

Obedience in retrospect.

by Alan C. Elms

Milgram's original paradigm for studying obedience to authority is briefly described, and the main results are summarized. Personal observations of the conduct of the initial studies give added context for interpreting the results. Psychologists' reactions to the Milgram experiments are discussed in terms of (1) rejecting the research on ethical grounds, (2) explaining away the results as expressions of trivial phenomena, (3) subsuming obedience to destructive authority under other explanatory rubrics, and (4) endorsing or rejecting the results in terms of their perceived social relevance or irrelevance.

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The problem of obedience to authority may well be the crucial issue of our time. The experiments you took part in represent the first efforts to understand this phenomenon in an objective, scientific manner. (Stanley Milgram, Report to Memory Project Subjects, 1962b)

Introduction

Obedience to destructive authority was indeed a crucial social issue in 1962. The Holocaust had ended less than two decades earlier. Adolf Eichmann recently had been sentenced to death for expediting it, despite his plea that he had just been "following orders." American military advisers were being ordered to Vietnam in increasing numbers to forestall Communist control of Southeast Asia. Whether destructive obedience could reasonably be described as the crucial issue of the time is a judgment call; surely other issues offered competition for that status. But there can be little argument that Stanley Milgram's experiments were indeed "the first efforts to understand this phenomenon in an objective, scientific manner."

Milgram was not seeking to develop a grand theory of obedience. His main concern was with the phenomenon itself. He advised his graduate students that as they began their own research, "First decide what questions you want to answer." For him those first questions were typically substantive, not theoretical. He also told his students he sought to collect data that would still be of interest 100 years later, whatever theoretical interpretations might be made of the data. For his data on obedience, we are a third of the way through that 100 years. Those data remain of high interest indeed, offering continual challenges to our theories and to our confidence as psychologists that we really understand important aspects of human social behavior.

Milgram eventually proposed his own theoretical interpretations. But what most people still remember are the data themselves, the sheer numbers of research volunteers who obeyed every order to the very end. Before Milgram, creative writers had incorporated striking incidents of obedience into novels, poems, and

screenplays. Historians had written factual accounts of remarkably obedient individuals and groups. Psychologists had developed F- and other scales to measure inclinations toward authoritarian tyranny and subservience. Milgram instead established a realistic laboratory setting where actual obedience and its circumstances might be closely studied.

The Obedience Paradigm

For those who have forgotten the details, and for the few who have never read them, here is the basic situation that Milgram devised. First, he advertised in the New Haven (Connecticut) daily newspaper and through direct mail for volunteers for a study of memory and learning. Volunteers were promised \$4.00 for an hour of their time, plus 50 cents carfare. (At the time, \$4 was well above minimum wage for an hour of work; 50 cents would have paid for a round-trip bus ride to and from most areas of New Haven.) Most of those who volunteered were scheduled by telephone to come at a given time to a laboratory on the Yale University campus.

In the basic experiments, two volunteers arrived at the laboratory at about the same time. Both were invited into the lab by the experimenter. The experimenter explained that one volunteer would be assigned the role of teacher and the other would become the learner. The teacher would administer an electric shock to the learner whenever the learner made an error, and each additional shock would be 15 volts higher than the previous one. By drawing slips of paper from a hat, one volunteer became the teacher. His first task was to help strap the arms of the other volunteer to the arms of a chair, so the electrodes from the shock generator would not fall off accidentally. The teacher was given a sample 45 volt electric shock from the shock generator, a level strong enough to be distinctly unpleasant. Then the experimenter asked the teacher to begin teaching the learner a list of word pairs. The learner did fairly well at first, then began to make frequent errors. Soon the teacher found himself administering higher and higher shock levels, according to the experimenter's instructions. (Male pronouns are used here because most volunteers were male; in only one experimental condition out of 24 were female subjects

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used.)

After a few shocks the learner began to object to the procedure. After more shocks and more objections, he loudly refused to participate further in the learning task, and stopped responding. If the teacher stopped giving him electric shocks at this point, the experimenter ordered the teacher to continue, and to administer stronger and stronger shocks for each failure to respond - all the way to the end of the graded series of levers, whose final labels were "Intense Shock," "Extreme Intensity Shock," "Danger: Severe Shock," and "XXX," along with voltage levels up to 450 volts. In the first experimental condition, the teacher was separated from the learner by a soundproofed wall; the learner could communicate his distress only by kicking on the wall. In subsequent conditions, teachers could hear the learner's voice through a speaker system, or sat near the learner in the same room while the learning task proceeded, or sat next to the learner and had to force his hand down onto a shock grid if he refused to accept the shocks voluntarily.

Teachers were not told several important pieces of information until their participation in the experiment was finished. Number one, the experiment was a study of obedience to authority, not a study of memory and learning. Number two, the volunteer who assumed the role of learner was actually an experimental confederate. Number three, the only shock that anyone ever got was the 45 volt sample shock given to each teacher; the shock generator was not wired to give any shocks to the learner. Number four, the learner's kicks against the wall, his screams, his refusals to continue, were all carefully scripted and rehearsed, as were the experimenter's orders to the teacher. A number of variables could be (and were) added to the research design in different conditions (see Miller, Collins, & Brief, this issue), but these aspects were constant.

Observations from the Inside

The basic series of obedience experiments took place in the summer of 1961. Milgram was at that time a very junior assistant professor, 27 years old, with no professional publications yet in print. I had just finished my first year of graduate school when he hired me to be his research assistant for the summer. Stanley sent me a letter on June 27, a week before I was scheduled to return to New Haven from a brief summer vacation:

Matters have been proceeding apace on the project. The apparatus is almost done and looks thoroughly professional; just a few small but important pieces remain to be built. It may turn out that you will build them, but that depends on factors at present unknown.

The advertisement was placed in the New Haven Register and yielded a disappointingly low response. There is no immediate crisis, however, since we do have about 300 qualified applicants. But before long, in your role of Solicitor General, you will have to think of ways to deliver more people to the laboratory. This is a very important practical aspect of the research. I will admit it bears some resemblance to Mr. Eichmann's position, but you at least should have no misconceptions of what we do with our daily quota. We give them a chance to resist the commands of malevolent authority and assert their alliance with morality.

. . . . The goal this summer is to run from 250-300 subjects in nine or ten experimental conditions. Only if this is accomplished can the summer be considered a success. Let me know if there is something I have overlooked.

The summer was a success by any reasonable standards, if not fully by Milgram's. He had not overlooked anything procedural; even at that early stage in his career, he was already the most well-organized researcher I have ever encountered. But he had hardly come close to anticipating the degree to which his subjects would yield to the commands of malevolent authority, or how readily they would abrogate their alliance with morality. Milgram knew he would get some obedience; in a pilot study the previous winter, he had found Yale undergraduates disturbingly willing to shock their victims. But he recognized that Yale undergraduates were a special sample in many ways; that the prototype shock generator was rather crude and perhaps not altogether convincing; and that the simulated victim's displays of pain were fairly easy to ignore. For the main experiments, Milgram auditioned and rehearsed a victim whose cries of agony were truly piercing. He recruited a larger and diverse sample of nonstudent adults from the New Haven area, ranging from blue-collar workers to professionals and from 20 to 50 years in age. He constructed a professional-looking shock generator and purchased other high-quality equipment, including a 20-pen Esterline Angus Event Recorder that registered the duration and latency of each "shock" administration to the nearest hundredth of a second. He had decided that his main dependent variable would be the mean shock level at which subjects refused to go further in each experimental condition, but he wanted to be able to examine more subtle differences in their performance as well.

In early August the curtains went up on the first official obedience experiment. (More accurately, the curtains were drawn aside; Yale's new Social Interaction Laboratory, on temporary loan from the Sociology Department, was enclosed by two-way mirrors and heavy soundproofing curtains.) Would subjects be convinced of the reality of the learning-and-memory experiment, the shock generator, the

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victim's suffering? They were. Would subjects obey the experimenter? They did. How far would they go? On and on up the sequence of shock levels. Would any subjects go all the way to the end of the shock board? Yes indeed.

Behind the two-way mirrors, Stanley Milgram and I (as well as occasional visitors) watched each early subject with fascination and with our own share of tension. Stanley had made broad predictions concerning the relative amounts of obedience in different conditions, but we paid little attention to the gradual confirmation of those predictions. Instead we tried to predict the behavior of each new subject, based on his initial demeanor and the little we knew about his background. We were gratified when any subject resisted authority. Sometimes it was quiet resistance, sometimes noisy, but it was exciting each time it happened. As more and more subjects obeyed every command, we felt at first dismayed, then cynically confirmed in our bleakest views of humanity. We were distressed when some volunteers wept, appalled when others laughed as they administered shock after shock. The experimenter gave each subject a standard debriefing at the end of the hour, to minimize any continuing stress and to show that the "victim" had not been injured by the "shocks." When a subject appeared especially stressed, Milgram often moved out from behind the curtains to do an especially thorough job of reassurance and stress reduction. When a subject did something truly unexpected during the experiment - an especially resolute show of resistance, for instance, or a long laughing jag - Milgram would join the experimenter in giving the subject a detailed cross-examination about why he had displayed such behavior. For us as well as for the subjects, the situation quickly became more than an artificially structured experiment. Instead it presented slice after slice of real life, with moral decisions made and unmade every evening.

The Most Prominent Results

As matters turned out, Milgram did not need equipment sensitive enough to measure shock intervals in hundredths of a second. By the end of the second run of 40 subjects, if not before, his main dependent variable had become simply the percentage of subjects who obeyed the experimenter's commands all the way to the end of the shock series, contrasted with the percentage who disobeyed by quitting at any point in the whole long sequence of shock levels. In the first condition, a substantial majority of subjects (26 out of 40, or 65%) obeyed completely. That was the condition with minimal feedback from the learner - a few vigorous kicks on the wall. But wouldn't obedience drop substantially if the teacher could actually hear the learner screaming and demanding to be set free? It didn't. Twenty-five out of 40 were fully obedient in this second condition. Even when

Milgram tried to encourage disobedience by having the learner claim a preexisting heart condition ("It's bothering me now!"), obedience remained at a high level: 26 of 40 subjects again (Milgram, 1974, pp. 56-57). Putting the victim in the same room and near the teacher reduced obedience somewhat, but 40% still obeyed fully. Indeed, even when teachers were ordered to press the hand of the screaming victim down onto a shock plate to complete the electrical circuit, a majority did so at least twice before quitting, and 30% obeyed in this fashion to the end of the shock board (Milgram, 1974, p. 35).

Milgram ran approximately a thousand subjects through various obedience conditions in less than a year. (The National Science Foundation, which financed the research, got its money's worth from two grants totaling about \$60,000.) Each subject was run through the procedure individually, then was subjected to both immediate and follow-up questionnaires of various kinds. Milgram looked at the effects not only of the victim's physical proximity to the subject but of the experimenter's proximity, the amount of group support either for obedience or for defiance, and the learning experiment's apparent institutional backing. He made a variety of interesting findings - enough to fill a book, and more. But the data that carried the greatest impact, on other psychologists and on the general public, came from those first few experimental conditions: two-thirds of a sample of average Americans were willing to shock an innocent victim until the poor man was screaming for his life, and to go on shocking him well after he had lapsed into a perhaps unconscious silence, all at the command of a single experimenter with no apparent means of enforcing his orders.

Reactions to the Research

Once these data appeared in professional psychological journals (after initial resistance from editors), they were rather quickly disseminated through newspaper and magazine stories, editorials, sermons, and other popular media. With few exceptions, the nonprofessional citations of the experiments emphasized their social relevance: Milgram had revealed in ordinary Americans the potential for behavior comparable to that of the Nazis during the European Holocaust. (According to a TV Guide ad for a docudrama with William Shatner as a fictionalized Milgram, the research revealed "A world of evil so terrifying no one dares penetrate its secret. Until now!" [August 21, 1976, p. A-86.]

Psychologists responded in more diverse ways. Authors eager to enliven their introductory and social psychology textbooks soon made the obedience experiments a staple ingredient (see Miller, this issue). Other psychologists seemed to regard Milgram's results as a challenge of one

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sort or another: conceptual, ethical, theoretical, political. The obedience studies were related, historically and procedurally, to earlier studies of social influence, but they did not fit readily into current theoretical models or research trends. Because of their rapidly achieved visibility inside and outside the field, they were soon treated as fair game for elucidation or attack by psychologists with a multitude of orientations.

Ethical Concerns

One type of response to the disturbing results of the obedience studies was to shift attention from the amounts of obedience Milgram obtained to the ethics of putting subjects through such a stressful experience. The first substantial published critique of Milgram's studies focused on the presumed psychic damage wreaked on his subjects by their ordeal (Baumrind, 1964). Milgram was not altogether surprised by such criticism; similar concerns had been expressed by several Yale faculty members during or soon after the experiments, and ethical questions had been raised about the research when Milgram first applied for American Psychological Association membership. But he was disappointed that his critics did not recognize the care he had put into responding to his subjects' high stress levels immediately after their participation, as well as into checking on any lingering effects over time (Milgram, 1964). Milgram was a pioneer in the debriefing procedures that are now a matter of course in psychological experiments on human subjects - debriefing in the sense not only of questioning the subject about his or her perception of the experiment, but of providing the subject with information and encouragement that will counteract any reactions to participation that might damage the subject's self-esteem. As Milgram told me later,

My membership application to APA was held up for one year while they investigated the ethicality of the obedience experiment. In the end, they gave me a clean bill of health and admitted me to membership. Whenever any group has seriously considered the merits and problems of the experiment, they have concluded that it was an ethical experiment. Nonetheless, isolated individuals still feel strongly enough to attack it. (Personal communication, July 3, 1969)

One consequence of those individual attacks was a set of stringent federal regulations that made it virtually impossible ever again to conduct a close replication of the Milgram studies at any U.S. educational or research institution.

Many social scientists who have considered the ethics of the obedience studies in print have taken a neutral position

or have come down on the side of Milgram. But outside the field, a similar perception of appropriate research and debriefing procedures is not widespread. When I participated in a conference on social science research ethics at the Kennedy Institute of Ethics 18 years after the obedience research was completed, several philosophers and professional ethicists devoted a large part of their energies to what struck me as rather crude Milgram bashing. The research scientists at the conference were not so inclined, but they had to work hard to communicate the virtues of a set of studies that had raised important issues about both the bad and the good in human nature (Beauchamp, Faden, Wallace, & Walters, 1982).

Questions of Belief

Among other early commentaries on the research, several psychologists argued that the results were not credible because the subjects did not believe they were actually harming the victim (e.g., Orne & Holland, 1968). Milgram's own data, showing that during the experiment a very high percentage of subjects believed the victim was receiving extremely painful shocks (1974, pp. 171-174), were ignored or dismissed as attempts by the subjects to give Milgram the answers he wanted. Researchers' descriptions of many subjects' visible signs of high stress were also ignored, or were assumed to be evidence merely of the subjects' enthusiastic play acting. Even a filmed record of several actual subjects (Milgram, 1965a), displaying either great stress or extraordinary improvisational acting ability, did not convince psychologists who took this dismissive position. Some critics may have assumed that the four subjects shown at length in the film, plus several others who appeared more briefly, were the most convincingly emotional subjects Milgram could find among his thousand participants. In fact, Milgram chose all of them from the 14 subjects who happened to be "selected in the normal manner for recruitment" during the two days he brought movie cameras to the laboratory (Milgram, 1965c, p. 5).

Theoretical Alternatives

Many social psychologists have accepted the ethical appropriateness of Milgram's procedures and the believability of the experimental context. Even they, however, have often redirected attention away from the specific phenomenon of destructive obedience by subsuming it under a broader theoretical approach or alternative hypothetical constructs.

Milgram was slow to offer a comprehensive theoretical account of his own. His definitions of obedience to authority, from his first to his final writings on the subject, drew upon no theoretical assumptions. Rather, they were

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commonsense or dictionary definitions: "Every power system implies a structure of command and action in response to the command" (Milgram, 1961, p. 2); "If Y follows the command of X we shall say that he has obeyed X; if he fails to carry out the command of X, we shall say that he has disobeyed X" (Milgram, 1965b, p. 58); "[I]t is only the man dwelling in isolation who is not forced to respond, through defiance or submission, to the commands of others" (Milgram, 1974, p. 1). In his grant proposals he referred to "internal restraints" or "internal resistances" that were pitted against the acceptance of authoritative commands, but he did not specify the nature of these internal processes (Milgram, 1961, p. 3; Milgram, 1962a, p. 1). He raised the possibility of predispositional factors and of "highly complex, and possibly, idiosyncratic motive structures" (1962a, p. 17), but in the research itself he directed his efforts mainly toward identifying situational factors that increased or decreased obedience. In his most extensive early discussion of his results (Milgram, 1965b, largely written in 1962), he cited such midlevel hypothetical constructs as "empathic cues," "denial and narrowing of the cognitive field," and a varying "sense of relatedness between his [the subject's] own actions and the consequences of those actions for the victim" (pp. 61-63; his italics).

Though it took Milgram less than a year to run all his subjects and not much longer than that to write several papers on the results, he worked on his book about obedience for over five years. He attributed the slowness of the book's writing in part to his becoming engaged in other sorts of research. But much of his struggle with the book appears to have centered on the difficulty of developing a general theory of obedience. The principal theoretical concepts he advanced in the book, including the agentic state (Milgram, 1974, pp. 133-134) and the evolution of a potential for obedience in humans (pp. 123-125), impressed many readers rather less than the results themselves - a reaction that both frustrated and pleased the data-centric Milgram. Though he had collected demographic information on all participants and had supported my collection of personality data from subsamples of obedient and disobedient subjects (Elms & Milgram, 1965), he gave short shrift to such data in his book, concluding that "It is hard to relate performance to personality because we really do not know very much about how to measure personality" (p. 205).

Others have usefully discussed the interaction of personality and situational variables in the obedience situations (e.g., Blass, 1991). A majority of the alternative explanations, however, have stressed cognitive processes, emphasizing ways in which the subject processed information about the situation that might have justified his obedience or strengthened his resistance. Milgram viewed

such alternative explanations with interest, but took steps to rule out certain of them experimentally. One of the most obvious of these alternatives was the idea that subjects might be so awed by Yale University and so certain of its virtue that they would do anything they were told within those august halls, regardless of any general proclivity toward destructive obedience. Even before this environment-based explanation of his subjects' obedience was first offered in print, Milgram had largely vitiated it by moving the experiments from the awe-inspiring Interaction Laboratory to a rather less impressive basement facility and then to the intentionally unimpressive office of a fly-by-night company in industrial Bridgeport, Connecticut. He got essentially the same results in all three locations. A number of alternative or additional explanations of Milgram's results remain as operable hypotheses, but none has decisively carried the day. Their very diversity ensures that the larger audience for the research will continue to be concerned primarily about the subjects' disturbing behavior rather than about the internal processes that may have produced it.

The Question of Relevance

Finally among ways in which psychologists have responded to Milgram's findings are arguments concerning the social relevance of the experiments. Many psychologists, at least in their textbooks, have embraced his findings as being highly relevant to important social phenomena, including destructive obedience not only in totalitarian states but among American soldiers, Bosnian combatants, and suicidal religious cults. But others (including some who also argued that the research was unethical or experientially unconvincing) have denied any real social relevance. Even if subjects believed they were really shocking the victim, these psychologists say, they knew the situation must not be as bad as it appeared, because somebody would have stopped them if it was. Or the subjects were in a situation where the experimenter accepted responsibility for the effects of their behavior, so their behavior is not really relevant to real-world situations where blame is less readily transferred to another individual. Or some other rationale is advanced, presumably peculiar to the Milgram obedience situation, that somehow does not translate into real-world social dynamics. Milgram rightly dismissed all such explanations that had been advanced up to the time of his final writings, and very likely would have dismissed all subsequent ones, for two simple reasons: Any effective authority figure in the real world always finds ways to justify imposing his or her will on underlings. The underlings who obey authoritative commands in the real world always find rationales for their obedience. In most prominent real-world cases of destructive obedience that have been compared (or discompared) to the Milgram studies, the authorities were

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able to call upon a social rationale for their commands that was at least as strong as or stronger than that available to any psychological experimenter. In addition, they were often able to promise their followers much greater rewards for obedience and punishments for disobedience.

Stanley Milgram's research on obedience tapped into psychological processes that ranked as neither new nor extreme in the history of human behavior. A "crucial issue of our time," perhaps the crucial issue, obedience unfortunately remains. Though Milgram was proud that his studies were "the first efforts to understand this phenomenon in an objective, scientific manner," he did not want them to be the last. This issue of the Journal of Social Issues gives strong evidence that the efforts of other researchers to expand upon his groundbreaking work will continue unabated.

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- Orne, M. T., & Holland, C. C. (1968). On the ecological validity of laboratory deceptions. *International Journal of Psychiatry*, 6, 282-293.
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