

# Research Ethics: Issues and Resources

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The knowledge gained through psychological research has provided many practical benefits as well as invaluable insights into the causes of human behavior. Despite these benefits and insights, the process of conducting scientific research can pose serious ethical dilemmas. Because research is a complex process, well-intentioned investigators, especially students with only limited experience, can inadvertently overlook the interests of research participants, causing harm to the participants, scientists, science, and society. This chapter outlines some of the issues that the student researcher and his or her mentor need to keep in mind when conducting research, and describes online training programs available for teaching research ethics.

## **Ethical Issues in Recruiting Participants**

One of the first ethical issues a researcher must address is the recruitment of research participants. In the recruitment process, researchers must be guided by the principles of autonomy, respect for persons, and the principle of beneficence that requires them to minimize the possible harm to participants while maximizing the benefits from the research (Scott-Jones, 2000). The first stage in the recruitment of participants is often an advertisement for the research project. At this stage, ethical concerns include the use of inducements and coercion, consent and alternatives to consent, institutional approval of access to participants, and rules related to using student subject pools. Researchers must not exploit potential participants, especially vulnerable participants, by offering inducements that are difficult to refuse, for example highly desirable toys to children. At the same time, researchers must weigh the costs to the participant and provide adequate compensation for the time they spend in the research process.

Most psychological research is conducted with students recruited from university subject pools, which raises an ethical concern since the students' grades may be linked with participation (Leak, 1981). Ethical practice requires that students be given a reasonable alternative to participation that offers the same credit as those who choose to participate in

research. The alternatives offered must not be seen by students as either punitive or more stringent than research participation.

## **Informed Consent and Debriefing**

Informed consent is the cornerstone of ethical research. Consent can be thought of as a contract in which the participant agrees to tolerate experimental procedures that may include boredom, deception, and discomfort for the good of science, while the researcher guarantees the safety and well-being of the participant. In all but minimal risk research, informed consent is a formal process whereby the experimenter presents the relevant aspects of the research along with the obligations and responsibilities of both the participant and the researcher. Minimal risk refers to a level of harm or discomfort no greater than that which the participant might expect to experience in daily life. Research that poses minimal risk to the participant is allowed greater flexibility with regard to informed consent, the use of deception, and other ethically questionable procedures.

Informed consent presents difficulties when the potential participants are children, the participants speak a different language than the experimenter, or the research is therapeutic but the participants are unable to provide informed consent. Certain research methodologies make it difficult to obtain informed consent, as when the methodology includes disguised observation or other covert methods. The omission of informed consent in covert studies can be appropriate, when there is a need to protect participants from nervousness, apprehension, and in some cases criminal prosecution (Herrera, 1999). While most psychological research includes an informed consent process, federal guidelines permit informed consent to be waived if (a) the research involves no more than minimal risk to the participants, (b) the waiver will not adversely affect the rights and welfare of the participants, and (c) the research could not be feasibly conducted if informed consent were required.

## The Use of Deception in Research

At one time deception was routine in behavioral science research, and by the 1960s research participants, usually college students, expected deception and as a result sometimes produced results different from those obtained with unsuspecting participants (Diener & Crandall, 1978). In general, psychologists use deception in order to prevent participants from learning the true purpose of the study, which might in turn affect their behavior. Many forms of deception exist, including the use of an experimental confederate posing as another participant, providing false feedback to participants, presenting two related studies as unrelated, and giving incorrect information regarding stimulus. The acceptability of deception remains controversial, although the practice is common.

Several alternatives to using deception are available. Role-playing and simulation can be used in lieu of deception (Geller, 1982). In field research, many researchers have sought to develop reciprocal relationships with their participants in order to promote acceptance of occasional deception. Such reciprocal relationships can provide direct benefits to the participants as a result of the research process. In cases where deception is unavoidable, the method of assumed consent can be used. In this approach, a sample taken from the same pool as the potential participants receives a complete description of the proposed study, including all aspects of the deception, and indicates whether they would be willing to participate in the study. A benchmark of 95 percent agreement allows the researcher to proceed with the deception manipulation.

## Avoiding Harm: Pain and Suffering

Participants' consent is typically somewhat uninformed in order to obtain valid results untainted by knowledge of the researcher's hypothesis and expectations. Because of this lack of full disclosure, the researcher must ensure that no harm will come to the participant in the research process. Protection from harm is a foundational issue in research ethics. The researcher must consider physical harm; psychological stress; feelings of having one's dignity, self-esteem, or self-efficacy compromised; or becoming the subject of legal action. Other types of potential harm include economic harm, including the imposition of financial costs to the participants, and social harms that involve negative effects on a person's interactions or relationships with others. In addition to considering the potential harm that may accrue to the research participant, the experimenter

must consider the possibility of harm to the participants' family, friends, social group, and society.

While conducting research, the researcher's responsibility includes monitoring actual or potential harm to the participant in case the level of harm changes during the course of the research. One cause of change in potential harm is a mistake made by the researcher. If the likelihood of harm increases, the researcher should inform the participant and remind him or her that voluntary withdrawal without penalty is available (Eyde, 2000).

A particular kind of harm addressed in the 1992 APA Code of Ethics is the harm caused by culturally incompetent researchers whose perceptions of gender and race are misinformed by their group's view of social reality (Casas & San Miquel, 1993). Research designs constructed by researchers with uninformed views can reinforce negative stereotypes about the group studied. One way to avoid this ethical bias is to view research participants as partners as opposed to subjects in the research process. The perception of partnership can be fostered by taking the participants into the researchers' confidence, providing a thorough debriefing and the opportunity for further involvement in a role other than *subject*.

While psychological research into certain processes, for example anxiety, depends on the arousal of some discomfort in the participant, the researcher must look for ways to minimize this discomfort. In many situations, discomfort is inherent in what is being studied. When nothing can be done to eliminate this type of discomfort, some ways that may minimize the psychological consequences of the discomfort include providing full and candid disclosure of the experimental procedures, providing opportunities for the participant to withdraw, and ensuring that there are no lingering ill effects.

## Maintaining Confidentiality

Respecting the privacy of the research participant involves much more than just obtaining informed consent. Confidentiality is a complex, multifaceted issue. Confidentiality involves an agreement, implicit as well as explicit, between the researcher and the participant regarding disclosure of information about the participant and how the participant's data will be handled and transmitted. The participant has the right to decide what information will be disclosed, to whom it will be disclosed, under what circumstances it will be disclosed, and when it will be disclosed.

Participants must be informed about mandatory reporting requirements, for example, illegal activity, plans for sharing information about the participant

with others, and the extent to which confidentiality can be legally protected (NBAC, 2001). Review committees are responsible for ensuring that the proposed research procedures will not unintentionally compromise confidentiality, especially if participants are vulnerable because of age, gender, status, or disability.

New technologies, along with government statutes and access by third parties to data, can threaten confidentiality agreements, although both state and federal courts have been willing to uphold promises of confidentiality made to research participants. Techniques to maintain confidentiality of data include data encryption and electronic security. Some types of data such as video recordings, photographs, and audio recordings require special care in order to protect participants' privacy. Distortion of the images and sounds is possible, but the most important safeguard is to obtain permission from the participant to use the material, including the dissemination of the findings.

Similarly, qualitative research poses special difficulties for maintaining privacy and confidentiality (Turnbull, 2000). Techniques for maintaining confidentiality include the use of pseudonyms or fictitious biographies and the coding of tapes and other data recording methods in which participant identification cannot be disguised. Researchers must also take reasonable precautions to ensure that participants respect the privacy of other participants, particularly in research settings where others are able to observe the behavior of the participant.

## **Debriefing**

Debriefing provides the participant an opportunity to discuss the findings of the study. Adequately debriefing participants in a research study is a clear ethical responsibility of the investigator, although it is still the exception rather than the rule. Debriefing can serve four purposes. It can (a) remove fraudulent information about the participant given during the research process, (b) desensitize subjects who have been given potentially disturbing information about themselves, (c) remove the participants' negative arousal resulting from the research procedure, and (d) provide therapeutic or educational value to the participant. Even participants who are screened out of a study or voluntarily withdraw from a study should be debriefed and told why they might have been eliminated from the study.

## **Ethical Issues in Conducting Research with Vulnerable Populations**

An important ethical concern considered by IRBs is the protection of those who are not able fully to protect themselves. While determining vulnerability can be difficult, several types of people can be considered vulnerable for research purposes, including people who (a) either lack autonomy and resources or have an abundance of resources, (b) are stigmatized, (c) are institutionalized, (d) cannot speak for themselves, (e) engage in illegal activities, and (f) may be damaged by the information revealed about them as a result of the research (Sieber, 1992). One of the principle groups of research participants considered to be vulnerable includes children and adolescents. In addition to legal constraints on research with minors adopted by the United States Department of Health and Human Services (DHHS), ethical practices must address issues of risk and maturity, privacy and autonomy, parental permission and the circumstances in which permission can be waived, and the assent of the institution (school, treatment facility) where the research is to be conducted. Research with psychiatric patients poses a challenge to the researcher. A major ethical concern with clinical research is how to form a control group without unethically denying treatment to some participants, for example, those assigned to a placebo control group. One alternative to placebo-controlled trials is active-controlled trials.

A number of ethical issues arise when studying families at risk and spousal abuse. Investigators must report abuse and neglect, and participants must understand that responsibility before giving consent. Other ethical issues include conflict between research ethics and the investigator's personal ethics, identifying problems that cannot be solved, and balancing the demands made by family members and the benefits available to them.

Alcohol and substance abusers and forensic patients present particular problems for obtaining adequate informed consent. The researcher must take into account the participants' vulnerability to coercion as well as their competence to give consent. The experience of the investigator in dealing with alcoholics and drug abusers can be an important element in maintaining ethical standards related to coercion and competence to give consent.

One final vulnerable population addressed in the literature includes those who are cognitively impaired (Karlavish & Sachs, 1997). The question here is: who speaks for the participant? Research with vulnerable participants requires the researcher to take particular care to avoid several ethical dilemmas,

including coercive recruiting practices, the lack of confidentiality often experienced by vulnerable participants, and the possibility of a conflict of interest between research ethics and personal ethics.

## **Ethical Considerations Related to Research Methodology**

### ***Ethical issues in field research***

Research conducted in the field confronts an additional ethical dilemma not usually encountered in laboratory studies. Often the participants are unaware that they are being studied, and therefore no contractual understanding can exist. In many field studies, especially those that involve observational techniques, informed consent may be impossible to obtain. Similarly, some laboratory experiments involving deception use procedures similar to field research by introducing the independent variable as unrelated to the experiment. Covert research that involves the observation of people in public places is not generally considered to constitute an invasion of privacy; however, determining when a reasonable expectation of privacy exists may be difficult, for example, behavior in a public toilet (see Koocher, 1977).

Because assessing whether participants have been harmed in covert studies is usually impossible, opinions regarding the ethicality and legality of such methods vary markedly. Four principles to consider in deciding on the ethicality of covert field research are (a) the availability of alternative means for studying the same question, (b) the merit of the research question, (c) the extent to which confidentiality or anonymity can be maintained, and (d) the level of risk to the uninformed participant. Asking individuals who are similar to those who will be observed about whether or not they would give permission if asked to participate is a valuable way to address these ethical concerns.

### **Ethical issues in Internet research**

The Internet provides an international forum in which open and candid discussions of a variety of issues of interest to behavioral scientists take place. These discussions provide an opportunity for the behavioral scientist to *lurk* among Usenet discussion groups, Internet Relay Chat, and Multi-user dungeons (Miskevich, 1996). Cyberspace is typically considered public domain where privacy is not guaranteed and traditional ethical guidelines may be difficult to apply. A second ethical concern in Internet research is the possibility for online

misrepresentation. For example, children or other vulnerable populations could be inadvertently included in research.

To address these concerns, a set of informal guidelines for acceptable behavior in the form of netiquette has developed (Smith & Leigh, 1997). Among other things, the guidelines suggest that researchers should identify themselves, ensure confidential treatment of personal information, obtain consent from those providing data whenever possible, provide participants with information about the study, and be sensitive to possible unanticipated consequences to participants as a result of the research process, particularly potential harm in the form of stress, legal liabilities, and loss of self-esteem.

## **Online Training Programs in Research Ethics**

### ***CITI Training Program***

The University of Miami has developed an online educational training program in research ethics called Collaborative IRB Training Initiative or CITI. The CITI program consists of 17 modules for biomedical investigators and 11 modules specifically prepared for investigators conducting social/behavioral research. Each participating institution has the flexibility to set the curriculum for their learners. Multiple Learner Groups can be established to customize the course to the learner's role in human subjects research. Each module focuses on a different aspect of research. Each module, developed by experts in the IRB community has an associated quiz. The software maintained at the University of Miami, compiles the quiz scores. When the user completes the required materials, the learner can print/ download a Completion Report that details the learner's accomplishments. A copy of the Report is emailed to the institutional key trainer or IRB administrator. The course is hosted on a secure server and the CITI office retains all records in strict confidence.

Each participating institution has the opportunity to post specific material on an institutional page that their faculty and students should be familiar with. The students/trainees can even be quizzed on this material if that is desirable. CITI charges a user fee of \$1000 per year to offset the administrative costs of running the site. This also includes the set up fee for the institutional page. There are no limits on how many members of an institution may go through the course. CITI can prepare an institutional page in a few days. For details, see [http://www.citiprogram.org/citi\\_information.asp](http://www.citiprogram.org/citi_information.asp).

## Online Research Ethics Course

The University of Montana, with support from the Office of Research Ethics, Department of Health and Human Services, has developed a free online training course. The course includes 6 modules that cover (1) an overview of ethical issues in research, (2) interpersonal responsibility, (3) institutional responsibility, (4) professional responsibility, (5) animals in research, and (6) human participation in research. Each module provides information on major issues and contains at least one case study to allow exploration of different options, as well as an assessment tool so the student can test his or her knowledge of the area. Once the student has successfully completed the section assessment, he or she may print out a certificate of completion for the section. To access their web site, go to the following: [http://ori.hhs.gov/education/products/montana\\_round1/research\\_ethics.html](http://ori.hhs.gov/education/products/montana_round1/research_ethics.html).

## NIH Research Ethics Training

The National Institute of Health has a course that is required of all NIH personnel and available to others. The topics covered in their course include (1) scientific integrity, (2) data acquisition and management, (3) publication and authorship, (4) peer review, (5) mentor/trainee relationships, (6) collaborative science, (7) human and animal subjects, and (8) conflict of interest and commitment. Their course is available at: <http://researchethics.od.nih.gov/>. These courses in research ethics are useful but should not be the only ethical training the undergraduate student researcher receives. Mentors must reinforce the training and help students apply what they have learned in the online training program. In general, the faculty mentor must model ethical practices and help students grapple with the ethical dilemmas inherent in the actual research project they plan to conduct. While online course can assess the extent to which students have learned ethical facts, the application of ethics is more of a decision making process than an informational set. Thus, mentors should talk with their students about why and how to apply ethical rules as well as what those rules are. For example, student researchers should explore what they should and should not do to ensure informed consent. Students should discuss with their mentors what they must tell the participant about their study and why some information can and should be omitted. Students should also learn how to properly debrief participants. Only by thoroughly exploring such issues can students truly learn to be ethical investigators.

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