (for some universities) grievance procedures.

Generally, informed consent is accepted by many scientists as implicitly given by participants upon the return of a completed survey instrument. Qualitative researchers involved in ethnographic research have to be particularly vigilant in their research when it can include observation, participation and immersion. The design and continuation of the study outlined in Box 5.1, despite its obvious ethical problems, illustrate an extreme example of the problem that ethical research should avoid. The study breached fundamental principles in ethics. Not only was there no informed consent, but there was also a long-term disregard for the dignity of persons, as Kant would advise, as ends in themselves.

A common mechanism for establishing informed consent is to obtain a signed university pro-forma consent form from a participant. As stated, for many universities, a returned questionnaire usually suffices for those involved in more statistical methodologies. But the use of consent forms is highly contested among qualitative researchers. While it may appease university research ethics committees, who may require it for administrative approval for you to proceed, it does not deal with the complexity surrounding grounded theory, ethnography or action research. While informed consent is often a requirement to proceed,



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Box 5.1 THE TUSKEGEE SYPHILIS STUDY

One famous case in the United States involved both unethical research and scientific misconduct (Byrne 2001). It is known as the Tuskegee syphilis study and began in 1932. The study spanned forty years with the aim of documenting the natural course of syphilis in adult African-American men. Participants were not informed about the purpose or procedures of the research. The death rate of participants with syphilis was twice as high for participants in the control group, yet the researchers did not treat them, despite the fact that penicillin was available as an effective treatment. Key stakeholders within the medical profession (such as doctors, nurses, medical foundations and national medical organizations) knew about the research for many years and yet the study continued. In 1972 the study was terminated after it was reported in a newspaper.

it is advisable to familiarize yourself with the university regulations and discuss the matter thoroughly with the research ethics committee or your supervisor. This will place you in the best position to proceed so that, as best as humanly possible, most or all of the ethical principles are adhered to.

Honesty

In many Western countries, participation is considered part of the social obligation. People commonly allow themselves to be interviewed or surveyed at no cost to the researcher. Sometimes market researchers approach people in the street or home for opinions in return for enrolment in a lottery or some token prize. But research at the masters or doctoral level generally does not involve payment. As such, it is incumbent upon your professionalism to be honest and not to coerce or trick someone into participating in research. Deception can be when subjects do not realize they are participating in research, as well as where no effort to gain informed consent is undertaken. In this case, there is also a breach of privacy, where behaviour is recorded and used without knowledge. (Box 5.2.)

There are instances where deception in research is defensible, such as in cases of low frequency of events or because of some negative emotional association with what is being studied, for example, shame or dishonour (Sieber 1992: 65). What you have to be able to do is always justify your research, not only to university research ethics committees but also to an examiner who may raise a question about its propriety. As researcher you may have to balance partial deception with respect for the participants and the requirement not to harm them. You must



Box 5.2
DECEPTION AS PARTICIPATION

Investigators set up an elaborate laboratory in a brothel. As clients arrived, they were secretly given LSD. The behavioural results of the drug were filmed with a hidden camera. The subjects were never debriefed. One subject committed suicide while under the influence of LSD.

Source: Sieber (1992)

ensure privacy where appropriate in order not to harm, and you must show beneficence in the sense that the study, although using deception, results in some greater good to society.

Conflict of interest

The problem of conflict of interest is that it negates the integrity of a decision or process. In business, such conflict is described as a breach of the obligation to remain objective and without bias in relation to stakeholders. Conflict of interest in research raises questions of power and reliance, along with benefit and trust.

Morin *et al.* (2002) give a good example of how conflict of interest can be managed in the expansion of interaction between medical research and for-profit corporations in recent years. They advise biotechnology and pharmaceutical companies are becoming either active or passive partners in clinical research trials and creating problems of research independence. Substantial funding and clinical resources are made available to researchers in private, non-profit and public fields. University graduate programmes are not immune from such developments.

Pharmaceutical companies are sometimes active in enrolling both doctors and patients with incentives. This will often raise a conflict of interest concern because pharmaceutical companies have a vested interest in positive trial outcomes. Also, doctors may have a vested interest in enrolling patients. Such conflict can compromise the research integrity as well as the safety of research subjects. It raises a number of questions:

- the role of a research scientist
- the integrity of the informed consent process
- the risks and potential benefits of such research
- the treatment in such trials of patients/participants.

One way to assist in resolving some of the conflict issues is appropriate disclosure such as revealing relationships and support arrangements as part of the

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informed consent process. There is no foolproof way of completely resolving conflicts of interest, because at the end of the day, research relies upon the integrity of the investigator. Protocols are often self-regulatory, but along with disclosure procedures are a good first step in avoiding or resolving dilemmas of this nature.

Privacy

Privacy and confidentiality are often used synonymously and are central ethical concerns in research. Confidentiality is the management of data to prevent participants' identities from being linked to their responses. Privacy is violated if data are collected or disseminated without participants' knowledge. A researcher can protect research participants' privacy by ensuring anonymity or confidentiality. Anonymity exists when participants in the research cannot be identified or, in some cases, linked to the actual data or responses.

One way to ensure the anonymity of participants is to develop codes that remove identifying links between the data and the person responding. Anonymity is sometimes a feature of the research design, such as questionnaires with anonymous returns. But in qualitative research, ensuring anonymity is sometimes more difficult. Interview transcripts need to be structured in such a way as to protect the data from outside access, and also to remove any identifying features. In order to ensure privacy is respected, a researcher should keep questionnaires, tape recordings and interview transcripts in a safe place, under lock and key, and not in or near the research site. If using coding keys for interviewees, keep this file separate from the actual raw data files. Cases like Joe's (Box 5.3) illustrate



Box 5.3 MANAGEMENT OF DATA

Joe is a doctoral student researching work satisfaction and leadership styles. He works for a company whose CEO is supportive of his research and has allowed Joe permission to use the company as one of his case studies. Joe keeps most of his data at home, except he also keeps a second copy of the interview transcripts for his own company in his work office. Over the course of months, he gathers significant data on this topic. In the course of interviews of employees within Joe's company, there is general disquiet about the CEO. Many people are openly critical of management and express clear dissatisfaction with their work lives. Joe is very happy with the data he is collecting.

What dangers do you see in Joe's management of the data? How would privacy be ensured?

that it is easy to be deluded by the exciting nature of data being collected to the detriment of upholding the privacy of respondents or subjects. In Joe's case he runs the risk of his data being accessed, and the opinions of interviewees being revealed.

Nonmaleficence

The researcher is obligated to avoid harming anyone in their study. One of the most important ethical aspects of research is the principle of *nonmaleficence*: to manipulate a person in the interview process through cajoling or leading questions treats them with minimal respect. In the tradition of Kant, every human being has intrinsic worth and basic dignity. The obligation is to respect that dignity and treat others as ends rather than as means to our ends. This means you need to respect the dignity of participants or questionnaire respondents in different ways: honouring privacy, honest research and by being mindful of the effects of your findings on participants' reputations, relationships, happiness and lives.

Ellsberg and Heise (2002) report a case of one Indian researcher who wanted to study wives who were admitted to hospital after having been burned by their husbands in disputes about dowries. However, the researcher could not guarantee the safety of the women who were to be involved in the study, so it was decided not to proceed with the research for fear that it would put women at risk. This case illustrates that a research project that cannot reasonably guarantee that no harm will come to those who participate is potentially unethical.

Research should be based on *beneficence*, that is, fostering greater good than harm. Beneficence refers to your obligation, as researcher, to consider the longer-term interests of those being studied. It means ensuring that your shorter-term goal of collecting data does not blind you to the consequences once you have finished, reported and published your findings in the thesis. You need to consider whether the findings will result in shame or embarrassment to any stakeholder. Researchers also have an ethical obligation to maximize possible benefits as much as humanly possible. Even though much of this refers to research involving human subjects, it also pertains to the research design, methodology and reporting of inanimate data if it can potentially be harmful to stakeholders, such as society generally.

ESTABLISHING A RESEARCH PROTOCOL

A protocol is a statement of your intent in the research, together with the plan of how you will carry it out in a way that honours the ethical principles stated by your university. These principles may include all or some of the principles covered in this chapter: informed consent, honesty, conflict of interest, privacy and nonmaleficence. Your university may, of course, include principles beyond

these. It is your responsibility to ensure that the policies of your institution are followed and proceed with the data collection.

The protocol is a document that you must develop and comply with ethically. It must ensure that privacy is maintained and that the research is ethically sound. You may not intend to harm anyone, but you must take an assessment of the risks of the research and the protocols or procedures that will be occurring. If problems arise, you will want to be contacted immediately. Many universities have a grievance procedure. The university will usually require you to submit an ethics application.

It is usually a good idea to have a copy of the research project and the protocols can be established as an ethical research project after reflection about the ethical principles may vary, depending on the research. You do not wish your research to be criticized by your stakeholders. Your credentials and the quality of your research design are important factors in the problems occurring.

Many countries have established guidelines for the ethical conduct of research. The Health and Medical Research Council (HMRC) that apply to clinical research and assist university health research. The HMRC is a regulatory body, at the national level, that you can refer to for advice on how to develop research protocols.

CONCLUSION

In summary, research is a complex process and you are responsible for

these. It is your responsibility to familiarize yourself with the ethical research policies of your institution in preparing a protocol and ethics application to proceed with the data collection.

The protocol is your audit trail of how you will manage the research process and comply with ethical principles. It is meant to outline your steps to ensure that privacy is maintained, that harm is minimized and that informed consent is realized. You may not expect problems such as breaches of privacy, and you may not intend to harm anyone. But the protocol is a plan of action where you undertake an assessment of likely or potential problems. Included in this plan are the protocols or procedures for how to stop or minimize such problems from occurring. If problems do eventuate, the university research ethics committee will want to be convinced that you are in the best position possible to respond immediately. Many universities require research protocols also to include information about grievance procedures in case a participant or stakeholder complains. The university will want to ensure such grievances are avoided, and your protocol or ethics application is one way of assuring them of this.

It is usually a good idea for a researcher to establish an ethics protocol as part of the research project. Sieber (1992) offers a good overview of how ethics protocols can be established. Generally, a research protocol establishes your credibility as an ethical researcher, by establishing your project as one that is proceeding after reflection about what ethical principles are important. These ethical principles may vary, depending on the type of research you are undertaking. You do not wish your research to be perceived as an impulsive and haphazard exercise. You do want your research to be perceived as attentive to the interests of stakeholders. Your credentials as an ethical researcher are also established by the clarity of your research design, and by the proactive and rigorous manner to minimize problems occurring, or to stop them occurring in the first place.

Many countries have highly regarded institutions responsible for overseeing the ethical conduct of human research. For example in Australia, the National Health and Medical Research Council (NHMRC) sets out the ethical principles that apply to clinical research. Such committees provide guidelines for researchers and assist university human research ethics committees in their approval and monitoring of research protocols. It is prudent to familiarize yourself with the various regulatory bodies, at national or disciplinary or university level, in order to assist you in understanding the particular ethical issues at stake in *your* research, and in advising you on how best to develop both ethics approval applications and ethical research protocols.

CONCLUSION

In summary, research is full of ethical considerations. As the prime investigator, you are responsible for ensuring your research design and implementation comply

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with all the ethical standards of your university. As well, you will want to ensure your research findings stand up to scrutiny when presented and published.

FURTHER READING

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