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Chapter 2

ETHICAL PERSPECTIVES IN CLINICAL RESEARCH

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> *Psychologists conduct research competently and with due concern for the dignity and welfare of the participants.*
>
> American Psychological Association's Ethics Code (1992)

A group of psychologists working for the military were interested in creating an experimental situation that effectively aroused the fear of death or injury in participants. Using this paradigm, they hoped to identify the determinants of effective performance under the stress of combat. This was the first in the series of experiments they designed and performed as part of their research program.

Sixty-six men ages 18–24 in their first weeks of Army basic training were randomly assigned to one of three groups: an experimental group, a flying control group, and a grounded control group. Subjects in the experimental group boarded a plane for what they were told would be a routine training flight. Once aloft, at 5,000 feet, they completed an irrelevant test then waited for the plane to reach a higher altitude. Suddenly, the aircraft lurched. The passengers saw that one propeller had stopped turning and heard about other malfunctions over the intercom. They were then informed directly that there was an emergency. A simulated pilot-to-tower conversation was provided to the passengers over their earphones to support the deception. As the plane passed within sight of the airfield, the study participants could see fire trucks and ambulances on the airstrip in apparent expectation of a crash landing. After several minutes, the pilot ordered the steward to prepare for ditching in the nearby ocean because the landing gear was not functioning properly.

At this point, the steward distributed to everyone on the plane something called the Emergency Data Form. This was a terribly complicated form the passengers were asked to complete so that the military would know to whom their personal possessions should go in the event of their death. They also were given the Emergency Instructions Test, which asked questions about airborne emergency procedures that the passengers had been required to read before the flight. The supposed purpose of this second form was to furnish proof to insurance companies that emergency precautions had been properly followed. These two sets of forms were to be put in a waterproof container

and jettisoned before the aircraft fell to the ocean. After a specified time, the plane made a safe landing at the airport.

The flying control group was taken up for a flight but was not exposed to the fear-of-death-inducing manipulations. The grounded controls never left the ground. All three groups completed the same set of dependent measures. The participants were then debriefed, interviewed about the experience, and asked for a urine sample. (In the case of the experimental group, collecting the urine sample probably entailed simply wringing out their underwear into a beaker.) As expected, the experimental group rated themselves as being more stressed than the control groups, made more errors when filling out the Emergency Data Form and the Emergency Instructions Test, and had more corticosteroids in their urine, a physiological index of stress.

We present the Ditching study (Berkun, Bialek, Kern, & Yagi, 1962) to make three basic, introductory points. The first is that research ethics is fundamentally a methodological issue; each procedural decision a researcher makes has potential ethical implications. As a consequence, ethics should not be an afterthought and attention to ethical considerations must go beyond preparing a consent form and a debriefing. If the Ditching study is unethical, it is in large part because the researchers failed to temper their methodological decision making with empathy for their participants. Their only apparent concession to moral propriety was refraining from actually crashing the plane into the ocean, and that may have been only because one or more of the researchers were on board. This study demonstrates what can happen when scientific goals drive research methodology unchecked by ethical considerations.

The second point is that ethical problems often arise as a result of scientists viewing research participants as objects to be manipulated, as data on the hoof, or as a means to a publication. Apparently, the researchers who performed the Ditching study placed ecological validity and the scientific goals of their research firmly ahead of the emotional welfare of their subjects. The word "subjects" is used here as opposed to the currently preferred "participants" precisely because the men in this study were treated as subjects, as lab rats might be treated, and not as autonomous beings. Participants are people who have graciously given research scientists their time and attention and often their considerable effort; they have a right to expect nonmaleficence and respect in return. Resisting the temptation to objectify the people in their studies is one of the biggest ethical challenges researchers face. As is true with almost all people-oriented professions, it is hard not to come to have a certain degree of contempt for the people one relies on for his or her livelihood. Just as salespeople often view their customers merely as a means to a commission and wait staffs have a certain degree of disdain for restaurant patrons, researchers also may develop a somewhat jaundiced view of the people in their studies especially because research participants often miss appointments, fail to cooperate, and, on occasion, even render data contrary to their hypotheses. Unfortunately, psychologists cannot afford to indulge in objectifying their participants, nor allow their contempt to influence their methodological choices, because psychologists hold far more sway over peoples' well-being than do salesclerks and waiters.

The most important point to remember from this chapter is that you can do damage, that what psychologists say and do to people carries more weight than similar words and deeds on the part of someone who is not a psychologist. If a salesclerk calls

a customer an idiot, it is a rude insult. If a psychologist calls a person in a study the equivalent of an idiot (say, in the form of false feedback on a fake intelligence test), it can be construed as a diagnosis based on scientific evidence. Needless to say, the latter is much harder to shrug off than the former, and, at least for a time, the person is actually likely to feel that he or she is of below average intelligence. Especially among college students at competitive universities, such a feeling can be experienced as a significant self-esteem wound.

The third point is that ethical considerations will often require making methodological tradeoffs. This fact may make it seem as though good ethics and good science are often adversaries. As a case in point, there is the Ditching study, a methodological masterpiece. One can imagine the researchers growing more pleased with themselves as each little bit of realism was incorporated into their design. They did not just switch off an engine; they allowed the passengers to hear emergency transmissions between the pilot and tower personnel. As a final touch, they allowed the passengers to see emergency equipment lining the runway. If anyone had the presence of mind to wonder why the passengers had to fill out forms that would be as unlikely to survive a crash as they were, the researchers had the clever idea of introducing the notion of a waterproof canister that could be jettisoned before impact. Every methodological decision the researchers made was in service to convincing their subjects that they were in a life-threatening situation. This was also the heart of the study's ethical problems. It made people suffer the experience of being in fear for their lives. But to the extent that the researchers would have included procedural steps designed to ameliorate this fear, there would have been a cost in terms of the scientific goal of the study—to observe the impact of fear of death on psychological functioning.

In situations such as this, in which good ethics seems to stand in the way of good science, there are several possibilities to consider. The first is that the issue being addressed is unworthy of study. Just because a question can be asked does not mean that it should be asked. A case in point is the notorious Tuskegee study on the disease course of untreated syphilis. Surely, medical science could have done without the information gained in that investigation, especially after a cure for the disease was found partway into the study. Closely related is the possibility that the question being examined is not worth the cost in terms of the suffering required to gain the information sought. The pursuit of knowledge is not humankind's highest virtue; there are considerations that carry more weight. Perhaps knowing how people react in the face of life-threatening situations is less important than abiding by the right people have not to be put in fear of their lives. Although it may be important for the Army to know how their soldiers will react in the face of possible death, more important considerations may mean that this question will have to be left unasked. Deciding to forgo a study, however, is the most drastic and not always the most desirable way of handling a conflict between ethical concerns and research goals.

A less onerous alternative is to consider the possibility of whether there is a different, more ethical, way to operationalize the variable of interest. Perhaps the researchers in the Ditching study could have caused significant fear without making people think that they were about to be in a plane crash. If fear of death is viewed as merely an extreme point on a continuum of fear, then perhaps subjecting people to a lesser fear would still

have allowed the researchers to gather the information they wanted. For example, soldiers about to make their first parachute jump could have been used in the experimental group. Surely, such soldiers are harboring some form of fear resembling a fear of death, but they are experiencing this fear by choice, assuming that being a paratrooper is a job one signs up for, and this fear is probably less acute than that generated in the Ditching study.

A final possibility is that instead of examining the question in a manipulation study, perhaps one can take advantage of a naturally occurring situation. Researchers looking for cancer cures do not give people the disease and then try to cure it; they find people who already have cancer. Instead of simulating a plane crash, the Ditching study researchers could have found a war (there is almost always one occurring someplace in the world) and worked with the soldiers at the front who were already in a position to be fearing for their lives.

These last two possibilities point to another link between methodology and ethics. A skilled and creative methodologist can almost always find a way to research an issue in an ethical manner. Conversely, an inferior methodologist is unlikely to do ethical research. Poorly designed, even if otherwise quite benign, research is unethical if for no other reason than that it represents a waste of time, effort, and resources that could have been devoted to research that had the potential to be truly informative (Rosenthal, 1994). Poorly designed research also has a greater likelihood of yielding erroneous or artifact-driven results, which, in turn, can lead to harmful consequences such as misbegotten further research, misinformed policy decisions, and misperceptions on the part of the public (see, e.g., Ernhart, Scarr, & Geneson's 1993 discussion of Herbert Needleman and his research on the effects of low-level lead exposure on children).

Although ethics and psychological research may seem to be in an adversarial relationship, the relationship is actually more like that of the Supreme Court and Congress. The Court's purpose is not to impede the work of Congress but rather to ensure that Congress does not infringe on the basic rights of the people. Though the Court's judgments may seem at times like unwelcome intrusions to the Congress, in the long run they serve to protect Congress and the government as a whole. Our government, as does psychological research, exists only at the pleasure of the people. If either institution comes to be viewed as immoral, exploitative, or insensitive to the values and concerns of society, it will be sanctioned or eliminated. Institutional review boards (IRBs) were mandated into existence in response to perceived abuses by researchers. The more jaundiced a view society comes to have of psychological research, the tighter funding and regulation will become. In the long run, the benefits of good ethical conduct to psychology as a science more than compensate for the constraints it imposes on research methodology.

Unfortunately, even intensive ethics instruction will not prevent bad people from acting in an immoral manner. Thus, this chapter is not aimed at such people (those who are evil by nature might as well skip ahead). It is our belief, though, that most ethical breaches are not the result of bad people acting true to their nature, but rather of good people making bad decisions. As we see it, the biggest culprits in the commission of unethical behavior are lack of information, mindlessness, self-deception, and motivated cognition (the process by which judgment becomes biased by self-interest) (Kunda, 1990). The best defense against these causal factors is education in conjunction with disciplined moral decision making and consultation with colleagues.

There is a substantial and ever growing literature dealing with the ethical issues and dilemmas facing professional and research psychologists. Investigators should become familiar with and keep abreast of this literature in the same way they follow the work being done in their areas of research specialization. A good place to start is with this chapter and a basic text such as D. N. Bersoff (1995) or Koocher and Keith-Spiegel (1998). Monitoring the ethics literature will not only keep researchers informed of the current rules, regulations, and codes governing research and the practice of psychology in general, but it will also sensitize them to the moral implications of what psychologists do, especially in their interactions with research participants, clients, and students.

Disciplined moral decision making means going beyond the immediate, intuitive level of moral thinking and adopting a more critical-evaluative stance (Kitchener, 1984). It means taking out a pencil and paper and documenting one's thought processes step by step as one analyzes the ethical issues involved in a study. There are several models available in the literature for making ethical decisions. We present one model from Koocher and Keith-Spiegel (1998, pp. 12–16) and recommend getting in the habit of using it or one of the others available (see, e.g., The Canadian Psychological Association Committee on Ethics, 1986), especially when one is considering using research procedures or populations with which one has had little or no personal experience.

1. Describe the parameters of the situation. Initially one should obtain information from the parties involved and/or from sources relevant to the matter, such as literature papers or collegial consultation.
2. Define the potential issues involved. From the information assembled from step one, the resulting critical issues should be described.
3. Consult the guidelines, if any, already available that might apply to the resolution of each issue. These guidelines may include the Ethical Principles or other codes or policy statements as well as federal and local laws and regulations. The "right answer" might not necessarily emerge at this point. Nevertheless, this is a critical step to take conscientiously since a disregard for extant policy may well have future consequences.
4. Evaluate the rights, responsibilities, and welfare of all affected parties (including institutions and the general public).
5. Generate the alternative decisions possible for each issue. This phase should be conducted without a focus on whether each option is ethical or feasible, but may include alternatives that the psychologist would consider useless, too risky, or inappropriate. The decision not to make a decision or to do nothing should also be included.
6. Enumerate the consequences of making each decision. Whenever relevant, these consequences should include economic, psychological, and social costs; short-term, ongoing, and long-term effects; the time and effort necessary to effect each decision, including any resource limitations; any other risks, including the violation of individual rights; and any benefits.
7. Present any evidence that the various consequences or benefits resulting from each decision will actually occur. To the extent possible, estimate the probability of such occurrences. Often no evidence exists, because the rapidly changing

discipline is characterized by the frequent emergence of new and not-fully-tested innovative techniques. Lack of evidence must be considered in and of itself a risk, since the decision outcome is not predictable.

8. Make the decision.

In addition to these eight steps, we suggest a ninth:

9. Assume responsibility for the consequences of the action taken, including correction of negative consequences, if any, or re-engaging in the decision-making process if the ethical issue is not resolved (The Canadian Psychological Association, 1986, p. 6E).

It is impossible to stress enough the importance of discussing ethical concerns and issues with colleagues. Most ethical dilemmas involve a preferred resolution. For example, researchers naturally are going to prefer that some interesting and potentially fame-garnering, but perhaps somewhat morally iffy, study that they have designed be considered ethical. Regardless of how objective they may think they are being, there is a good chance that this preference or desire may contaminate their moral judgment in favor of ethical acceptability (D. M. Bersoff, in press; Silver, Sabini, & Miceli, 1989). Even scrupulously following the above decision-making model does not offer sufficient protection from the influence of motivated reasoning (though following a model is significantly more protective than is allowing intuition or a gut feeling to guide one's actions) because the model requires that one make many somewhat speculative judgments regarding risks, benefits, and the likelihood of both good and bad consequences, all of which themselves are prone to contamination by motivated cognition (Kunda, 1990). Consulting with colleagues can help prevent self-deception. It will also force a researcher to explicitly verbalize a moral justification for his or her experimental procedures. Following the steps of a moral-decision-making model can help one form such a justification and can serve as the basis for discussions with colleagues.

In the remainder of the chapter, we address the ethical considerations inherent in specific aspects of research such as subject recruiting, informed consent, methodology choices, debriefing, and the presentation of findings. In the beginning of each section there is a synopsis of the relevant rules and regulations germane to the topic addressed. We then explore the key issues and ethical ambiguities inherent in the topic.

RECRUITMENT OF RESEARCH PARTICIPANTS

Participation in scientific research must be voluntary. When recruiting people for research it is unethical to use undue inducement or any element of force, fraud, deceit, duress, or other form of constraint or coercion (45 C.F.R. 46.103[c], 1983; American Psychological Association [APA] Ethics Code, 1992, section 6.14). The problem is that, short of threats of violence or promises of eternal youth, it is not always easy to recognize coercion and undue inducement. The American Psychological Association (APA) does elaborate to some extent by specifically enjoining teachers from requiring

participation in experiments as part of their courses or from offering participation in return for extra credit without making available an equitable alternative activity (APA Ethics Code, 1992, section 6.11 [d]). But even within this more specific guideline, it is quite easy to apply subtle pressure to a class, the members of which are unlikely to want to displease the person holding their grade in his or her hands. In fact, it would not be unreasonable to contend that there is some element of coercion involved in any investigator-participant interaction (Koocher & Keith-Spiegel, 1998). Simply being solicited by a person perceived as having prestige and authority can be coercive in itself, especially if the potential participants approached are vulnerable, deferential, starving for attention, desperate for a solution to their psychological problems, or occupy a less powerful position than the solicitor, such as inmates, students, or employees of the organization sponsoring the research. Even if a participation request is not meant to be coercive, it still might be perceived as such by the people solicited.

This is especially likely in institutional settings such as schools, mental hospitals, and prisons. People in such settings are not used to having autonomous choice in everyday matters that influence their lives. They may agree to participate in a study not because they want to but because, within the context of the institution in which their participation was solicited, there is an implicit expectation that official requests are met with compliance (Grisso, 1996). One way around such problems is for investigators to refrain from soliciting individuals directly. Instead, they could advertise passively for participants in newspapers, newsletters, electronic bulletin boards, or with posted sign-up sheets, thus putting potential participants in the position of instigating any contact between themselves and researchers.

Certain inducements to participate in research can also be considered coercive. Examples include offering people in poor neighborhoods cash for participating or allowing their children to participate in unpleasant studies, or offering clinical intervention to people without insurance or other financial resources in need of treatment in return for their participation in an outcome or efficacy study.

Any debate regarding undue inducements entails a conflict between two fundamental moral values: beneficence and the respect for autonomy. To say that offering people who are living in deprivation a relatively large reward for participating in a study is unethical because the reward will cloud their judgment is to assume that the poor cannot make decisions regarding what is in their own best interest. But it would also be grossly naïve to believe that desperation does not affect judgment. At the least, when dealing with studies that involve more than minimal risk, the one put at risk should be the recipient of the benefit. Thus, for example, one should err on the side of beneficence in cases where parents are being compensated for allowing their children to participate in a research project. Among competent adults, the scales are tipped in favor of a respect for autonomy.

Ethical considerations should influence not only how participants are recruited but also who is recruited. By the year 2000, approximately one-third of the U.S. population will be people of color (U.S. Bureau of Census, 1995). Yet historically, psychological research has excluded diverse populations from its participant pool (Hall, 1997). In a study of empirically based articles in six major APA journals between 1970 and 1989, only 3.6% of the studies examined focused on African American participants (Graham, 1992). In another study involving research articles published in the