

What Price Knowledge?

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The experiments of Stanley Milgram on obedience to authority have achieved a visibility that is without precedent in the social sciences. Although conducted more than twenty years ago, Milgram's research may be the most widely cited program of studies in psychology. The treatment given to these experiments in textbooks is extraordinary in terms of space alone. It is not uncommon for several pages to be allotted, including photographs of Milgram's laboratory and of actual episodes of genocide or destructive obedience as these have occurred in our history. The obedience experiments, which in many respects are unique and unlike any other variety of behavioral research, have come to be the focal point for analyses and debates about research ethics. From its inception, Milgram's work unleashed a storm of ethical controversy.

The experiment was conducted at Yale University. The subjects, recruited by newspaper advertisement and mail solicitation, were forty men, ranging in age (twenty to fifty) and socioeconomic circumstances (postal clerks, engineers, laborers, high-school teachers, and so on). They receive \$4.50 for their participation. The stated purpose of the study was to examine the effects of punishment on learning. A highly credible rationale for the ensuing study was presented, one that would justify the use of electric shocks.

Three individuals participated in the basic experiment: The experimenter, played by a thirty-one-year-old high-school teacher; the learner (or victim), played by a forty-seven-year-old accountant; and the teacher, always destined, by a fixed draw, to be played by the real or true subject. After a short briefing by the experimenter and the role assignments, the learner was placed in an electric-chair apparatus, and an elaborate description was given regarding the nature of the task to be learned and the punishment delivery system.

The teacher was instructed to read a series of word pairs to the learner and then to read the first word of a pair and four possible associations. The learner was to indicate which of the four associations had been paired with the first word. The response alternatives consisted of four numbered switches, each of which would light up a corresponding indicator light on the top of the shock generator

in front of the teacher. The instructions authorized the teacher to punish the learner for each error of recall by pressing a lever on a shock generator. The teacher was also required to announce over an intercom the outcome of each trial, the correct answer if an error had been made, and the amount of shock voltage which would be momentarily forthcoming.

The shock generator consisted of a panel with thirty levers, each accompanying a designated voltage ranging from 15 to 450 volts. Various switches, dials, indicator lights, and meters gave a highly authentic appearance to the generator. Particularly important (and later to become a point of controversy) were the verbal labels engraved at various intervals (Slight Shock, Moderate Shock, Strong Shock, Very Strong Shock, Intense Shock, Extreme Intensity Shock, Danger: Severe Shock). The last two shock levers (that is, 435v, 450v) were marked XXX. There was no attempt to conceal the fact that very powerful shocks could be delivered using this formidable piece of apparatus. To convince subjects of the realistic punishment that could be administered, each teacher received a sample shock—more than a tingle—which was described as being 45 volts, that is, position #3 on the generator. Milgram reported that no subject suspected the simulated aspect of the generator.

Considerable controversy arose regarding the precise amount of harm that subjects perceived could be inflicted during the experiment. While being strapped into place and having the electrodes attached to his arm, the learner was instructed to inquire about the prospect of being harmed. The experimenter's standard response was: "Although the shocks can be extremely painful, they cause no permanent tissue damage."

The delivery of punishment thus occurred in the context of an interaction between the experimenter (authority), the teacher, and the learner. The teacher was required to increase the voltage level by one switch, (that is, by 15 volts) for each error made by the learner. On 25 percent of the trials, the learner made the "correct" response to lend a note of credibility to his performance. In response to questions or hesitation on the part of the teacher, the experimenter answered with one of four increasingly strident prods, to the point that the teacher

should continue. If the subject refused to continue after the fourth prod, the experiment was terminated. There were various inquiries from subjects that received standardized replies, such as a reassurance that no permanent tissue damage would occur, or the fact that "whether the learner likes it or not, you must go on until he has learned all the word pairs correctly," or the fact that the experimenter would assume responsibility for the learner's welfare.

The physical setting involved the teacher and learner in adjacent rooms, with the experimenter in the same room as the teacher. If the subject (teacher) continued to shock the learner to the 300 volt level (the twentieth lever), feedback from the learner was supplied by his pounding on the wall. This was clearly audible to the teacher. After this point, the learner's responses no longer appeared on the indicator light. This nonresponse was, according to the experimenter, to be treated as an error, with the shock series being continued as it had been to this point.

Milgram's experiment is unique in using verbal commands that blatantly contradict the subject's wishes. The element of authority seems to occur most vividly at the third prod—"It is absolutely essential that you continue." This assertion is qualitatively more emphatic than the two earlier prods ("Please continue. . . . The experiment requires that you continue"). The final prod—"You have no other choice, you *must* go on"—is a clear falsehood. That such verbal utterances, without clear substantive meaning, appear to have strongly influenced subjects to shock (in their own minds) a protesting individual is one of the most intriguing findings of the study.

Responses to Authority

The primary measure was the maximum shock administered to the learner, ranging in principle from 0 to 450 volts. Although individual differences in following orders were clearly evident, Milgram's orientation always focused upon the ultimate behavior: "A subject who breaks off the experiment at any point prior to administering the thirtieth shock level is termed a *defiant* subject. One who complies with experimental commands fully, and proceeds to administer all shock levels commanded, is termed an *obedient* subject."

This categorical designation—obedience versus defiance—has an appealing simplicity, and facilitates a comparison of different procedural variations on the subjects' performance. Milgram described a total of eighteen experimental variations on the basic paradigm in his 1974 book *Obedience to Authority*.

Of the forty subjects participating in the baseline experiment described in Milgram's 1963 publication in the *Journal of Abnormal and Social Psychology*, twenty-six pressed the 450-volt switch. This result—an obedience rate of 65 percent—is the major finding of the study. It has become the most well-known result of the entire obedience research project, despite the fact that in a number of Milgram's experiments, the obedience rate dropped to zero. The 65 percent obedience result has become a base-

line finding against which other findings, including people's intuitive perceptions, are compared.

After the experiments, a debate between Milgram and D. Baumrind appeared in the 1964 *American Psychologist*. A strong case could be made that this was the impetus for a renaissance of sensitivity to ethical issues in human experimentation. Their exchange is invariably cited in any serious review of research ethics. It was not simply that Milgram had used deception, for countless studies prior to his own had used this procedure, often to an extreme degree. Nor was the use of electric shock, or at least the prospect of delivering it, a key factor. There was

Milgram denied that his subjects experienced psychological trauma of any significant duration.

something about the obedience experiments that aroused a particularly hostile reaction in many readers, a reaction often involving a general rejection of the experiments and, at least by implication, a personal attack on Milgram himself. It is also true that the obedience research, because of its novelty and vivid impact, sensitized social scientists to a broad array of ethical issues which were, in principle, applicable to research in general, research of a more benign surface quality.

We could reason that any research investigation that achieves the kind of celebrity status accorded to Milgram's work is likely to elicit criticism simply because of its visibility. This is not applicable to the obedience experiments, for they were the subject of an impassioned and (what turned out to be an) extraordinarily influential ethical criticism less than one year after Milgram's initial publication in 1963. It was Milgram's response to Baumrind—and his published reactions to a number of other critics as well—that helped to construct an instructive and enriched scholarly foundation for the controversies that emanated from the obedience experiments. Students of the obedience research stand to profit, not simply in being able to arrive at a verdict in terms of whether Milgram "wins or loses" the debate, but rather in learning about the values and premises that generate questions about these experiments, and the strategies and resourcefulness of Milgram and others, in answering them.

Baumrind opened her essay with a recognition that certain types of psychological research may prove unsettling to subjects. Noting that the experimenter is obliged to be attentive to the subjects' sense of well-being, particularly if the treatment has induced feelings of insecurity, anxiety, or hostility, Baumrind emphasized the dependent posture

of subjects in experimental settings. She concluded that this role or "mind-set" has important consequences in terms of what may be investigated. Her argument emphasized the vulnerability of the subject in the experimental setting, a factor that she viewed as having both ethical as well as methodological implications. Experimenters should assume a protective role in view of the emotional distress that could occur, and they should recognize the implausibility of investigating phenomena which, as in obedience, are built into the subject's role. She did not rule out the use of deception or anxiety-evoking procedures, but stressed the need for sensitive, thorough postexperimental interactions between investigators and their subjects. What specifically were her objections to the obedience experiments? Her focus is on the tension experienced by Milgram's subjects, as in this description: "I observed a mature and initially poised businessman enter the laboratory smiling and confident. Within 20 minutes he was reduced to a twitching, stuttering wreck, who was rapidly approaching a point of nervous collapse." Citing Milgram's statement that "a friendly reconciliation was arranged between the subject and the victim, and an effort was made to reduce any tensions that arose as a result of the experiment," Baumrind expressed grave doubts: "His casual assurance that these tensions were dissipated before the subject left the laboratory is unconvincing."

Baumrind appears to dismiss the validity of Milgram's assurance. Her use of the term "casual" could be taken as a reference to Milgram's irresponsible professional conduct, an implication also made when she asks: "What could be the rational basis for such a posture of indifference?" She asserts that in terms of research ethics, Milgram has taken a position that the "ends are worth the

means." Because of the scientific value of his research, the costs, in terms of the distress experienced by his subjects, are viewed as acceptable. Baumrind does not agree: "Unlike the Sabin vaccine, for example, the concrete benefit to humanity of his [Milgram's] particular piece of work, no matter how competently handled, cannot justify the risk that real harm will be done to the subject." Her position is that behavioral scientists cannot, in principle, have the kind of confidence that medical researchers would have regarding society's evaluation of their work.

Consequences

Baumrind outlined two unacceptable outcomes of the subjects' participation in the Milgram paradigm. One is a shaken faith in authority. Subjects may generalize their encounter with the deceitful experimenter and experience difficulty in their future relationships with authority figures. Second, the subject's self-image is threatened, in a manner that may be resistant to effective debriefing. It is largely irrelevant to tell the subject that no shocks were actually delivered, because the issue centers on the implications of the subject's behavior when he or she believed that the shocks were being delivered to the learner.

Emphasizing her earlier argument regarding the high baseline of dependency inherent in the role of laboratory subject, Baumrind takes exception to linking the obedience research to the genocide perpetrated by the Nazis. She notes that the Nazi SS officers (analogous to the teacher) were not under the impression that the ultimate authority—that is, Hitler—was kindly disposed toward the victims. The victims were not (as in the obedience paradigm) social peers of the SS but rather were dehumanized to an extreme degree. Baumrind contends that the conflict expressed by many subjects is evidence of their concern for the learner—again unlike the Nazi analogy—and that the subjects' tensions may have reflected their inability to comprehend the behavior of the experimenter as much as, or even more than, their misgivings about how they were treating the learner.

While the generalizability of Milgram's work is, strictly speaking, a methodological rather than ethical problem, these two perspectives are often closely related. Because one of Baumrind's central arguments rests on the trust and dependence of the subject with respect to the experimenter—that is, that the experimenter is a "good" person who is kindly disposed toward human beings—it is precisely this perspective that leads her to see the entire paradigm as unconvincing in its relevance to the Nazi death camps. The laboratory, to subjects, is a trustworthy and safe place. Milgram violated this presumption and that was his ethical error. Yet, because the laboratory is still

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means." Because of the scientific value of his research, the costs, in terms of the distress experienced by his subjects, are viewed as acceptable. Baumrind does not agree: "Unlike the Sabin vaccine, for example, the concrete benefit to humanity of his [Milgram's] particular piece of work, no matter how competently handled, cannot justify the risk that real harm will be done to the subject." Her position is that behavioral scientists cannot, in principle, have the kind of confidence that medical researchers would have regarding society's evaluation of their work.

I am tempted to say that Baumrind's conception of a breakthrough phenomenon in research is naive, for rarely

presumably invested with these qualities, one cannot interpret the subjects' behavior as reflecting destructive obedience with parallels to the Holocaust.

Baumrind concluded with a strong although not absolutist recommendation: "I would not like to see experiments such as Milgram's proceed unless the subjects were fully informed of the dangers of serious aftereffects and his correctives were clearly shown to be effective in restoring their state of well-being."

The use of deception as a research strategy appears to be acceptable to potential subjects.

Milgram's published response to Baumrind's criticism appeared several months later in the 1964 *American Psychologist*. Milgram had collected the entire set of data prior to the 1963 publication, and he had made reference in that publication to the fact that a larger data set had been collected, including some containing relevant information concerning the apparatus and initial reaction of subjects. Baumrind had published her ethical criticism without first contacting Milgram and making inquiries pertinent to her objections.

Milgram went into considerable detail concerning the debriefing phase of his research. Subjects, regardless of their obedience or defiance, were each given an explanation that bolstered their sense of esteem and supported their course of action. Subjects were also sent a report presenting various procedural details as well as findings. He emphasized that "their own part in the experiments was treated in a dignified way and their behavior in the experiment respected."

The results of a questionnaire sent to subjects following their participation also support Milgram's view of the ethics of his paradigm. Eighty-four percent reported being glad or very glad to have been in the experiment; 15 percent reported being neutral, and less than 2 percent reported to have been sorry or very sorry to have participated. Over 75 percent indicated that experiments of this type are important and should be performed. Milgram stated that his follow-up procedures were carried out "as a matter of course and were not stimulated by any observation of special risk in the experimental procedure." Milgram vehemently denied Baumrind's allegations that harm was inflicted upon his subjects and that he, personally, was indifferent to their welfare. Psychiatric interviews were held with forty subjects approximately one year after their participation. The conclusion reached by the psychiatrist, Paul Errera, was that "none were

found by this interviewer to show signs of having been harmed by their experience." Several subjects did display various recollections of having been angered or irritated in some manner, but no evidence of lasting trauma was apparent.

Milgram's rebuttal on this point is convincing because he presents empirical data concerning reactions of his subjects to their participation. (This kind of postexperimental assessment is extremely rare in behavioral research.) He reported a 92 percent return rate for the questionnaires, an unusually high percentage. Presumably, any negative reactions that might have been generated by subjects' inferences—for example, associations made to obedience phenomena in Nazi Germany—would have appeared in their questionnaire responses. No evidence of this was present. That the debriefing received by each subject was supportive regardless of their behavior in the experiment raises the question of whether the major purpose of debriefing is to calm the subject or to inform the subject of the true nature and significance of the study. Clearly Milgram's major intent was to provide emotional support. Were his goal purely informational, there would have been no justification in providing different information to obedient versus defiant subjects, which, apparently, is what transpired.

Obedience in a Laboratory

Recall that Baumrind criticized the choice of the experimental laboratory as a suitable context for the study of obedience because of the naturally occurring trust and dependency—hence the inevitably high baseline of obedience—in that setting. Others have drawn the same conclusion. Milgram, not surprisingly, took a fundamentally opposing position on this matter:

Here is one social context in which compliance occurs regularly. Military and job situations are also particularly meaningful settings for the study of obedience precisely because obedience is natural and appropriate to these contexts. I reject Baumrind's argument that the observed obedience does not count because it occurred where it is appropriate. That is precisely why it *does* count. A soldier's obedience is no less meaningful because it occurs in a pertinent military context. A subject's obedience is no less problematic because it occurs within a social institution called the psychological experiment.

Although this debate has strong methodological overtones, the ethical issue is clearly present. Baumrind's thesis is that the experimenter exploited the subjects. These were individuals who, in her view, were primed to do whatever the experimenter told them to do simply by virtue of their role. They trusted the experimenter and depended upon him for guidance and direction. He then "took advantage" of their vulnerability and evoked destructive obedience. Milgram denies this view of what

transpired. He observed that a substantial number of subjects did disobey the experimenter at some point, that in some of the variations—not accessible to Baumrind in reading his 1963 article—a majority of subjects defied the experimenter's orders. Speaking more directly to the ethical and moral dimensions of this problem, Milgram makes this crucial distinction between Baumrind's construction of events and his own:

Baumrind feels that the experimenter *made* the subject shock the victim. This conception is alien to my view. The experimenter tells the subject to do something. But between the command and the outcome there is a paramount force, the acting person who may obey or disobey. I started with the belief that every person who came to the laboratory was free to accept or to reject the dictates of authority. This view sustains a conception of human dignity insofar as it sees in each man a capacity for *choosing* his own behavior.

We cannot simply assert that Milgram was correct or incorrect. It would seem, at this point, that Milgram's most convincing argument rests with the data themselves—the variability of his subjects' behavior both within various experimental situations and across them. This variability does not support Baumrind's thesis that there is a kind of built-in obedience factor in the laboratory to which subjects must succumb.

Analogy to Nazi Germany

Milgram agreed with Baumrind on the obvious differences between the historical events of the Holocaust and the laboratory paradigm. Although not backing off from the analogy, Milgram asserted, simply, that it was an analogy, that his intent was not to create a microcosm of the Holocaust in his laboratory but rather to capture a social process that may have had vital significance in the Holocaust.

As Douglas Mook has observed in the *American Psychologist*, it is a simple matter to criticize psychological experiments on the grounds that they lack ecological validity or generalizability to nonlaboratory events, but it is crucial to recognize that the goal of a direct application or extrapolation of experimental findings is not always intended by the investigator. (At times, it is intended—as in trying to forecast a political election by means of sampling polls). Milgram's intent was not to explain the Holocaust:

Baumrind mistakes the background metaphor for the precise subject matter of investigation. The German event was cited to point up a serious problem in the human situation: the potentially destructive effect of obedience. But the best way to tackle the problem of obedience, from a scientific standpoint, is in no way restricted by "what happened exactly" in Germany. What happened exactly can *never* be

duplicated in the laboratory or anywhere else. The real task is to learn more about the general problem of destructive obedience using a workable approach.

Milgram began his 1963 article with a reference to the Nazi death camps, and his work has continuously been linked to the Holocaust. It is common, for example, for textbooks to include a photograph of concentration camp victims at the point in the text in which Milgram's experiments are being described. Pictures of the victims of the My Lai massacre of civilians during the Vietnamese war may also be linked to discussions of the obedience research. The emotional imagery of the Holocaust in combination with the vivid, unexpected behaviors observed in the obedience paradigm create a compelling association for many readers. It becomes virtually impossible not to make a kind of causal connection—that is, that what Milgram has shown did indeed play a crucial role in the Holocaust.

"How could it have happened?" This is the ultimate puzzle of the Holocaust. It becomes difficult—in part because of the manner in which Milgram's research is taught—to disengage the obedience experiments from assuming the status of an answer to that puzzle. It also needs to be recognized that although Milgram was disposed, in 1964, to make a sharp distinction between his primary research interests and the events of the Holocaust, there were subsequently enormous pressures placed upon him to make extensions from his laboratory findings to a variety of real-world examples of obedience to authority as these have periodically occurred in the course of history. The effective meaning of his experiments has been strongly determined by the manner in which others have interpreted his research—notwithstanding his own more conservative, scientifically oriented position. In practical terms, it would have been unrealistic to expect Milgram to continuously deny the social and historical implications of his findings—even if he were personally more dubious about the certainty of the causal inferences than are others who have been so intrigued with his findings.

Insights from Participants

Milgram denied the accusation that his subjects experienced psychological trauma of any significant duration. His postexperimental reports from subjects supported this view. Milgram then went further, suggesting that many subjects had gained important insights regarding human nature, that they viewed the obedience paradigm as far more interesting as compared to "the empty laboratory hour, in which cardboard procedures are employed, and the only possible feeling upon emerging from the laboratory is that one has wasted time in a patently trivial and useless exercise." Regarding the concern that subjects would, as a result of their participation, have problems relating to authority, Milgram makes two points. Given that Baumrind views the laboratory as an inappropri-

ate—that is, nongeneralizable—context for the study of obedience, Milgram is puzzled that she worries about lasting, generalizable, negative influences. More significantly, Milgram appears gratified by the potential insight gained on this score:

I would consider it of the highest value if participation in the experiment could, indeed, inculcate a skepticism of this kind of authority . . . Baumrind sees the effect of the experiment as undermining the subject's trust of authority. I see it as a potentially valuable experience insofar as it makes people aware of the problem of indiscriminate submission to authority. . . . If there is a moral to be learned from the obedience study, it is that every man must be responsible for his own actions.

Milgram could be accused of departing from his previously stated, more modest intentions, that is, of studying obedience in the interests of science. In this passage, he seemed to accept without reservation the moral significance of his findings and to presume that the lessons inherent in his research would be worthwhile for the subjects who yielded its data. Milgram's right to engage in this kind of moral pedagogy has not gone unchallenged.

In an unpublished paper by Baumrind, in which she responded directly to Milgram's rebuttal to her initial commentary, she argued that regardless of the motivation of the experimenter—his good intentions, his postexperimental caution—"the use of the professional setting to inflict psychological pain . . . [is] an improper use of authority." A point not raised by Baumrind but relevant here is that although Milgram did not anticipate the prevalence nor the severity of the tensions experienced by his subjects, he nevertheless pursued this paradigm over a three-year period. He made a decision to continue the research despite the extreme agitation demonstrated by subjects at the outset of the program.

Milgram on Research Ethics

Milgram's final pronouncements on the ethics of the obedience experiments are to be found in his 1974 book, *Obedience to Authority: An Experimental View*, and in a 1977 article in the *Hastings Center Report*. This is his major argument:

The central moral justification for allowing a procedure of the sort used in my experiment is that it is judged acceptable by those who have taken part in it. Moreover, it was the salience of this fact throughout that constituted the chief moral warrant for the continuation of the experiments. This fact is crucial to any appraisal of the experiment from an ethical standpoint.

Milgram thus reaffirmed his belief in the significance of his subjects' postexperimental reports. Given his perspective—that of a practicing social scientist—empirical evi-

dence pointing to a lack of harmful effects was crucial. He expressed surprise at how such evidence is often interpreted: "These data have been ignored by critics, or even turned against the experimenter, as when critics claim that 'this is simply cognitive dissonance.'" He makes a strong distinction between biomedical and psychological research. In the former, he acknowledges that risk is involved, but he denies this in the case of psychological research. He would not rule out the possibility of negative outcomes, but claims that this potentiality cannot serve as documentation that harm inevitably results.

Milgram's position reflects a set of values that not all would endorse. This bears on the nature of all debates concerning ethical issues. Some questions are resolvable in terms of observable events. If we ask "Is participation in the Milgram paradigm psychologically damaging?" the best evidence is that the answer is no. If we ask a slightly different question: "Does a research psychologist have the right to expose subjects to intense stress and conflict?" the answer is less clear. Is there evidence that would bear on such an answer? I think not. It becomes a question of values, of priorities, of what we view as important knowledge and whether the price of that knowledge is worth paying.

After the 1964 exchange between Baumrind and Milgram, there were three general types of reaction or impact. First, numerous position statements were presented by a large number of social scientists. These were usually brief comments, in a variety of outlets—journals, books, edited anthologies, mass media—which took an essentially pro or anti position on the ethics of the obedience research. A second, related intellectual development was a progressively intense interest in the general subject of ethical issues in behavioral research. Stemming from a variety of influences, a number of major publications appeared which dealt with such problems as the use of deception, the necessity of proper debriefing, the role of informed consent, alternative research methodologies, and ethical problems with special subject populations. It also became routine in the 1970s for textbooks in social psychology to give reasonably thorough treatment to ethical issues and dilemmas involved in social research.

A major theme in these presentations was that the prevailing research establishment was ethically negligent, that it fostered, perhaps unwittingly, a "dehumanization" of human beings in the name of "science." Most of these reactions were not simply jaundiced views from the outside; they reflected a growing crisis of confidence within social psychology. One concern, in this context, was the unfavorable image of the discipline that was being perpetrated by its characteristic research practices. Inevitably the obedience research became a focal point for all such ethical probing.

A third reaction was empirical. A number of investigations were conducted, directed at specific ethical problems or facets of the obedience paradigm. There is a kind of two-fold advantage to this kind of endeavor: we learn not only about the ethical issue but, more generally, about

obedience to authority. The difficulty lies in drawing generalizable ethical conclusions on the basis of these empirical studies. It is a special virtue of social psychology that it has at least attempted to apply an empirical orientation to questions concerning its methods and ethics.

Researching Harmful Aftereffects

Kenneth Ring, K. Wallson, and M. Corey performed what may have been the first replication of the obedience paradigm; they reported their work in *Representative Research in Social Psychology* in 1970. Ring and his colleagues made no attempt to minimize negative reactions or to deny that a critic of the obedience research could find one or more objectionable features in their data. Their major conclusion, however, is clear: "The data from this study fail to substantiate the charge that there are likely to be widespread and persistent negative aftereffects from Milgram-type obedience experiments." This conclusion is particularly significant because Ring et al. did not share Milgram's confidence regarding the ethics of this paradigm. They suggest that a detailed, personally involving debriefing is clearly useful. More crucial may be the nature of this debriefing:

deception experiments particularly require that in order to protect a subject's welfare the full truth about an experiment be withheld from him. Whenever such disclosure might lower a subject's self-esteem, it would seem advisable to sacrifice complete honesty with him. It may be that a subject would be better off knowing the truth, but as Kelman [in the *Psychological Bulletin* in 1967] rightly points out, when he volunteers for an experiment, a subject doesn't bargain for such potentially upsetting insights.

The exasperating nature of the ethical dilemma is well illustrated by Kelman's position on the content of post-experimental disclosure: "If we hope to maintain any kind of trust in our relationship with potential subjects, there must be no ambiguity that the statement 'The experiment is over and I shall explain to you what it was all about' means precisely that and nothing else."

To the extent that one cannot provide two different "truths," that is, to obedient and defiant subjects, the Milgram paradigm lacks, in Kelman's view, the possibility of an ethical debriefing. We could raise the issue of whether the truth actually exists regarding this research (or, for that matter, most experiments). Would it not be possible to provide different emphases depending upon a subject's performance, without fabricating substantive realities? The viewpoint expressed by Ring et al. is one of the most sophisticated discussions of the ethics of the obedience paradigm. The fact that their perspective is based upon direct experience with the paradigm considerably strengthens their line of reasoning.

Among the complexities involved in a consideration of the ethics of the obedience research is the simple fact that

we know what happened. Our ethical stance could be biased by our evaluative reaction to the subjects' behavior. Put simply, if we don't like the message, we may not feel kindly toward the messenger. Milgram addressed this possibility in his first reply to Baumrind:

Is not Baumrind's criticism based as much on the unanticipated findings as on the method? The findings were that some subjects performed in what appeared to be a shockingly immoral way. If, instead, every one of the subjects had broken off at "slight shock," or at the first sign of the learner's discomfort, the results would have been pleasant, and reassuring, and who would protest?

Research by Bickman and Zarantonello and by Schlenker and Forsyth has supported Milgram's contention.

Accepting Deception

The use of deception as a research strategy appears to be generally acceptable to potential subjects. A number of investigations have probed for subjects' reaction to a variety of research practices. Subjects are far more likely to express negative attitudes toward being mistreated or toward not being given a clear explanation about the experiment at its conclusion than to the use of deception per se. The "Candid Camera" mind-set may have infiltrated society to the degree that people recognize the utility of observing behavior under conditions that minimize the actors' ability to distort or bias their own actions. This by no means legitimizes the use of deception, but suggests that in the context of behavioral research, the usefulness of deception is at least recognized by many people. What appears to be a recurrent complaint is not that deception is, categorically, unethical, but that it too often is used routinely, without serious consideration of alternatives.

Schlenker and Forsyth have conducted one of the most elaborate investigations bearing on the ethics of psychological research, using the Milgram obedience paradigm as an illustration. The findings of this complex investigation, reported in the 1977 *Journal of Experimental Social Psychology*, can be summarized. Subjects were questioned concerning the relative impact of the degree of obedience and the amount of stress on ethical evaluations of the research. The results clearly indicated that it was the degree of obedience and not the amount of stress that was crucial. For example, on one item—"How much do you feel the experiment threatened the dignity and welfare of the subjects?"—the perceived threat was significantly higher if the results had shown high rates as opposed to low rates of obedience. The factor of stress or psychological conflict was not a significant variable. Subjects also indicated that the obedience research was less moral under the condition of high rates of obedience.

The findings also suggested that the specific ethical orientation held by the evaluator was a decisive influence on reactions to the obedience research. Moreover, judgments of the experiment's moral and ethical qualities were, for

certain subjects, positively associated with impressions of its scientific value and contribution to knowledge, and not associated with estimates of the degree of harm likely to have occurred.

Although it was hardly Milgram's intent, one of the most influential and lasting consequences of the obedience research has been a consciousness raising in terms of ethical issues in social research. It may be less important to know whether or not Milgram's research was or

Research was continued despite the extreme agitation demonstrated by subjects at the outset.

was not ethical than it is to engage in serious reflection about this matter. Subsequent studies—such as those by Ring et al., Bickman and Zarantonello, and Schlenker and Forsyth—are illustrations of how this sensitization to the ethical dimension has been translated into empirical research.

The ethical base of a research investigation is not solely an empirical matter but depends considerably upon our point of view on such issues as the cost-benefit model, the role of informed consent, and the use of deception. It was particularly this latter issue, that of deception in social research, which, historically, became the core problem for most of the published debates on research ethics. Because the obedience paradigm involved extensive use of a number of deceptions, Milgram's research became the most frequently cited target in the debates on the deception problem.

Notwithstanding the intensely critical position of various commentators, there have been numerous, enthusiastic endorsements regarding the ethics of Milgram's obedience experiments. Similar to those critics who extended their arguments to a personal attack on Milgram himself, those with positive regard for the research have often praised Milgram for his ingenuity and pioneering efforts on the problem of harmful obedience. Many do not object, categorically, to the use of deception in social research and readily endorse the cost/benefit rationale. The vast majority of textbook writers in social psychology—and related disciplines in psychology, sociology, and other social sciences—fall into this latter grouping. These individuals are extremely positive in their characterization of the obedience research. For many, this research is the "very stuff out of which social psychology is made."

It is almost irresistible, after reviewing the ethical com-

mentary on the obedience research, to avoid an integrative point of view. How simple it would be to say, with conviction, that "there are good points on both sides." I will resist this temptation and take a strongly affirmative position on the ethics of the obedience experiments.

Baumrind contrasted the obedience experiments with medical research, such as the Sabin polio vaccine, and argued that Milgram could not be in a comparable position to justify the risk that might be incurred by his subjects. I appreciate Baumrind's line of reasoning. Certainly there is a vividness, a sense of urgency or immediacy regarding the devastation of physical illness that seems to justify almost anything done in the name of trying to find a cure. In fact, "anything goes" is hardly the case in biomedical research, for which ethical guidelines are often extremely restrictive. I argue that the phenomenon of destructive obedience, which was one of the major facilitators to the success of the genocidal social policy in Nazi Germany, is as worthy of serious research as is cancer, heart disease, or poliomyelitis. "Real harm" (to use Baumrind's phrase) could result from not doing research on destructive obedience. I agree with Alan Elms who, in T. Beauchamp et al.'s *Ethical Issues in Social Science Research*, stated that "better and wider public understanding of the conditions most likely to promote destructive obedience on a small scale could have a prophylactic effect with regard to destructive obedience on a large scale." If we read Milgram's initial research proposal it is hard to imagine a more convincing presentation, made prior to the research itself, in terms of the usefulness of a basic research project.

We are fortunate that this ethical controversy has been aired in accessible sources—in journals and, with increasing frequency, in books devoted to the vexing ethical problems involved in social research—and that the discussants have been generally so articulate and thoughtful. To say that we are better off for having considered the ethical dimension of the obedience paradigm may sound trite, but it must certainly be the case. Among the beneficiaries are legions of research subjects who have been treated in a more humane and informed manner by researchers who, in the past two decades, have been enlightened by studying the issues I have reviewed. □

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