Formation in Research Ethics:

Developing a teaching approach for the social sciences

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Abstract

An extensive literature research has been undertaken to survey the extent of formalised teaching of research ethics for higher degree research students. While seminars for medical and medico-technological students are well represented, there is limited evidence for research ethics formation in the social sciences and humanities areas.

This paper reports the development of a unit in research ethics. While recommended for all research students, the unit is still optional. The unit is attracting a large proportion of research students as well as students who major in philosophy and ethics.

The unit is run as an online seminar series using the courseware BlackBoard™. The approach facilitates a general investigation of social sciences research ethics which over three assessment items funnels to the development of a research ethical commitment that is based on personal values as well as best practice within the individual’s research domain.

Introduction

Research ethics is frequently treated as a footnote to research practice. It is not uncommon for higher degree research students in humanity faculties to face the ethics clearance requirements of their institution as the last act in preparing their research. In times past, it may even have been thought that institutional ethic clearance was another hurdle to be overcome before the real activity of research could be conducted. Such positions place research ethics at the periphery or administrative side of research activities. This article argues for a central place for research ethics and claims that such centrality is not only demanded by our understanding of research but also a fundamental response to the challenge of critics who would claim that research is of limited value or usefulness.

This discussion of research ethics focuses on the humanities’ faculties and the social sciences. The article consciously focuses on qualitative methods, while accepting that the main ideas equally apply to quantitative methods employed in the social sciences. It explicitly excludes a discussion of medical, genetic and biochemical research. The intended audience is those researchers and beginning researchers who anticipate involving human participants in social sciences research. Such students may be in education, sociology, psychology, anthropology and other social sciences. The bioethical expectations of invasive or tissue experiments are not within the ambit of this discussion.

Text book approach to research ethics

There are a number of good texts in research ethics. These texts have guided researchers and institutional ethics boards towards improved practice and have promoted the teaching of research ethics as a preparation for higher research degree activities (Burgess, 1989; Elliot & Stern, 1997; Penslar, 1995; Sales & Folkman, 2000; Sieber, 1992). The ethical principles are often stated under the three headings or...
concerns for beneficence, respect and justice elucidated in the Belmont Report (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979; Sieber, 1992, p.18). Smith develops this basis in five moral principles of: Respect; Beneficence; Justice; Trust; and Fidelity (Smith, 2000, p.5).

Sieber expands the three ‘Belmont principles’ to six norms of research:

- Valid research design
- Competence of the researcher
- Identification of consequences
- Selection of subjects
- Voluntary informed consent
- Compensation for injury

which she relates to the three ethical principles of beneficence, respect and justice listed above (Sieber, 1992, p.19).

All methodologies have an ethical imperative. Qualitative methods have usually been explicit about their ethical commitments (Anonymous, 2001; DeLorne, Zinkhan, & French, 2001; Marshall, 2003; van den Hoonnaard, 2001) whereas quantitative methods have often emphasised statistical and other skills (Bridges, Gillmore, Pershing, & Bates, 1998).

Research ethics is commonly identified in two main areas. The first area is within the research of higher degree students. Student research frequently requires the presentation and acceptance, for institutional purposes, of a research proposal. Such a proposal is commonly required to include a section on research ethics. The second, and often parallel requirement is the institutional research ethics clearance (Marshall, 2003). Most universities maintain a standing committee of research ethics which has oversight functions for all research within the institution whether it be class research, student or staff research. While some energy for these overviews of intended research comes from past malpractice (Gibelman & Gelman, 2001; Lucas & Lidstone, 2000; Steneck, 1994), present practices are reviewed in order to maintain best practice (DeLorne et al., 2001; Weijer, 2001). Similarly, as new areas of research develop, institutional review must adapt to the challenges (DeLorne et al., 2001; Erlen, 2000; Jeffers, 2002). Many external grant applications require this research clearance from the university’s staff applicants and similar bodies exist at the level of State and Federal departments.

A definition of research ethics

A number of definitions of research ethics exist. The Australian Vice Chancellors’ Committee and the National Health and Medical Research Council (NH&MRC) defines research ethics as:

Researchers must be aware of and adhere to ethical principles of justice and veracity, and of respect for people and their privacy and avoidance of harm to them, as well as respect for non-human subjects of research.

(NH&MRC 1997, General Principles #1.5)


There is nothing wrong with these categories or principles as they stand. The focus of this discussion is on the teaching of research ethics, or better phrased: formation in research ethics. It is acknowledged that formation in research ethics has progressed beyond research codes of conduct – which are often rules and boundaries defining misconduct. Such codes of conduct might be more appropriately described as ‘codes of misconduct’. The focus of this article is a discussion of how best to present and discuss research ethics so that beginning researchers are inculcated early in their development with a respect for
the ethics oversight procedures, and more importantly, an understanding of the ethical requirements of good social research (Lucas & Lidstone, 2000).

This paper is not directly concerned with misconduct. While misconduct includes unethical behaviours, misconduct also includes that which is unlawful. These include fabrication or falsification of data, plagiarism and practices unacceptable to the research community regarding the proposing, conducting or reporting of research (Price, 1994). There are indications that misconduct in research are not as rare as one would hope (Fox, 1994; Fox & Branxton, 1994; Hackett, 1994; Herman, Sunshine, Fisher, Zwolenik, & Herz, 1994). Some research communities even include the destruction of primary data within their definition of misconduct (Bostanci, 2002).

The four principles of integrity, beneficence, respect and justice are excellent foundations for discussion (NH&MRC,2001). Their usual treatments in texts and codified presentations do not go far enough and do not represent the full range of the research enterprise. This paper argues that there are at least three aspects in which the traditional understanding of research ethics are deficient. These deficiencies are that research ethics are often too limited and narrow in focus:

- Ethics limited to data collection
- Ethics limited to institutional demands
- Ethics not linked to personal accountability

It is not argued that participants need to receive more information than they currently receive. What this article is arguing is that a more holistic approach to research ethics includes a broader framework and hence needs to be a part of any research rationale. More importantly, this article intends to develop a model of research ethics formation based on what is required and beneficial for the research student rather than a focus on bad practice [codes of misconduct] and simulation exercises which are themselves of problematic ethical value (Lucas & Lidstone, 2000).

**Ethics limited to data collection**

The traditional construction of research ethics focuses the attention on the data collection phase of the research enterprise. Rightfully, the former understanding emphasises the need that participants be informed of the purposes and nature of the research and offer their consent for the research activities. They need to be informed of possible risks and be permitted to withdraw from the research at any time they so choose. However, being informed of the purposes and methods of the research might not cover the research intent and the research question. Clearly, there are research questions which we are not prepared to answer for ethical reasons. We are not prepared to repeat the errors of past researchers who may have used whatever methods they could to achieve data.

The ethical concerns for participants should also include their protection from harm due to research publication. This has implications for the style and place of research publications, and cannot be satisfied by merely claiming participants consented to be involved on data collection since publication may have unanticipated consequences after data collection.

**Ethics limited to institutional demands**

There is a sense that ethical research is what gets past the ethics committee. While this unfortunate perspective is possibly a sign more of past sensibilities than those of today, it is a stronger teaching point that research ethics pertains to all parts of the research enterprise. The holistic approach is more likely to alert intending researchers to their responsibilities throughout the complete research enterprise. The researcher has ethical responsibilities to the range of stakeholders and even gatekeepers of research domain, although not all these individuals are owed equal responsibilities, and also to the profession of researchers. While a prime focus of ethical clearance procedures may focus on institutional accountability, the University or institution cannot fully encompass all the ethical calls for any research project.

**Ethics not linked to personal accountability**

It is argued that research ethics pertains to the full range of activities that comprise research. As such, it is the researcher as an individual who must take responsibility for ethical behaviour. While it might sit uncomfortably with some, institutional demands often engender an approach that focus on avoidance or
circumvention. This article argues that ethical research is not the sum of a set of guidelines but the result of personal accountability towards making the research as good as it can be while respecting all the people and institutions that the research touches. This point will be further explored in the latter half of this paper.

**An improved model of research ethics**

This article attempts to offer a more holistic and inclusive construction of research ethics. The model allows ethical principles to be focused on the whole research enterprise, from its inception with a research question to the publication of its results and findings.

This model is not the result of perceived neglect of ethical principles nor their improper application. This article does not arise from an analysis of deficit of our presentation of research ethics but rather an analysis that seeks to improve and make more transparent the research thinking. It will be argued in a later section that this increased transparency is a claim for validity of all research and a strong response to those in the community who are sceptical of research and academic researchers (Branxton & Bayer, 1994; Steneck, 1994).

**A holistic definition of research ethics**

Research ethics does not need to be radically redefined in order to develop a stronger framework. Essentially, a refined definition would strive to be more inclusive of the totality of research activities. Research ethics are the guiding principles, based on values that esteem people and the growth of social structures, that promote and safeguard the integrity of all persons involved in the research: participants; gatekeepers; stakeholders; researchers and research consumers, to promote the good of all without sacrificing the interests of any, so that the research outcomes represent a progress worthy of the time and resources expended.

It would seem that such a definition has immediate consequences for planning and how we speak about research. One way of developing these consequences is to map the headings of a research plan that are affected by this reconceptualisation of research ethics. These headings could include:

- Research questions
- Methods
  - Instruments
  - Sampling
  - Researcher behaviour and persona
- Data collection
- Data analysis
- Reporting and use of results

It is not intended to unwrap each of the research headings above. Considerations of space in this article restrict the discussion to a brief treatment of major points. The advantage of considering research ethical components of each of these headings is their very familiarity to researchers and the increased transparency of ethical reflection of each heading. As earlier stated, this ethics model comes not from a discussion of deficits or mal-practice in terms of research practice (Meslin, 2002; Payne, 2000), but rather a motivation to increase transparency and public acceptance as well as to better explain the research processes.

There is a strong motive for this better understanding of research ethics. It is well argued that the validity of social research stands upon its ethical conduct and, more insistently, the present cynicism and scepticism in some sections of the public and informed readership can only be addressed by the grounded ethical construction, conduct, analysis and reporting of research (Shaw, 2003, p.113).

The ethical issues of data collection are often focused upon informed consent and privacy. Yet other ethical issues do pertain to data collection. Mark, Eysell and Campbell (1999) advocate a cost benefit analysis in which “the risks to participants are to be weighed against potential benefits of the research” (Mark et al., 1999, p.48). While methodological choices have ethical overtones (McLeod, 1996), the design of the research program is also an ethical issue since the resources and time and trouble of participants should not be lightly requested nor expended (Mark et al., 1999, pp.49-51).
Data analysis is a research activity that has its own ethical requirements. Most would be familiar with a sense of performing only those (statistical) tests that might be required as a minimum or to explore hypothesised relationships. Principled discovery (Mark et al., 1999, pp.52-53) stands in contrast to data mining, as data mining is an automatic and algorithmic approach to retrieving data (Mena, 1999, p.42).

Parker and Szymanski (1996) list ten standards of ethical publication of research findings which establish a sound basis for this often neglected aspect of research. They include: the responsibility to print retractions if findings are later found to be unsubstantiated; due accord to previous authors; not submitting the same article to multiple journals; and an openness to share data when requested (Parker & Szymanski, 1996, pp.162-163).

This article is not alone in calling for increased ethical responsibility in social research. Within a number of social science disciplines there is heightened concern for ethical clarity. Nursing (Jeffers, 2002; Royal College of Nursing Research Society, 2003) and social work (Antle & Regehr, 2003; Gibelman & Gelman, 2001; Richards & Schwartz, 2002) have within the last several years raised concerns about ethical education. It is argued that a more holistic model of research ethics, that moves beyond the traditional focus on the data collection, may address the valid and urgent concerns raised.

Gibelman and Gelman (2001, p.249-250) raise two further matters pertaining to maintaining high ethical standards. The first recommendation is that researchers develop mentoring relationships with more experienced researchers. Clearly this recommendation has benefits beyond those of high ethical standards. The second recommendation is that 'whistle blowing' be more strongly approved in ethics courses. While pointing out that many whistleblowers still suffer career detriments, Gibelman and Gelman (2001, p.50) note that most cases of misconduct are reported by whistle blowing colleagues. Evered and Lazar (1995) suggest three approaches to diminish misconduct: education and the establishment of ethical standards; encouraging practices to diminish pressures that promote malpractice (principally the pressure to publish); and processes to enact consequences for malpractice.

**Research ethics as the fundamental basis of research validity**

If one accepts that academic and professional research is not universally well regarded, how can researchers respond? This author argues that the best response is to more transparently base our research activities upon ethical foundations. While it is an unfortunate aspect of human frailty that not all professional researchers will be innocent of misconduct, the argument about the usefulness of research needs to be made from an ethical foundation.

When instances of research fraud and cheating are discovered, the research community needs to act firmly. Firstly, the research community needs to respect and protect those who do function as ‘whistle blowers’ to report misconduct (Evered & Lazar, 1995; Gibelman & Gelman, 2001, pp.250-251). Secondly, the research community needs to ensure that adequate censures for misconduct are in place (Fox, 1994; Hackett, 1994). Thirdly, universities and their research centres as well as government and non government research facilities need to publicise and promulgate their ethical commitments (White, 2002). Fourthly, university curricula need to acknowledge the requirement to form research students and academics in research ethics (Beck & Kauffman, 1994; Kaiser, 2002).

Lastly, research review boards need to focus on moving from technical to personal values. The standard ethical clearance form of Australian universities requests technical information about research practices especially in relation to potential harm that participants might encounter. There is nothing wrong with this. What this article argues is that the research ethics should more transparently require the applicant to substantiate that the research promotes integrity, beneficence, respect and justice (NH&MRC 2001, pp.C3-C16). In part this shift will require a personal ethical commitment from the researchers towards ethical principles, rather than a simple disavowal of those actions which might be unethical.

While the above point might seem to be a small one, in fact it is substantial. Research quality always rests on the researcher – oversight boards and even research supervisors can only be aware of a small part of the interactions that comprise research between and among human subjects. Good research is more likely to be done by well informed and well intentioned researchers, and research training needs to address both the technical side of research preparation and the human, ethical side of research formation. As research participants, consumers and interested readers better understand that the principles of
integrity, justice, beneficence and respect underpin research, these same people are going to be more receptive to the claims and insights of research.

There have been research ethics mistakes of the recent past (Fox, 1994; Meland, 2003; Moreno, 1999; Normlie, 2001). While it has proved difficult to quantify such misconduct (Branxton & Bayer, 1994; Holden, 2002), it is clear that increased oversight of research is on the horizon (LaFollette, 1994). Put bluntly, to the extent that the research profession does not administer itself, then governments will be tempted to administer.

One result of the publication of ethical lapses in research could be a public more critical of research and even consumers increasingly critical of research claims. The means to combat this possible outcome are already to hand and can be readily employed. Universities can take the lead in a triple approach to ensure that research ethics become the foundation of good research. These steps include:

- A clear statement of the research ethics principles that support all the university’s research
- A strong statement of boundaries and responses for unethical behaviour with a transparent means of responding to accusations of unethical behaviour
- A central place for research ethics education for all higher degree researchers

It seems that this triple approach need not be too difficult to accomplish. Ethics committees in most universities are already charged with the several of the steps described above. A stronger presence and discussion of research ethics on Research Centre websites will be a first step. Serious and transparent investigations of ethical lapses can only be enacted when such lapses are reported, but the climate that remains open to such reporting can be readily established.

It should be relatively easy to include a seminar or unit of research ethics preparation for higher degree students. While PhD students might need seminar preparation to ensure that their supervisors are not additionally burdened, doctoral students and those whose courses include some coursework will readily find opportunities for a research ethics unit. Further, the university should not be shy of teaching research ethics, even if not all aspects are unproblematic, since this readiness itself will impress the seriousness of the topic upon all.

Developing a teaching program

The challenge that needs to be addressed is: How to develop a teaching program to deliver these ideals of research ethics? This author has taken a problem-based learning (PBL) approach. PBL is not new, especially in the medical sciences and medical education fields (Miflin, Campbell, & Price, 2000; Morrison, 2004). To my knowledge, no one has yet taken a PBL approach to Research Ethics.

The realities of the University that employs the author preclude the formation of large classes of research students. Small classes of postgraduate researchers are the norm. This limitation has encouraged the development of a online delivery mode which also facilitates the distance education students, some of whom include international students who return to their country of origin to collect data. one corollary of this limitation of small groups is that group discussion is less likely to occur face-to-face (Azar, 2004; Mierson & Freier, 2004) and is more likely to occur online or individually with the Unit leader. PBL has been associated with an increase in reflective practice and the encouragement of professionalism (Basile, Olsen, & Nathenson-Mejia, 2003). PBL has offered a new perspective to the content of the Unit: the Unit leader not needing to be the expert in all aspects of the field, but more the facilitator of the individual student’s learning journey (Dahlgren, Castensson, & Dahlgren, 1998; Miflin, 2004). The means of facilitating this journey is explored in the PowerPoint presentation offered during the conference, exploring the online materials that are offered as stimuli and resources for the achievement of the student’s learning.

What is the problem for the PBL approach?

The simple formulation of the problem is: The requirement to submit a cogent and defensible Ethics Clearance Application to the UNDA Research Ethics Committee so that the proposed postgraduate research project can commence data collection. The steps that are offered in this approach are:
1. An overview of research ethics. This is essentially a book review of a reasonably general text (Sieber, 1992);
2. Developing a synthesis of the research ethics parameters and practices in one’s own content domain;
3. Completing a personal Research Ethics commitment statement; and

Conclusion

This article has argued that the present conception of research ethics is too tightly allied to data collection. Research ethics must inform the whole of the research process from shaping a research question to the publication of findings. Research ethics is the major defence and reply to those critical of research practices. To establish a rich and vibrant discussion of research ethics in researcher formation programmes is seen to be the best response to increased criticism of faulty research and attention to ethical lapses. Put simply, the best research will be that research that promotes the beneficence, and integrity of all research participants in a manner that incorporates respect and justice for all involved.

The particular focus of this article has been the social or human sciences. That research not promote beneficence, integrity, justice and respect is simply unacceptable to most researchers. While various oversight measures may need to be better established in some universities, it is most likely that information and education are preferred means to achieving a higher profile for ethical standards and research practices. This education should be grounded in higher research degree programmes and proclaimed as an integral part of the research activity.

References


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