4 Ethics and Research

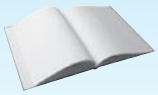
OBJECTIVES **Studying this chapter should enable you to:**

- Describe briefly what is meant by "ethical" research.
- Describe briefly three important ethical principles recommended for researchers to follow.
- State the basic question with regard to ethics that researchers need to ask before beginning a study.
- State the three questions researchers need to address in order to protect research participants from harm.
- Describe the procedures researchers must follow in order to ensure confidentiality of data collected in a research investigation.
- Describe when it might be appropriate to deceive participants in a research investigation and the researcher's responsibilities in such a case.
- Describe the special considerations involved when doing research with children.

INTERACTIVE AND APPLIED LEARNING After, or while, reading this chapter:

Go to the Online Learning Center at www.mhhe.com/fraenkel8e to:

- Learn More About What Constitutes Ethical Research



Go to your online Student Mastery Activities book to do the following activities:

- Activity 4.1: Ethical or Not?
- Activity 4.2: Some Ethical Dilemmas
- Activity 4.3: Violations of Ethical Practice
- Activity 4.4: Why Would These Research Practices Be Unethical?

Mary Abrams and Lamar Harris, both juniors at a large midwestern university, meet weekly for lunch. "I can't believe it," Mary says.

"What's the matter?" replies Lamar.

"Professor Thomas says that we have to participate in one of his research projects if we want to pass his course. He says it is a course requirement. I don't think that's right, and I'm pretty upset about it. Can you believe it?"

"Wow. Can he do that? I mean, is that ethical?"

No, it's not! Mary has a legitimate (and ethical) complaint here. This issue—whether professors can require students to participate in research projects in order to pass a course—is one example of an unethical practice that sometimes occurs.

The whole question of what is—and what isn't—ethical is the focus of this chapter.

Some Examples of Unethical Practice

The term *ethics* refers to questions of right and wrong. When researchers think about ethics, they must ask themselves if it is "right" to conduct a particular study or carry out certain procedures—that is, whether they are doing **ethical research**. Are there some kinds of studies that should *not* be conducted? You bet! Here are some examples of unethical practice:

A researcher

- requires a group of high school sophomores to sign a form in which they agree to participate in a research study.
- asks first-graders sensitive questions without obtaining the consent of their parents to question them.
- deletes data he collects that do not support his hypothesis.
- requires university students to fill out a questionnaire about their sexual practices.
- involves a group of eighth-graders in a research study that may harm them psychologically without informing them or their parents of this fact.

Each of the above examples involves one or more violations of ethical practice. When researchers think about ethics, the basic question to ask in this regard is, Will any physical or psychological harm come to anyone as a result of my research? Naturally, no researcher wants this to happen to any of the subjects in a research study. Because this is such an important (and often overlooked) issue, we need to discuss it in some detail.

In a somewhat larger sense, ethics also refers to questions of right and wrong. By behaving ethically, a person is doing what is right. But what does it mean to be "right" as far as research is concerned?

A Statement of Ethical Principles

Webster's New World Dictionary defines *ethical* (behavior) as "conforming to the standards of conduct of a given profession or group." What researchers consider to be ethical, therefore, is largely a matter of agreement among them. Some years ago, the Committee on Scientific and Professional Ethics of the American Psychological Association published a list

of ethical principles for the conduct of research with human subjects. We have adapted many of these principles so they apply to educational research. Please read the following statement and think carefully about what it means.

> The decision to undertake research rests upon a considered judgment by the individual educator about how best to contribute to science and human welfare. Once one decides to conduct research, the educator considers various ways by which he might invest his talents and resources. Keeping this in mind, the educator carries out the research with respect and concern for the dignity and welfare of the people who participate and with cognizance of federal and state regulations and professional standards governing the conduct of research with human participants.
>
> *a.* In planning a study, researchers have the responsibility to evaluate carefully any ethical concerns. Should any of the ethical principles listed below be compromised, the educator has a correspondingly serious obligation to observe stringent safeguards to protect the rights of human participants.
>
> *b.* Considering whether a participant in a planned study will be a "subject at risk" or a "subject at minimal risk," according to recognized standards, is of primary ethical concern to the researcher.
>
> *c.* The researcher always retains the responsibility for ensuring that a study is conducted ethically. The researcher is also responsible for the ethical treatment of research participants by collaborators, assistants, students, and employees, all of whom, however, incur similar obligations.
>
> *d.* Except in minimal-risk research, the researcher establishes a clear and fair agreement with research participants, before they participate, that clarifies the obligations and responsibilities of each. The researcher has the obligation to honor all promises and commitments included in that agreement. The researcher informs the participants of all aspects of the research that might reasonably be expected to influence their willingness to participate in the study and answers honestly any questions they may have about the research. Failure by the researcher to make full disclosure prior to obtaining informed consent requires additional safeguards to protect the welfare and dignity of the research participants. Furthermore, research with children or with participants who have impairments that would limit understanding and/or communication requires special safeguarding procedures.
>
> *e.* Sometimes the design of a study makes necessary the use of concealment or deception. When this is the case, the researcher has a special responsibility to: (i) determine whether the use of such techniques is justified by the study's prospective scientific or educational value; (ii) determine whether alternative procedures are available that do not use concealment or deception; and (iii) ensure that the participants are provided with sufficient explanation as soon as possible.
>
> *f.* The researcher respects the right of any individual to refuse to participate in the study or to withdraw from participating at any time. The researcher's obligation in this regard is especially important when he or she is in a position of authority or influence over the participants in a study. Such positions of authority include, but are not limited to, situations in which research participation is required as part of employment or in which the participant is a student, client, or employee of the investigator.
>
> *g.* The researcher protects all participants from physical and mental discomfort, harm, and danger that may arise from participating in a study. If risks of such consequences exist, the investigator informs the participant of that fact. Research procedures likely to cause serious or lasting harm to a participant are not used unless the failure to use these procedures might expose the participant to risk of greater harm, or unless the research has great potential benefit and fully informed and voluntary consent is obtained from each participant. All participants must be informed as to how they can contact the researcher within a reasonable time period following their participation should stress or potential harm arise.
>
> *h.* After the data are collected, the researcher provides all participants with information about the nature of the study and does his or her best to clear up any misconceptions that may have developed. Where scientific or humane values justify delaying or withholding this information, the researcher has a special responsibility to carefully supervise the research and to ensure that there are no damaging consequences for the participant.
>
> *i.* Where the procedures of a study result in undesirable consequences for any participant, the researcher has the responsibility to detect and remove or correct these consequences, including long-term effects.
>
> *j.* Information obtained about a research participant during the course of an investigation is confidential unless otherwise agreed upon in advance. When the possibility exists that others may obtain access to such information, this possibility, together with the plans

CONTROVERSIES IN RESEARCH

Clinical Trials—Desirable or Not?

Clinical trials are the final test of a new drug. They offer an opportunity for drug companies to prove that new and previously unused medicines are safe and effective to use by giving such medicines to volunteers. Recently, however, there has been an increase in the number of complaints against such trials. The most flagrant example was recently cited in the *San Francisco Chronicle.** A scientist gave a volunteer participant in one such trial what turned out to be a lethal dose of an experimental drug.

There has been an increase in the number of clinical trials, as well as a corresponding increase in the number of volunteers involved in such trials. In 1995 about 500,000 volunteers participated; by 1999 the number had jumped to 700,000.† Another concern is that some of the physicians who conduct such trials may have a financial stake in the outcome. No uniform policy currently exists on the disclosure of investigators' financial interests to patients who participate in such trials.

Proponents of clinical trials argue that, when properly conducted, clinical trials have paved the way for new medicines and procedures that have saved many lives. Volunteers can gain access to promising drugs long before they are available to the general public. And patients usually get excellent care from physicians and nurses while they are undergoing such trials. Last, but not least, such care often is free.

What do you think? Are clinical trials justified?

*T. Abate (2001). Maybe conflicts of interest are scaring clinical trial patients. *San Francisco Chronicle,* May 28.

†Report issued at the Association of Clinical Research Professionals Convention, San Francisco, California, May 20, 2001.

for protecting confidentiality, is explained to the participant as part of the procedure for obtaining informed consent.[1]

The above statement of ethical principles suggests three very important issues that every researcher should address: protecting participants from harm, ensuring confidentiality of research data, and the question of deception of subjects. How can these issues be addressed, and how can the interests of the subjects involved in research be protected?

Protecting Participants from Harm

It is a fundamental responsibility of every researcher to do all in his or her power to ensure that participants in a research study are protected from physical or psychological harm, discomfort, or danger that may arise due to research procedures. This is perhaps the most important ethical decision of all. Any sort of study that is likely to cause lasting, or even serious, harm or discomfort to any participant should not be conducted, unless the research has the potential to provide information of extreme benefit to human beings. Even when this may be the case, participants should be fully informed of the dangers involved and in no way required to participate.

A further responsibility in protecting individuals from harm is obtaining their **informed consent** if they may be exposed to any risk. (Figure 4.1 shows an example of a consent form.) Fortunately, almost all educational research involves activities that are within the customary, usual procedures of schools or other agencies and as such involve little or no risk. Legislation recognizes this by specifically exempting most categories of educational research from formal review processes. Nevertheless, researchers should carefully consider whether there is any likelihood of risk involved and, if there is, provide full information followed by formal consent by participants (or their guardians). Three important ethical questions to ask about harm in any study are:

1. Could people be harmed (physically or psychologically) during the study?
2. If so, could the study be conducted in another way to find out what the researcher wants to know?
3. Is the information that may be obtained from this study so important that it warrants possible harm to the participants?

These are difficult questions, and they deserve discussion and consideration by all researchers.

Figure 4.1 *Example of a Consent Form*

CONSENT TO SERVE AS A SUBJECT IN RESEARCH

I consent to serve as a subject in the research investigation entitled: _____
_____
_____

The nature and general purpose of the research procedure and the known risks involved have been explained to me by _____. The investigator is authorized to proceed on the understanding that I may terminate my service as a subject at any time I so desire.

I understand the known risks are: _____
_____
_____

I understand also that it is not possible to identify all potential risks in an experimental procedure, and I believe that reasonable safeguards have been taken to minimize both the known and the potentially unknown risks.

Witness _____ Signed _____ (subject)

Date _____

To be retained by the principal investigator.

Ensuring Confidentiality of Research Data

Once the data in a study have been collected, researchers should make sure that no one else (other than perhaps a few key research assistants) has access to the data. Whenever possible, the names of the subjects should be removed from all data collection forms. This can be done by assigning a number or letter to each form, or subjects can be asked to furnish information anonymously. When this is done, not even the researcher can link the data to a particular subject. Sometimes, however, it is important in a study to identify individual subjects. When this is the case, the linkage system should be carefully guarded.

All subjects should be assured that any data collected from or about them will be held in confidence. The names of individual subjects should never be used in any publications that describe the research. And all participants in a study should always have the right to withdraw from the study or to request that data collected about them not be used.

When (If Ever) Is Deception of Subjects Justified?

The issue of deception is particularly troublesome. Many studies cannot be carried out unless some deception of subjects takes place. It is often difficult to find naturalistic situations in which certain behaviors occur frequently. For example, a researcher may have to wait a long time for a teacher to reinforce students in a certain way. It may be much easier for the researcher to observe the effects of such reinforcement by employing the teacher as a confederate.

Sometimes it is better to deceive subjects than to cause them pain or trauma, as investigating a particular research question might require. The famous Milgram study of obedience is a good example.[2] In this study, subjects were ordered to give increasingly severe electric shocks to another subject whom they could not see sitting behind a screen. What they did not know was that the individual to whom they thought they were administering the shocks was a confederate of the experimenter, and no shocks were actually being administered. The

MORE ABOUT RESEARCH

Patients Given Fake Blood Without Their Knowledge*

Failed Study Used Change in FDA Rules

ASSOCIATED PRESS

Chicago—A company conducted an ill-fated blood substitute trial without the informed consent of patients in the study—some of whom died, federal officials say.

Baxter International Inc. was able to test the substitute, known as HemAssist, without consent because of a 1996 change in federal Food and Drug Administration regulations.

The changes, which broke a 50-year standard to get consent for nearly all experiments on humans, were designed to help research in emergency medicine that could not happen if doctors took the time to get consent.

But the problems with the HemAssist trial are prompting some medical ethicists to question the rule change.

"People get involved in something to their detriment without any knowledge of it," George Annas, a professor of health law at the Boston University School of Public Health, told the *Chicago Tribune.* "We use people. What's the justification for that?"

No other company has conducted a no-consent experiment under the rule, FDA officials said.

Baxter officials halted their clinical trial of HemAssist last spring after reviewing data on the first 100 trauma patients placed in the nationwide study.

Of the 52 critically ill patients given the substitute, 24 died, representing a 46.2 percent mortality rate. The Deerfield, Ill.-based company had projected 42.6 percent mortality for critically ill patients seeking emergency treatment.

There has been an intense push to find a blood substitute to ease the effects of whole-blood shortages.

Researchers say artificial blood lasts longer than conventional blood, eliminates the time-consuming need to match blood types and wipes out the risk of contamination from such viruses as HIV and hepatitis.

The 1996 regulations require a level of community notification that is not used in most scientific studies, including community meetings, news releases and post-study follow-up.

No lawsuits have arisen from the blood substitute trial, Baxter officials said.

**San Francisco Chronicle,* January 18, 1999.

dependent variable was the level of shock subjects administered before they refused to administer any more. Out of a total of 40 subjects who participated in the study, 26 followed the "orders" of the experimenter and (so they thought) administered the maximum shock possible of 450 volts! Even though no shocks were actually administered, publication of the study results produced widespread controversy. Many people felt the study was unethical. Others argued that the importance of the study and its results justified the deception. Notice that the study raises questions about not only deception but also harm, since some participants could have suffered emotionally from later consideration of their actions.

Current professional guidelines are as follows:

- Whenever possible, a researcher should conduct the study using methods that do not require deception.
- If alternative methods cannot be devised, the researcher should determine whether the use of deception is justified by the prospective study's scientific, educational, or applied value.
- If the participants are deceived, the researcher must ensure that they are provided with sufficient explanation as soon as possible.

Perhaps the most serious problem involving deception is what it has done to the reputation of the scientific community. In general when people begin to think of scientists and researchers as liars, or as individuals who misrepresent what they are about, the overall image of science suffers. Fewer and fewer people are willing to participate in research investigations today because of this perception. As a result, the search for reliable knowledge about our world may be impeded.

Three Examples Involving Ethical Concerns

Here are brief descriptions of three research studies. Let us consider each in terms of (1) presenting possible harm to the participants, (2) ensuring the confidentiality of the research data, and (3) knowingly practicing deception. (Figure 4.2 illustrates some examples of unethical research practices.)

Study 1. The researcher plans to observe (unobtrusively) students in each of 40 classrooms—eight visits

Figure 4.2 *Examples of Unethical Research Practices*

each of 40 minutes' duration. The purpose of these observations is to look for relationships between the behavior of students and certain teacher behavior patterns.

Possibility of Harm to the Participants. This study would fall within the exempt category regarding the possibility of harm to the participants. Neither teachers nor students are placed under any risk, and observation is an accepted part of school practice.

Confidentiality of the Research Data. The only issue that is likely to arise in this regard is the possible but unlikely observation of a teacher behaving in an illegal or unethical way (e.g., physically or verbally abusing a student). In the former case, the researcher is legally required to report the incident. In the latter case, the researcher must weigh the ethical dilemma involved in not reporting the incident against that of violating assurances of confidentiality.

Deception. Although no outright deception is involved, the researcher is going to have to give the teachers a rationale for observing them. If the specific teacher characteristic being observed (e.g., need to control) is given, the behavior in question is likely to be affected. To avoid this, the researcher might explain that the purpose of the study is to investigate different teaching styles—without divulging the specifics. To us, this does not seem to be unethical. An alternative is to tell the teachers that specific details cannot be divulged until after data have been collected for fear of changing their behavior. If this alternative is pursued, some teachers might refuse to participate.

Study 2. The researcher wishes to study the value of a workshop on suicide prevention for high school students. The workshop is to consist of three 2-hour meetings in which danger signals, causes of suicide, and community resources that provide counseling will be discussed. Students will volunteer, and half will be assigned to a comparison group that will not participate in the workshop. Outcomes will be assessed by comparing the information learned and attitudes of those attending the meetings with those who do not attend.

Possibility of Harm to the Participants. Whether this study fits the exempt category with regard to any possibility of risk for the participants depends on the extent to which it is atypical for the school in question. We think that in most schools, this study would probably be considered atypical. In addition, it is conceivable that the material presented could place a student at risk by stirring up emotional reactions. In any case, the researcher should inform parents as to the nature of the study and the possible risks involved and obtain their consent for their children to participate.

Confidentiality of the Research Data. No problems are foreseen in this regard, although confidentiality as to what will occur during the workshop cannot, of course, be guaranteed.

Deception. No problems are foreseen.

Study 3. The researcher wishes to study the effects of "failure" versus "success" by teaching junior high

MORE ABOUT RESEARCH

An Example of Unethical Research

A series of studies reported in the 1950s and 1960s received widespread attention in psychology and education and earned their author much fame, including a knighthood. They addressed the question of how much of one's performance on IQ tests was likely to be hereditary and how much was due to environmental factors.

Several groups of children were studied over time, including identical twins raised together and apart, fraternal twins raised together and apart, and same-family siblings. The results were widely cited to support the conclusion that IQ is about 80 percent hereditary and 20 percent environmental.

Some initial questions were raised when another researcher found a considerably lower hereditary percentage. Subsequent detailed investigation of the initial studies* revealed highly suspicious statistical treatment of data, inadequate specification of procedures, and questionable adjustment of scores, all suggesting unethical massaging of data. Such instances, which are reported occasionally, underscore the importance of repeating studies, as well as the essential requirement that all procedures and data be available for public scrutiny.

*L. Kamin (1974). *The science and politics of I.Q.* New York: John Wiley.

students a motor skill during a series of six 10-minute instructional periods. After each training period, the students will be given feedback on their performance as compared with that of other students. In order to control extraneous variables (such as coordination), the researcher plans to randomly divide the students into two groups—half will be told that their performance was "relatively poor" and the other half will be told that they are "doing well." Their actual performance will be ignored.

Possibility of Harm to the Participants. This study presents several problems. Some students in the "failure" group may well suffer emotional distress. Although students are normally given similar feedback on their performance in most schools, feedback in this study (being arbitrary) may conflict dramatically with their prior experience. The researcher cannot properly inform students, or their parents, about the deceptive nature of the study, since to do so would in effect destroy the study.

Confidentiality of the Research Data. Confidentiality does not appear to be an issue in this study.

Deception. The deception of participants is clearly an issue. One alternative is to base feedback on actual performance. The difficulty here is that each student's extensive prior history will affect both individual performance and interpretation of feedback, thus confounding the results. Some, but not all, of these extraneous variables can be controlled (perhaps by examining school records for data on past history or by pretesting students). Another alternative is to weaken the experimental treatment by trying to lessen the possibility of emotional distress (e.g., by saying to participants in the failure group, "You did not do quite as well as most") and confining the training to one time period. Both of these alternatives, however, would lessen the chances of any relationship emerging.

Research with Children

Studies using children as participants present some special issues for researchers. The young are more vulnerable in some respects, have fewer legal rights, and may not understand the language of informed consent. Therefore, the following specific guidelines need to be considered.

- Informed consent of parents or of those legally designated as caretakers is required for participants defined as minors. Signers must be provided all necessary information in appropriate language and must have the opportunity to refuse. (Figure 4.3 shows an example of a consent form for a minor.)
- Researchers do not present themselves as diagnosticians or counselors in reporting results to parents, nor do they report information given by a child in confidence.
- Children may never be coerced into participation in a study.
- Any form of remuneration for the child's services does not affect the application of these (and other) ethical principles.

San Francisco State University
Parental Permission for a Minor to Participate in Research
Research Title

A. PURPOSE AND BACKGROUND

My name is _____. I am a (*graduate student/faculty member*) at San Francisco State University and I am conducting a research study about _____. I am inviting your child to take part in the research because he/she_____.

(State the purpose of the research; the purpose must be the same as stated in the protocol. In fact, sections throughout this form should mirror the protocol statement. State why the prospective subject is being invited to participate in this study, e.g. "he/she is in the after school program I am studying.")

B. PROCEDURES

If you agree to let your child participate in this research study, the following will occur:

- Your child will be asked to *(play math games and take a test)*
- This will take place in their regular classroom as part of my scheduled curriculum.
- Your child will participate in a group discussion in social studies class about their attitudes about extracurricular activities. The discussions will be audiotaped. *(OR///)*
- Your child will be invited to participate in an after school tutoring project. The tutoring sessions will take place between 3:45 and 4:45 PM on five Tuesdays and Thursdays during the spring semester.

(State where the research will take place, how long it will take, and at what time of day it will occur. State the time each procedure will take, and also state the total time it will take.)

C. RISKS

There is a risk of loss of privacy, which the researcher will reduce by not using any real names or other identifiers in the written report. The researcher will also keep all data in a locked file cabinet in a secure location. Only the researcher will have access to the data. At the end of the study, data will be _____ (see "Guidelines for Data Retention.")

There may be some discomfort for your child at being asked some of the questions. Your child may answer only those questions he or she wants to, or he or she may stop the entire process at any time, without penalty.

(State the risks involved, and how the researcher will reduce them. If the questions are very sensitive and may cause anxiety or other negative emotions, researcher should include a brief list of counseling contacts they may consult.)

D. CONFIDENTIALITY

State how you will protect the confidentiality of the data collected. Where will you store it, will it be password-protected if stored on a computer, or in a locked office if it's paper data. How long will the data be kept, what will happen to it when the project is over? (Will it be destroyed, kept for future research—if so the research must be consistent with the original purpose.)

E. DIRECT BENEFITS

F. COSTS

G. COMPENSATION

H. QUESTIONS

Questions about your child's rights as a study participant, or comments or complaints about the study also may be addressed to the Office for the Protection of Human Subjects at Your University.

J. CONSENT

You have been given a copy of this consent form to keep. PARTICIPATION IN THIS RESEARCH STUDY IS VOLUNTARY. You are free to decline to have your child participate in this research study. You may withdraw your child's participation at any point without penalty. Your decision whether or not to participate in this research study will have no influence on your or your child's present or future status at your university

Child's Name _____

Signature _____ Date _____

Parent

Signature _____ Date _____

Researcher

Figure 4.3 *Example of a Consent Form for a Minor to Participate in a Research Study*

Regulation of Research

The regulation most directly affecting researchers is the National Research Act of 1974. It requires that all research institutions receiving federal funds establish what are known as **institutional review boards (IRBs)** to review and approve research projects. Such a review must take place whether the research is to be done by a single researcher or a group of researchers. In the case of federally funded investigations, failure to comply can mean that the entire institution (e.g., a university) will lose all of its federal support (e.g., veterans' benefits, scholarship money). Needless to say, this is a severe penalty. The federal agency that has the major responsibility for establishing the guidelines for research involving human subjects is the Department of Health and Human Services (HHS).

At institutions receiving federal funding, any affiliated researchers (including co-researchers, research technicians, and student assistants) planning to use human subjects are currently required to pass an online research training course administered by the National Institutes of Health (NIH) or the Collaborative Institutional Training Initiative (CITI). Once the course is completed successfully, a course completion report is issued that is valid for three years. (The NIH course can be found at http://phrp.nihtraining.com/users/login.php and the CITI course at www.citiprogram.org/.) Both courses take approximately two to three hours to complete and can be bookmarked so that the course does not have to be taken during one sitting. The CITI course takes a little longer to complete but is recommended for social, behavioral, and educational researchers because of the elective modules that can be tailored to a particular field of study. Researchers and students should check with their own institutions about specific policies and procedures regarding the research training course. Usually, the report of completion must be submitted along with any research protocol materials to the IRB for approval.

An IRB must have at least five members, consist of both men and women, and include at least one nonscientist. It must include one person not affiliated with the institution. Individuals competent in a particularly relevant area may be invited to assist in a review but may not vote. Furthermore, individuals with a conflict of interest must be excluded, although they may provide information.

If the IRB regularly reviews research involving a vulnerable category of subjects (e.g., such as studies involving the developmentally disabled), the board must include one or more individuals who are primarily concerned with the welfare of these subjects.

The IRB examines all proposed research with respect to certain basic criteria. Sometimes the criteria used by an IRB to determine whether a study is "exempt," for example, may differ from those specified by the HHS (see the More About Research box on HHS revised regulations). Oftentimes, the criteria set forth by an institutional IRB are more conservative than those stipulated by the federal government because of risk management related to litigation liability and funding withdrawal. Researchers and students are advised to consult with their own institution's IRB policies and procedures. The IRB board can request that a study be modified to meet their criteria before it will be approved. If a proposed study fails to satisfy any one of these criteria, the study will not be approved (see Table 4.1).

TABLE 4.1 *Criteria for IRB Approval*

- Minimization of risk to participants (e.g., by using procedures that do not unnecessarily expose subjects to risk).
- Risks that may occur are reasonable in relation to benefits that are anticipated.
- Equitable selection—i.e., the proposed research does not discriminate among individuals in the population.
- Protection of vulnerable individuals (e.g., children, pregnant women, prisoners, mentally disabled or economically disadvantaged persons, etc.).
- Informed consent—researchers must provide complete information about all aspects of the proposed study that might be on interest or concern to a potential participant, and this must be presented in a form that participants can easily understand.
- Participants have the right to withdraw from the study at any time without penalty.
- Informed consent will be appropriately documented.
- Monitoring of the data being collected to ensure the safety of the participants.
- Privacy and confidentiality—ensuring that any and all information obtained during a study is not released to outside individuals where it might have embarrassing or damaging consequences.

Ethical or Not?

In September 1998, a U.S. District Court judge halted a study begun in 1994 to evaluate the effectiveness of the U.S. Job Corps program. For two years, the researchers had randomly assigned 1 out of every 12 eligible applicants to a control group that was denied service for three years—a total of 6,000 applicants. If applicants refused to sign a waiver agreeing to participate in the study, they were told to reapply two years later. The class action lawsuit alleged psychological, emotional, and economic harm to the control subjects. The basis for the judge's decision was a failure to follow the federal law that required the methodology to be subject to public review. A preliminary settlement pledged to locate all of the control subjects by the year 2000, invite them into the Job Corps (if still eligible), and pay each person $1,000.*

In a letter to the editor† of *Mother Jones* in April 1999, however, Judith M. Gueron, the President of Manpower Demonstration Research Corporation (*not* the company awarded the evaluation grant) defended the study on two grounds: (1) since there were only limited available openings for the program, random selection of qualified applicants "is arguably fairer" than first-come, first-served; and (2) the alleged harm to those rejected is unknown, since they were free to seek other employment or training.

What do you think?

*J. Price (1999). Job Corps lottery. *Mother Jones,* January/February, pp. 21–22.

†Backtalk (1999). *Mother Jones,* April, p. 13.

IRB Boards classify research proposals in three categories:

Category I (Exempt Review)—the proposed study presents no possible risk to adult participants (e.g., an anonymous mailed survey on innocuous topics or an anonymous observation of public behavior). This type of study is exempt from the requirement of informed consent.

Category II (Expedited Review)—the proposed study presents no more than minimal risk to participants. A typical example would be a study of individual or group behavior of adults where there is no psychological intervention or deception involved. This category of research does not require written documentation of informed consent, although oral consent is required. Most classroom research projects fall in this category.

Category III (Full Review)—the proposed study includes questionable elements, such as research involving special populations, vulnerable individuals, unusual equipment or procedures, deception, intervention, or some form of invasive measurement. A meeting of all IRB members is required, and the researcher must appear in person to discuss and answer questions about the research.

The question of risk for participants is of particular interest to the IRB. The board may terminate a study if it appears that serious harm to subjects is likely to occur. Any and all potential risk(s) to subjects must be minimized. What this means is that any risk should not be any greater than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.

Some researchers were unhappy with the regulations that were issued in 1974 by HHS because they felt that the rules interfered unnecessarily with risk-free projects. Their opposition resulted in a 1981 set of revised guidelines, as shown in the More About Research box on page 71. These guidelines apply to all research funded by HHS. As mentioned above, Institutional Review Boards determine which studies qualify to be exempt from the guidelines.

Another law affecting research is the Family Privacy Act of 1974, also known as the Buckley Amendment. It is intended to protect the privacy of students' educational records. One of its provisions is that data that identify students may not, with some exceptions, be made available without permission from the student or, if under legal age, parents or legal guardians. Consent forms must specify what data will be disclosed, for what purposes, and to whom.

The relationship between the current guidelines and qualitative research is not as clear as it is for quantitative research. In recent years, therefore, there have been a number of suggestions for a specific code of ethics for qualitative research.[3] In quantitative studies, subjects can be told the content and the possible dangers involved in a study. In qualitative studies, however, the relationship between research and participant evolves over time. As Bogdan and Biklen suggest, doing qualitative research with informants can be "more like having a friendship than a contract. The people who are studied have a say

Department of Health and Human Services Revised Regulations for Research with Human Subjects

The guidelines exempt many projects from regulation by HHS. Below is a list of projects now free of the guidelines.

1. Research conducted in educational settings, such as instructional strategy research or studies on the effectiveness of educational techniques, curricula, or classroom management methods.
2. Research using educational tests (cognitive, diagnostic, aptitude, and achievement), provided that subjects remain anonymous.
3. Survey or interview procedures, except where all of the following conditions prevail:
   a. Participants could be identified.
   b. Participants' responses, if they became public, could place the subject at risk on criminal or civil charges or could affect the subjects' financial or occupational standing.
   c. Research involves "sensitive aspects" of the participant's behavior, such as illegal conduct, drug use, sexual behavior, or alcohol use.
4. Observation of public behavior (including observation by participants), except where all three of the conditions listed in item 3 above are applicable.
5. The collection or study of documents, records, existing data, pathological specimens, or diagnostic specimens if these sources are available to the public or if the information obtained from the sources remains anonymous.

in regulating the relationship and they continuously make decisions about their participation."[4] As a result, Bogdan and Biklen offer the following suggestions for qualitative researchers that might be considered when the criteria used by an IRB may not apply:[5]

1. Avoid research sites where informants may feel coerced to participate in the research.
2. Honor the privacy of informants—find a way to recruit informants so that they may choose to participate in the study.
3. Tell participants who are being interviewed how long the interview will take.
4. Unless otherwise agreed to, the identities of informants should be protected so that the information collected does not embarrass or otherwise harm them. Anonymity should extend not only to written reports but also to the verbal reporting of information.
5. Treat informants with respect and seek their cooperation in the research. Informants should be told of the researcher's interest and they should give their permission for the researcher to proceed. Written consent should always be obtained.
6. Make it clear to all participants in a study the terms of any agreement negotiated with them.
7. Tell the truth when findings are written up and reported. Mail in a separate card indicating that they completed the questionnaire.

One further legal matter should be mentioned. Attorneys, physicians, and members of the clergy are protected by laws concerning privileged communications (i.e., they are protected by law from having to reveal information given to them in confidence). Researchers do not have this protection. It is possible, therefore, that any subjects who admit, on a questionnaire, to having committed a crime could be arrested and prosecuted. As you can see, it would be a risk therefore for the participants in a research study to admit to a researcher that they had participated in a crime. If such information is required to attain the goals of a study, a researcher can avoid the problem by omitting all forms of identification from the questionnaire. When mailed questionnaires are used, the researcher can keep track of nonrespondents by having each participant mail in a separate card indicating that they completed the questionnaire.

Academic Cheating and Plagiarism

A chapter on ethics and research would not be complete without some mention of academic dishonesty. Many educators believe the Internet has facilitated student cheating and plagiarism through easy access to electronic papers and resources. Prior to the Internet, **plagiarism**—the act of misrepresenting someone else's work as one's

own—was more difficult to commit and get away with. Most colleges and universities today have academic dishonesty policies in place and severe consequences for students who get caught, i.e., a failing course grade or even academic dismissal. In our experience of teaching undergraduate and graduate students, we believe a good number of students engage in plagiarism *unintentionally*. We think many students are unaware of attribution rules related to the proper use and citation of published and unpublished sources. The first place to get clarification on using sources correctly is a style guide such as those published by the American Psychological Association, Modern Languages Association, or the University of Chicago. In addition, some simple guidelines for avoiding plagiarism include the following: (1) Do not use someone's words without referencing the source or citing the information as a direct quotation; and (2) Do not use someone's ideas without citing the source. Finally, in our opinion, it is better to over-cite rather than under-cite words and ideas that are not your own.

Go back to the **INTERACTIVE AND APPLIED LEARNING** feature at the beginning of the chapter for a listing of interactive and applied activities. Go to the **Online Learning Center** at **www.mhhe.com/fraenkel8e** to take quizzes, practice with key terms, and review chapter content.

Main Points

BASIC ETHICAL PRINCIPLES

- *Ethics* refers to questions of right and wrong.
- There are a number of ethical principles that all researchers should be aware of and apply to their investigations.
- The basic ethical question for all researchers to consider is whether any physical or psychological harm could come to anyone as a result of the research.
- All subjects in a research study should be assured that any data collected from or about them will be held in confidence.
- The term *deception,* as used in research, refers to intentionally misinforming the subjects of a study as to some or all aspects of the research topic.
- Plagiarism is the act of misrepresenting someone else's work as one's own.
- Unintentional plagiarism can be avoided through the proper use and citation of published and unlisted sources.

RESEARCH WITH CHILDREN

- Children as research subjects present problems for researchers that are different from those of adult subjects. Children are more vulnerable, have fewer legal rights, and often do not understand the meaning of *informed consent.*

REGULATION OF RESEARCH

- Before any research involving human beings can be conducted at an institution that receives federal funds, it must be reviewed by an institutional review board (IRB) at the institution.
- The federal agency that has the major responsibility for establishing the guidelines for research studies that involve human subjects is the Department of Health and Human Services.

Key Terms

ethical research 61
informed consent 63
institutional review boards (IRBs) 69
plagiarism 71

For Discussion

1. Here are three descriptions of ideas for research. Which (if any) might have some ethical problems? Why?
   a. A researcher is interested in investigating the effects of diet on physical development. He designs a study in which two groups are to be compared. Both groups are composed of 11-year-olds. One group is to be given an enriched diet, high in vitamins, that has been shown to have a strengthening effect on laboratory animals. A second group is not to be given this diet. The groups are to be selected from all the 11-year-olds in an elementary school near the university where the researcher teaches.
   b. A researcher is interested in the effects of music on attention span. She designs an experimental study in which two similar high school government classes are to be compared. For a five-week period, one class has classical music played softly in the background as the teacher lectures and holds class discussions on the current unit of study. The other class studies the same material and participates in the same activities as the first class but does not have any music played during the five weeks.
   c. A researcher is interested in the effects of drugs on human beings. He asks the warden of the local penitentiary for subjects to participate in an experiment. The warden assigns several prisoners to participate in the experiment but does not tell them what it is about. The prisoners are injected with a number of drugs whose effects are unknown. Their reactions to the drugs are then described in detail by the researcher.
2. Which, if any, of the above studies would be exempt under the revised guidelines shown in the More About Research box on p. 71?
3. Can you suggest a research study that would present ethical problems if done with children but not if done with adults?
4. Are there any research questions that should *not* be investigated in schools? If so, why not?
5. "Sometimes the design of a study makes necessary the use of concealment or deception." Discuss. Can you describe a study in which deception might be justified?
6. "Any sort of study that is likely to cause lasting, or even serious, harm or discomfort to any participant should not be conducted, unless the research has the potential to provide information of extreme benefit to human beings." Would you agree? If so, why? What might be an example of such information?

Notes

1. Adapted from the Committee on Scientific and Professional Ethics and Conduct (1981). Ethical principles of psychologists. *American Psychologist, 36:* 633–638. Copyright 1981 by the American Psychological Association. Reprinted by permission.

2. S. Milgram (1967). Behavioral study of obedience. *Journal of Abnormal and Social Psychology, 67:* 371–378.

3. For example, see J. Cassell and M. Wax (Eds.) (1980). Ethical problems in fieldwork. *Social Problems 27* (3); B. K. Curry and J. E. Davis (1995). Representing: The obligations of faculty as researchers. *Academe* (Sept.–Oct.): 40–43; Y. Lincoln (1995). Emerging criteria for quality in qualitative and interpretive research. *Qualitative Inquiry 1* (3): 275–289.

4. R. C. Bogdan and S. K. Biklen (2007). *Qualitative research for education: An introduction to theory and methods,* 5th ed. Boston: Allyn & Bacon.

5. *Op. cit.* pp. 49–50.

Research Exercise 4: Ethics and Research

Using Problem Sheet 4, restate the research question you developed in Problem Sheet 3. Identify any possible ethical problems in carrying out such a study. How might such problems be remedied?

Problem Sheet 4

Ethics and Research

1. My research question is: _____

   _____

2. The possibilities of harm to participants (if any) are as follows: _____

   _____

   _____

   _____

   I would handle these problems as follows: _____

   _____

3. The possibilities of problems of confidentiality (if any) are as follows: _____

   _____

   _____

   _____

   I would handle these problems as follows: _____

   _____

4. The possibilities of problems of deception (if any) are as follows: _____

   _____

   _____

   _____

   I would handle these problems as follows: _____

   _____

5. In which IRB category (I, II, or III) do you think your proposed study should be considered? State why. _____

   _____

   _____

   _____

An electronic version of this Problem Sheet that you can fill in and print, save, or e-mail is available on the Online Learning Center at www.mhhe.com/fraenkel8e.