Research Ethics

Preview

Introduction

Without being too alarmist, the following incident underlines the importance of taking ethical issues seriously.

In June 1999 the front page of Melbourne newspaper the *Age* carried the headline 'Student survey sparks inquiry'. This story referred to a Deakin University research project in which it appeared that procedural guidelines had not been followed correctly. The newspaper report followed up a complaint lodged by the parents of some respondents to a survey of adolescents. Clearly, people are not only very aware of their rights, but also of the potential for the misrepresentation and abuse of information. They want to be given due respect and consideration, particularly when the information concerns sensitive personal issues. Unfortunately in this case, the procedural failure led not only to the cancellation of the study but also to a great deal of embarrassment.

This is fortunately not a common occurrence, but it does suggest that it is useful to get an early grasp on the ethical issues related to research. This will help you to design your project effectively and will inform your dealings with others during any subsequent study. Deakin University is committed to high research standards and has therefore developed an ethics code which provides a detailed framework for research practice, and gives due consideration to a range of serious issues. The professional standards of the university environment also imply that the spirit of these guidelines is embraced seriously.

These guidelines have been developed because Deakin University acknowledges the common rights of people to respect and protection. But the guidelines are also important to the University at large because research is an ongoing core activity. It's worth remembering that you are not undertaking the last-ever research project, but that other students are following. Therefore, in relations with the public, while it may be easy to embrace the spirit of ethical guidelines, it is also important to emphasise that correct procedures need to be followed.

Studies which involve human subjects can be particularly controversial and have therefore become the subject of conventions like the recent *National Statement on Ethical Conduct of Research Involving Humans* (NHMRC 1999). Interestingly, these conventions are not only aimed at curtailing bizarre psychological or medical studies. In organizations such as you may be interested in researching, they encompass such things as market research surveys, in-depth interviews, or the solicitation of expert opinions on a particular theme (such as the role of the Internet in contemporary society).

Ethical issues arise in all professions. When we refer to unethical practices, we are usually referring to situations in which the researcher uses improper methods to skew research findings to their own advantage, or who takes credit for work that is not their own. In all forms of research, the potential for unethical practice is great. Clearly, it is good to know how to recognise such things, but being able to anticipate areas of risk in advance of commencing a project is obviously an extremely advantageous professional skill.

Background ethical issues

The world of advertising is good place to look for the misuses of research results, and these help to bring into focus some key ethical concerns. The intention here is to instill a bit more cynicism into some of you, and for those who already possess an ample supply, to provide an additional target for it.

The positive spin

While not dealing directly with all managers, Vance Packard's influential book *The Hidden Persuaders* (1962) drew attention to questionable advertising practices in 1950s America. With regard to research, and in particular to the presentation of results, another book published a few years earlier was quite successful in demythologising the power and authority of 'statistical proof'.

It was called *How to Lie with Statistics*, and, according to the author, Darrell Huff, it set out to examine 'the pretty little instances of bumbling and chicanery' in advertising and research, which had not been openly questioned before (Huff 1954). In this context the examples Huff described are useful for bringing some ethical issues into clear focus. Most of these instances involved the manner of presentation of results; others involved the way the data was collected or analysed. Huff's general thesis was that research results which deserved little recognition, if any at all, were often accorded the status of grand discoveries by the advertising agencies hired by companies with a vested interest in those results.

Here is a typical example:

> It started innocently with the editor of the *Reader's Digest*, who smokes cigarettes but takes a dim view of them all the same. His magazine went to work and had a battery of laboratory folk analyze the smoke from several brands of cigarettes. The magazine published the results, giving the nicotine and whatnot content of the smoke by brands. The conclusion stated by the magazine and borne out in its detailed figures was that all the brands were virtually identical and that it didn't make any difference which one you smoked.
>
> Now you might think this was a blow to cigarette manufacturers and to the fellows who think up the new copy angles in the advertising agencies. It would seem to explode all advertising claims about soothing throats and kindness to T-zones.

> But somebody spotted something. In the lists of almost identical amounts of poisons, one cigarette had to be at the bottom, and that one was Old Gold. Out went the telegrams, and big advertisements appeared in newspapers at once in the biggest type at hand. The headlines and the copy simply said that of all cigarettes tested by this great national magazine Old Gold had the least of these undesirable things in its smoke. Excluded were all figures and any hint that the difference was negligible.
>
> (Huff 1954, pp. 58–9)

There is no limit to the potential for this sort of thing. For example, there was a very effective advertising campaign some time ago for an antiseptic liquid. The advertising copy said something like 'Experiments show that just a few drops will kill germs in 100 000 gallons of water', or some such staggering amount; it might well have been more. No-one ever thought to ask, however, *how many* germs it killed. As in the Old Gold example, even if it only managed to bump off a few, that would justify the usage of the plural in the copy, and thus ensure the 'truth' of the advertisement.

The annual reports of organisations are often places where you will find examples of the 'positive spin'. The following is a recent example where the writer has gone all out to demonstrate that there has been a significant increase in the readership of the organisation's publication.

> In 1998 we continued strategies to expand circulation and readership through increased individual and library subscriptions and improved marketing and distribution strategies. Our substantial mailouts and 'on-sell' arrangements continued and by issue 4/98 we were distributing 3000 copies—in Australia, New Zealand, USA, and in 13 other countries—and had achieved our aim for the year of securing over 1000 subscribers. Extrapolating from the University of Technology Sydney's 1996 readership survey, which indicated that each copy was read by 3 to 4 individuals, *Object*'s readership grew to 10 000.
>
> (Centre for Contemporary Craft 1999, p. 8)

Dramatic graphics

The most striking examples in *How to Lie with Statistics* concern graphical representation. By using a scale of relatively small incremental values along the vertical axis of a chart, but making those same distances between increments along the horizontal axis represent relatively large values, the line graph will be amazingly steep, even if the value increases have all been quite small. You can experiment with this yourself. Draw, or just visualise, a horizontal axis showing the months of the year, each a centimetre apart. If the monthly increase was $1000 per month, the line graph would climb ever so gradually if each of the vertical increments represented $10 000. However, if each represented $500, it would soar off the paper. Huff calls this sort of thing 'the gee-whiz graph'.

There are endless subtleties to this system. Huff contends that pictorial representations are also easily exploited. Comparisons of values that have increased over time are often depicted through an expanding pictorial representation. For example, a line of houses, each one bigger than the one before, depicting an increase in average price; or a line of cows, each decreasing in size, showing a decline in beef production. The visual problem here is that although the increases and decreases are produced by a change in the requisite proportion, they are often increased or decreased in both the vertical and the horizontal direction. Thus a 100 per cent real increase, doubled in each direction, is depicted as a picture *four times as large* as the picture representing the original value; a 300 per cent increase is depicted as *nine times as large*.

Comparisons and exclusions

We probably all know not to trust percentage increases. If last year's theatrical production of Sudraka's *The Little Clay Cart*, performed in the original Sanskrit, drew an audience of three, can it really matter to anyone if this year's attendance has increased 'a full 400 per cent'?

A verbal counterpart of Huff's examples are surveys to do with things such as 'culture'. Misrepresentations here, even if not intentional, are problematic. Can we really make any legitimate interpretations about people 'choosing' to spend time at a library, for example, when the attendance figures for particular age intervals include students who have little choice?

There is also a problem of diverse terminology and the comparison of different surveys, as this example demonstrates:

> In the fine arts, comparisons cannot be precise because the US figure is for 'art museums and galleries', while for most other countries it is either for 'art exhibitions' or for the category of 'all museums'.
>
> (Heilbrun & Gray 1993, p. 41)

With sporting and cultural events often included in the same survey in Australia, what happens when we compare this data with that of other countries? There may well be very few problems in such situations, but if the numbers are important to our organisation, it is certainly worth asking questions.

Sometimes, too, certain information that might be of interest to the reader of research results is not mentioned at all, such as the existence of contradictory findings. Again, this might not be intentional. However, suspicions are sometimes voiced.

Poor judgment

Ethical questions can often overlap questions of poor judgment. In regard to interview bias, for example, it should be obvious that if interviewers from an organisation administer questionnaires face-to-face, and let it be known to respondents that they are members of that organisation, then because of 'the barrier of politeness' most of those respondents are going to choose answers that they believe the interviewer wants to hear. On rare occasions interviewers go so far as to wear T-shirts with the organisation's name on it to advertise their self-interest. Thus, the question becomes whether this is unethical practice, in that the respondents will be manipulated, or whether it is just dreadfully poor judgment.

Sometimes ‘loaded’ questions are asked out of foolishness, or just a lapse of concentration in developing a questionnaire to a tight deadline. But when the business or organisation which commissioned the research is also the one who announces the results, it is hard to take them seriously unless they supply a copy of the questionnaire, with the exact phraseology of the questions.

Some ethical issues in your own research

This section introduces some complex ethical issues, and at times may use terminology with which you are as yet unfamiliar. Don’t worry; these terms will become clearer as you progress your research. We use them here to illustrate how ethical issues intersect with fundamental aspects of your research.

Confidentiality

If you use a questionnaire or conduct interviews or focus groups, the question of *confidentiality* must be considered. Care must also be taken with the types of questions asked and in the way responses are used to support hypotheses. If you use the ‘observation technique’, be sure that you do not observe or create situations that infringe unduly on people’s *privacy*.

Responses should not be traceable to any particular respondent. Someone may say, for example: ‘I am speaking as the marketing manager of the XYZ organisation, and, having been in that position for eleven years, I believe a single tourism publication would be a good idea for the city’.

What can we use here, keeping in mind this question of traceability? If you have included only one marketing manager in your sample, you obviously cannot use ‘speaking as the marketing manager’. If you have only spoken to one person from the XYZ organisation, you cannot use ‘XYZ’. If you have only spoken to one tourism person, you cannot use ‘Tourism Organisation. If this person has held that position for eleven years, undoubtedly anyone in the sector would know who matches that description, so you cannot use ‘been in that position for eleven years’.

You *can* write the following, but not much more: *One of the respondents who has been in the industry for a number of years said: ‘I believe a single tourism publication would be a good idea for the city’.*

So if you decide to conduct research which requires a sample, consider whether or not you are restricting yourself from the outset. If, among your respondents, there is one whom you are certain will have important things to say, then be sure to have at least one other person who is similar in some demographic way, in order to be able to grant the anonymity required. (This sort of thing can sometimes become difficult. Discuss potential problems with the respondent, if necessary.)

Some people, however, manage to avoid all that hassle. Replicated without comment is the following ‘filler’ from Lawrence Money’s column in the *Age*:

> Brain scan needed for one Western-suburbs newshound who knocked out a piece on local drug rehab services using information from the mother of rehabilitating junkie. Mother asked

> that he not be named and the paper obliged. But they named her, adding that her 27-year-old son was a heroin addict.
>
> (Money 1996, p. 18)

Plagiarism

Plagiarism is literary theft. It involves passing off the words and/or ideas of another as one's own. It is worthwhile drawing attention to two points:

- Plagiarism can be a nebulous area, in which accusations occur even when the writer has given what they feel is adequate attribution of a source.
- Students above the undergraduate level have generally been exposed to so much information that some of it, understandably, would by now have been unconsciously appropriated as their own; thus, inadvertent plagiarism is quite possible.

Regarding the first point, be sure, if you are citing a quotation, that it is clearly set off from your own text, either by indentation or by quotation marks. This is essentially a simple proofreading exercise, but it is worth being careful in order to avoid embarrassment. Keep a list of detailed sources as you work, inserting in brackets details of the author, date, publisher, place and page numbers immediately after every quotation, graph or illustration. This might be tedious, but when you come to put together the final draft, you will not have any problems trying to remember from where each item was obtained. If you move things around, keep these sources with the items.

As David Evans has pointed out in *How To Write a Better Thesis or Report*, most word processing programs include footnoting or referencing systems that allow for automatic renumbering as you continue to develop your text (Evans 1995, p. 54).

The second point is obviously more problematic. Get into the habit of questioning yourself about points that you make in the course of your research report. If you use an anecdote or an example, ask yourself (or better, interrogate yourself) about its origin. The worst result of slackness here is the situation, so jarring to a reader, in which the writer takes the 'first person' part in an anecdote which virtually everyone has heard at some time or another. This sort of thing makes people question the originality and validity of every aspect of the work in question.

Gathering data

What is meant by following *proper research procedures in gathering data*? In gathering data, for example, it is important not to ask leading questions which you know will result in certain responses. If you listen carefully to the questions asked in some street surveys, you will realise that the interviewer wishes to obtain a particular response, and usually succeeds. A 'leading' question such as 'Do you think there is too much violence on television?' will result in answers about violence. By selecting certain kinds of people (e.g. middle-aged, wealthy, middle-class) to answer questions, the interviewer can obtain certain kinds of results. The interviewer can almost always then conclude that 'most people' surveyed said there was too much violence on television. In genuine research, particularly academic research, it is important to ask questions which allow the respondent to give a genuine opinion on the subject of the research, and it is vital to ensure a cross-section of respondents in order to obtain a valid result.

Interpreting data

Similarly, when you are *interpreting data*, it is important to interpret the results as objectively as you can. If, for example, you are surveying people about their perceptions of modern theatre productions, and the results you get are mixed, you have no alternative but to point out that the results of your research are ambiguous and do not point clearly to any particular perception. This may be due to a fault in your research methodology, or it may be that there is no general perception of modern theatre among the people surveyed. Either way, it is important not to try to squeeze the results into your preconceived idea of the answers you would obtain.

Misconduct in research

While it is unlikely that you will be involved in anything approaching deliberate research fraud, here are a few of the major points that constitute actual misconduct in research:

- fabricating data (i.e. claiming results where none have been obtained);
- falsification of data (this includes changing records); and
- plagiarism.

While it may seem to you that no-one would do such things deliberately, remember that in some cases researchers are paid a lot of money by companies with a vested interest in the result, and the temptation to obtain the right results for the company (e.g. that a certain product is 'safe') has misled more than one researcher. Misconduct, by the way, does not include honest errors or honest differences in interpretation or in judgments of data.

Deakin University guidelines and requirements

There are two ways in which Deakin University ethics procedures directly impact on the development of your project. First, you will need to be familiar with the ethical ramifications of different data-gathering methods so that you can make informed decisions about the logistical requirements of your project. Second, in order to pursue your chosen project, you may have to make a formal written submission to the Ethics Committee. This requires time allocation, good management, and a high level of competence.

'Human subjects' and ethics clearance

University procedures insist that any research project involving human subjects needs to be approved by the Ethics Committee. The following list makes it pretty clear that there are few research projects which do not require ethics clearance if people are involved. Everyone, staff and students alike, is required to gain clearance prior to the commencement of a research project. Although planning and background work can proceed (as long as it does not involve actual human research), soliciting for and inviting human participation can only occur after clearance has been given.

A 'human research' project is one which includes any individual human or identifiable group of humans:

- being interviewed (including anonymously);
- being surveyed by questionnaire (including anonymously);
- being observed, for example, in a workplace, classroom, theatre, gallery;
- being portrayed, for example, photographed, described, painted;

- being asked for material things, for example, family belongings;
- being administered any physical or mental procedure, for example, evacuation plan; and
- whose personal records are being accessed or analysed (including through databases).

This means that if you are considering undertaking any program evaluation study which uses members of the public as a source of data you will need ethics clearance. If you are seeking a range of professional *opinions* you will also need clearance. On the other hand, you do not need permission to ask librarians, curators or archivists for straightforward information such as, 'Do you have any Arthur Boyd paintings in the collection?' or 'What files do you hold concerning the Ballet Russe de Monte Carlo?'. Ask yourself this question, 'What do I want from this person; basic information or personal data or opinion?'. If you want personal data or opinion, you will need ethics clearance.

Benefits of gaining Ethics Committee clearance

Gaining ethics clearance does require planning but it has a number of benefits. The following list suggests that your proposal will be much stronger and that your subjects will feel a great deal more secure than the disgruntled parents of the adolescents in the study referred to earlier.

- The Committee can help strengthen your project by asking formative questions.
- Your subject knows that you have the official backing of Deakin University's experience.
- The subject is informed about how their data will be used, and what access they will have to the information.
- The subject knows who your supervisor is, should further contact with Deakin University be required.

Fundamental concerns in planning and assessment

The following are the Deakin University guidelines which conform to the *National Statement on Ethical Conduct in Research Involving Humans* (NHMRC 1999) and which form the basis of an ethics clearance assessment. In planning your research project you will need to demonstrate to the Committee that you and your project will:

- be ethical, (i.e. identify and address all ethical issues likely to be involved);
- be meaningful or worthwhile (not waste time or effort of all parties involved);
- be carried out by properly qualified and competent researchers or properly supervised research assistants;
- respect the rights and interests of any subject at all times;
- ensure that consent is free and informed;
- have adequate facilities and resources to carry out the research and meet contingencies, such as back-up medical or counselling facilities to handle physical, personal or emotional distress; and
- be able to be modified or stopped if necessary to prevent or minimise harm.

In the assessment process, amongst other things of course, Deakin University staff are obliged to consider the following list of questions as essential when evaluating the ethical status of your research:

- Is the work entirely the writer's?
- Have other people's contributions been appropriately acknowledged?

- Has the role of Deakin University and that of the lecturer(s) been acknowledged?
- Has the host organisation's role, and that of the interviewees, been appropriately acknowledged?
- Has confidentiality been maintained?
- Have proper research procedures in gathering data been followed?
- Have proper research procedures in interpreting data been followed?
- Are the research claims complete, accurate and unambiguous?

Procedure for obtaining ethics clearance

Applying for ethics clearance is actually a good way of refining the design of your project. It forces you to be clear and confident about the aims and methodology of your research project. Often muddled thinking lies behind badly prepared material. Obtaining ethics clearance is not difficult provided you follow the procedures and present your application in a professional manner. You must remember though, that while the Committee convenes regularly, the meetings are often some time apart, so this obviously has logistical implications.

References

Centre for Contemporary Craft 1999, *Annual Report 1998*, Sydney.

Evans, D. 1995, *How To Write a Better Thesis or Report*, Melbourne University Press, Carlton.

Heilbrun, J. & Gray, C. 1993, *The Economics of Art and Culture*, Cambridge University Press, UK.

Huff, D. 1954, *How to Lie with Statistics*, Norton, New York.

Money, L. 1996, 'Spy Hole', *Age*, 14 July.

NHMRC 1999, *National Statement on Ethical Conduct in Research Involving Humans*, NHMRC, Canberra.

Packard, V. 1962 (1957), *The Hidden Persuaders*, Penguin, Harmondsworth, UK.