Case studies for Discussion

The following descriptions of published studies are presented for analysis and discussion. Ethical issues are present in any psychological investigation. Some situations and procedures, however, pose more serious problems than others. These studies have been selected deliberately to identify various ethical dilemmas faced by investigators in the context of doing psychological research. Therefore, the studies are not to be considered representative of all psychological research, nor should their selection be interpreted to mean that they have been judged unethical.

The sensitivity of psychologists to ethical issues is evidenced by the fact that a number of these published studies contain lengthy discussions by the investigators about the ethical problems raised by their research. Some of the more recent studies were no doubt reviewed by an ethics committee or institutional review board prior to their being carried out. As you read these abstracts of published studies, consider what ethical issues are raised and how the rights and welfare of the subjects are protected. Try to think of similar situations or methodologies that pose ethical dilemmas for an investigator. Decide how you would resolve these issues. Remember, however, that you have an advantage over the researchers and members of the institutional review boards. You know what results were obtained and can determine a risk/benefit ratio “after the fact.” As you make your decisions, try to put yourself in the position of those who must try to anticipate what benefits the research might have.


The impact of affirmative action pressures on employment practices of companies was assessed using two different data collection procedures. In one study, 240 employment managers were sent fake résumés describing work and educational experiences of two racially different applicants. In a second study, another 240 managers from the same population were asked to provide self-reports of what employment action they would take if they had actually received the two different résumés.

In the self-report condition 86 percent of the companies said they would treat the applicants identically. When companies were not aware that they were subjects of a field experiment, less than one-half of the companies were found to treat applicants equally. The authors concluded that the self-report data on affirmative action practices are not likely to reveal the actual employment actions taken in the case of racially different applicants.


*Personal space* is defined as an area with invisible boundaries surrounding an individual and into which others may not come. People seek comfortable interpersonal distances and will move away when others invade their space. A field experiment was conducted to test the hypothesis
that personal space invasions produce arousal as measured by delay of onset and duration of men’s urination. Men using a three-urinal lavatory at a Midwestern university were subjects. According to a previously predetermined schedule of random assignment a confederate either stood at the urinal adjacent to the subject, stood one urinal away, or was absent from the lavatory. An observer with a periscope was concealed in the toilet stall and recorded measures of urination. He did not see the faces of the subjects. Data was gathered on sixty users of the lavatory, all of whom did not know that they were subjects in an experiment. Delay of onset and persistence of urination were inversely related to closeness of another individual in the urinal. For example, urination delay (measured as the time between when a subject unzipped his fly and when urination began) was 4.8 seconds in the confederate absent condition, 6.2 seconds when the confederate was one urinal away, and 8.4 seconds when the confederate was at the adjacent urinal. Results were interpreted as supporting the hypothesis that increased arousal is a result of personal space invasions and this is the probable cause of certain behavioral responses (for example, moving away).


One approach to the treatment of alcoholics is aversion therapy. A noxious unconditioned stimulus is paired with alcohol consumption. At the time of the investigation, previous studies had shown mixed results using an aversion treatment based on a curare-like drug that produces rapid and complete paralysis of the skeletal muscles, although patients remain conscious, there is a temporary suspension of respiration (apnea). Patients’ response to this sudden inability to breathe is generally extreme fear. The subjects were twelve male alcoholics who had been admitted to a state psychiatric center and who had expressed a desire to stop drinking. All were on some form of drug therapy. In each case, the patient exhibited evidence of a psychoneurotic or personality disorder or was classified as exhibiting “chronic brain syndrome.” Patients were informed that they would receive a treatment that would help them stop drinking. They were told that “although frightening, the treatment involved minimal risk and actually was no more dangerous than extraction of a tooth” (p. 14). A physician and nurse assisted on the day of the treatment. Subjects lay down and an intravenous (IV) needle was inserted in their arm. The IV apparatus was hidden behind a screen, and patients were told that the IV contained only harmless salt solution. The paralyzing drug was injected via the IV and coincided with the subject’s drinking a glass of alcohol. After 30 seconds of apnea, a manual resuscitator was used so that the total time during which breathing was interrupted did not last longer than 90 seconds. The subjects believed the sudden cessation of respiration was related to alcohol consumption, and all spontaneously vowed during a postexperimental interview never to drink again. Twelve months later nine of the original twelve were contacted. Only two had stopped drinking. One of these subjects reported that he was extremely anxious concerning anything to do with alcohol and had violent reactions to such substances as mouthwash and hairspray. Although believed that the aversion treatment had stopped his excessive drinking permanently, the subject felt that the cure had left him in worse than his original condition. Possible reasons for the failure of the treatment were discussed and suggestions given for the future research.

Within the homosexual subculture, a tearoom is a public restroom where homosexual encounters occur. During a period between 1965 and 1968, the researcher investigated the nature of homosexual activity in restrooms located in public parks of a large city. In the initial stages of the project the researcher was a participant observer. He observed the role of a “lookout voyeur,” someone who watches for the approach of intruders while simultaneously being permitted to observe the homosexual acts. In his role of “watchqueen,” the researcher was able to observe homosexual activity directly without physically participating. The researcher made field research notes by using a portable tape recorder concealed in his car and by making written observation records when he got back to his office. The researcher also recorded the license numbers of cars of individuals he had observed engaging in homosexual activities. Using the vehicle registration information, he obtained the home addresses of 100 subjects. Observations were then made of their residences. This provided information as to geographic distribution, socioeconomic status (size of house, location) as well as other characteristics (swing sets of bicycles indicated subjects had children). Fifty subjects were personally interviewed in their homes in the guise of conducting a health survey. Responses of these individuals were compared to responses made by a group of fifty control subjects. Interviews were made more than a year after the subjects had been observed in homosexual activity. The researcher had changed his appearance and was not recognized. The list of names identifying these particular individuals was kept in a safety deposit box, and other identifying information was destroyed immediately after the interview was completed. Twelve additional subjects gave their permission for an in-depth interview of their homosexual activities. Identities of all subjects in the study were scrupulously safeguarded. The study provided a comprehensive description of the settings, types of individuals, strategies and tactics governing encounters, and other behaviors associated with homosexual activities. Also included was evidence of blackmailing by law enforcement personnel. In the Foreword to the published study, the director of the research project emphasizes the important knowledge gained and suggests that the results will provide a base for those trying to formulate rational social policies toward homosexual behavior.


The study seeks to identify factors associated with cheating behavior of college students. Subjects were students enrolled in two child psychology classes at a state university. All subjects had take a large battery of tests, including the California Personality Inventory (CPI), the Minnesota Multiphasic Personality Inventory (MMPI), and the Taylor Manifest Anxiety Scale, and had answered a questionnaire asking about such personal characteristics as sex, birth order, religion, and grade-point average. Three situations were provided for students to cheat. Situation 1 was the first examination in the course, an hour-long multiple-choice test. Five observers in the class watched for cheating while the instructor pretended to be inattentive. Students were also allowed to grade their own test following the class period, unaware that the examination had been graded in the interim. Situation 2 was the second examination in the course, an essay test. A week in advance, students had been given a list of five questions and told that two of the questions would be on the exam. Examination booklets were easily available at the university, and, at the time of the test, the booklets distributed by the instructor were unobtrusively marked so that any student substituting a booklet completed outside of class could be detected. In Situation 3 students were given an oral examination administered in the instructor’s office. Part
way through the exam, the instructor was called out of the room. The text from which the
questions were being taken was left in a conspicuous position near the student. Its position was
carefully marked so that the instructor could tell whether the book had been opened while she
was absent from the room. After the data had been collected on cheating behaviors in the three
situations, the class was told the nature of the experiment and those students who cheated were
permitted to take a makeup examination. More than half (59 percent) of the students exhibited
some form of cheating. Approximately 64 percent of those cheating did so in two situations and
24 percent cheated in all three situations. The tendency to cheat was associated with
demographic, intellectual, and personality characteristics of the subjects. Cheaters, relative to
noncheaters, tended to be males and first-borns, to exhibit a set of behaviors that suggest
maternal overprotection, and to be lower in intelligence. Cheaters also reported significantly
higher frequency of church attendance than noncheaters. Characteristics of cheaters also differed
according to the type of situation in which they were found cheating.


Psychological conformity is generally defined as accepting the opinions or judgments of others
in the absence of significant reasons to do so or in the face of evidence to the contrary. A
laboratory experiment was conducted to test the hypothesis that increasing a person’s fear level
will lead to increases in conformity. A total of sixty-four female subjects volunteered for a
psychology experiment and were paid $1.50 per hour for their participation. Subjects were told
that the experiment concerned hearing mechanisms, that subjects in an experimental condition
would receive electric shocks, and that subjects assigned to a control condition would not. An
experimenter dressed in a white coat met each subject and took her to a room littered with
electrical apparatus. The experimenter informed the subject of the particular condition
(experimental or control) that she had been assigned to and informed her of the assignment of
three other women whom the subject believed were also present in the situation. The “other”
women were either in the same condition as the subject or in the other condition. The subject put
on headphones through which she heard instructions by the experimenter and through which she
believed responses of other subjects in the experiment could be heard. Subjects in the
experimental condition heard instructions intended to induce fear of electrical shock. They were
told that physiological modification procedures involving electrical shock were necessary to
evaluate hearing mechanisms. The instructions went on to indicate that the shock would be
painful but the results of the experiment had great potential for alleviating suffering caused by
hearing defects. Subjects were then given an opportunity to rate their feelings of nervousness
about the experiment and to indicate whether they would prefer to wait with other women in the
experiment or to wait alone during a period following the pretest and before the experimental
subjects would be given electroshocks. The conformity test was then administered in the guise of
a pretest of auditory acuity. Subjects were asked to count the number of tape-recorded
metronome clicks that they heard. The subject gave her responses after three other subjects,
working as confederates of the experimenter, had given their responses. The confederates gave
wrong but unanimous judgments on twelve of the eighteen trials. The measure of conformity
was the number of trials on which the subject gave the same wrong response. No subject actually
received electric shock. After the experiment the subjects were told the true purpose of the
experiment, and the experimenter discussed their reactions with them. The fear manipulation
worked, as evidenced by the ratings subjects gave about their nervousness and by the fact that the women threatened with shock wanted to wait with other subjects whom they thought would also be receiving shock. Subject thinking they were to receive shock were more likely to conform to the confederates’ responses than those believing they would not be shocked. Conformity was the highest when subjects were in the shock condition and also believed that the other women were in the same condition. Results supported the hypothesis that increases in the level of fear increase subjects’ degree of conformity and that conformity is highest when the pressure to conform comes from people toward whom the subjects feel affiliative. The author points to possible relationships between his findings and mob behavior in a panicked crowd. People sometimes are led to imitate senseless and maladaptive acts of panicked member of the crowd.


During the early 1960s the researcher conducted a number of experiments designed to investigate the psychological mechanisms underlying obedience to authority. Although there were many variations, the basic methodology was as follows. Two people came to a psychology laboratory supposedly to participate in a verbal learning study. They were told that the study was concerned with the effects of punishment on learning. The individuals drew slips of paper to determine who would be the “teacher” and who would be the “learner.” One person was actually an accomplice of the principal investigators, and the drawing was rigged so that the real subject was always given the role of teacher. The subjects watched as the learner was taken to an adjacent room and strapped into a chair and an electrode attached to his wrist. The subject then heard the experimenter say that the learner would receive an electric shock for every error made while learning a list of word pairs. The teacher was then taken to the laboratory room, which housed an impressive-looking shock generator with thirty lever switches. Each switch was labeled with a voltage designation (ranging from 15 to 450 volts), and next to the switches were verbal labels describing the amount of shock, for example, “Slight Shock,” “Strong Shock,” and “Danger: Severe Shock.” Two switches after the last verbal description are simply marked XXX. The teacher was given a sample shock and told to administer the electric shock to the learner whenever the learner made a mistake. The learner’s responses were communicated via a set of four switches that lit up a number on the top of the shock generator. The teacher was also told to move one lever higher on the shock generator after each wrong response. As the experiment progressed, the learner offered various protests to the shock. These complaints could be heard through the walls of the room and included shouts to the effect that the shocks were becoming painful, and, later, that the learner wanted the experimenter to end the procedure. When the teacher moved the switch at 180 volts, the learner yelled, “I can’t stand it any more” and at 270 volts gave an agonizing scream. At 300 volts the learner yelled, “I will not give any more answers” but continued to scream. After the switch corresponding to 330 volts was pressed, the learner was not heard from anymore. The learner was not actually shocked, and the major dependent variable was the maximum shock that the subject would give in response to the “orders” of the experimenter.

Subjects usually exhibited intense conflict during the task and frequently turned to the experimenter to ask whether they should continue in the face of the learner’s protests. A number of subjects expressed fear they were seriously harming the learner. The experimenter always answered the subject’s inquiries with predetermined responses that varied from “please
continue” to “you have no choice, you must go on.” Even when the learner fell silent, the experimenter told the teacher he had to continue giving shocks. Despite the obvious anguish experienced by the subjects, many followed directions of the experimenter and administered the most extreme shocks possible. When subjects could hear the screams of the learner but not actually see the learner, approximately 60 percent of the subjects gave the maximum shock. In another variation of the experiment, when the learner was present in the room and the teacher was ordered to force the learner’s hand onto the shock plate, 30 percent of the subjects complied despite the very convincing protests of the learner. All subjects were debriefed and at times talked to individually for some length of time. All received a follow-up questionnaire and were sent a summary of the major findings. The number of ordinary people (many subjects were recruited from the local community through advertisements in the newspaper) who would knuckle down to authority and commit blatantly immoral acts was not predicted either by a group of psychiatrists or by people from the same population as the subjects. When thirty-nine psychiatrists were given a description of the experiment and polled as to what they believed would be the maximum shock subjects would administer, none predicted that the subjects would give the most extreme shock. The mean maximum shock predicted was 8.20, whereas in the actual experiment the mean maximum shock was 24.53 (out of the thirty levers) when the subject could be heard but not seen. The report contains a lengthy description of the possible mechanisms underlying these responses to authority and extensive discussions of the ethics of the experiments. The major justification for continuing the experiment when the initial (an unexpected) responses of subjects were obtained was that no subjects were apparently seriously injured by the experiment and that an overwhelming majority (84 percent) said they were glad to have been in the experiment. Many subjects (74 percent) said in a follow-up questionnaire that they had gained something of personal value from the experience. The investigator cooperated with a follow-up study in which an impartial medical examiner interviewed forty of the subjects. No evidence of traumatic reactions to the experiment was found.


The amygdala is a subcortical structure of the brain associated with the expression of emotion and aggression. Total destruction of the amygdala in monkeys generally leaves them unnaturally tame, exhibiting a lack of emotional responsiveness, showing excessive exploratory behavior, deficient in certain learning tasks, and (occasionally) hypersexual. In the present study, sixteen male rhesus monkeys were operated on, and either a portion of the amygdala or the total amygdala was destroyed. The operations were carried out with the monkeys under anesthesia and in sterile conditions. Lesions were produced by lowering an electrode through a hole cut in the skull and then briefly raising the temperature of the electrode tip in the target area. Some of the monkeys were operated on twice. One group of four monkeys was originally operated on but did not receive amygdala lesions. These animals served as a control group in stage one of the testing procedure. Three of the control monkeys were operated on again and the entire amygdala was removed. Four other monkeys also received a second operation in order to provide a control for the monkeys experiencing total destruction of the amygdala.

The goal of the study was to compare the effects of selective subtotal lesions of the amygdala with the effects of total lesions. In this way the researchers hoped to be able to
discover whether certain areas of the amygdala mediated specific behavioral responses seen when the entire amygdala was destroyed. Various experiments were carried out to test the monkeys’ food preferences, exploratory tendencies, emotional responsiveness, and willingness to approach a natural fear situation (an experimenter unknown to the animals or a plastic mask of a human face) as well as to examine learning of visual discriminations. Testing of emotional responsiveness involved observing the animals’ reactions to various frightening stimuli presented to them in the testing apparatus. These stimuli were toys (for example, a snake or bear) or the experimenter staring at them while wearing a surgical cap and gown as well as a face mask. After testing, all the animals were sacrificed by intracardial perfusion using formolsaline. Brains of the monkeys were prepared for histological examination so as to reveal the exact position of the lesions.

Results of the behavioral testing showed that only monkeys with total or near-total destruction of the amygdala showed the typical amygdalectomy syndrome. Lesions in specific areas of the amygdala failed to fractionate the syndrome. Only mild behavioral changes were observed in these animals, compared to drastic changes in emotional responsiveness and deficits in learning observed in the animals with total lesions. The results are seen as having particular relevance to psychosurgery with humans, because the procedure in the present experiment was similar to that used with human patients who are operated on in an attempt to control hyperaggressive and assaultive behavior. Psychosurgery is said to “normalize” the individuals, to have effects that are restricted to patient’s aggressive behavior, and not to involve global changes in the patient’s emotional responsiveness. Results of the present experiment apparently showed that not only aggression may be affected but also other aspects of emotional, motivational, and cognitive functioning. In fact, one monkey appeared to show an increase in aggression following the lesioning of the amygdala. In addition to the serious implications raised for psychosurgery with humans, the results contributed further to the knowledge of the function of the amygdala in mediating behavior.


Previous experiments had revealed a striking behavioral abnormality referred to as “learned helplessness.” Specifically, dogs who have been given inescapable shock while strapped in a harness failed to behave normally when later given escape/avoidance training. In this type of training an animal is first placed on one side of a shuttlebox apparatus, where it is shocked. The naïve dog generally runs frantically about, defecating, urinating, and howling until it manages to cross a barrier to the other side where it is not shocked. On successive trials, normal animals generally move more quickly to the other side when placed in the shock side. However, animals that experienced inescapable shock prior to escape/avoidance training often stop running and fail to escape the shock. Rather, they passively “accept” the shock and hence experience as much as 50 seconds of severe pulsating electric shock. The reaction was termed learned helplessness, because it was hypothesized to result from the animal learning in the first stage of the procedure (during inescapable shock) that its behavior was independent of the presentation of electric shock. The maladaptive response is seen as being similar to behavior disorders in humans in which individuals passively accept aversive consequences without attempting to escape. Such behavior was observed in the Nazi concentration camps where some prisoners were described as
“walking corpses” who had apparently given up all hope and who felt that there was nothing whatsoever that they could do to change their environment.

In the present experiment the researchers investigated possible methods of alleviating learned helplessness in dogs. Animals that had previously failed to escape shock as result of receiving prior inescapable shock served as subjects. Four mongrel dogs had been placed in a rubberized cloth hammock, constructed to allow their legs to hang beneath them. Shock was delivered through electrodes taped to the dogs’ hind feet. Animals had received sixty-four trials of inescapable shock. Twenty-four hours later they had been tested for escape/avoidance learning and all four dogs had failed to escape after ten trials, having experienced 500 seconds of shock during these trials. This failure was to escape was also observed 7 days later. Subsequently a procedure of behavior modification was used to attempt to remove the learned helplessness reaction. Treatment consisted of first calling to the dogs, with no barrier present in the escape/avoidance procedure and, for those dogs not responding to this treatment, physically pulling the animals to the safe side in the shuttle apparatus. One dog responded to the first stage of treatment; the remaining dogs began to show escape/avoidance after the “directive therapy.” All animals were then given further testing with the barrier gradually being raised to shoulder height. The procedures were viewed as being entirely successful in breaking up the maladaptive failure of the dogs to escape and to avoid shock. Results were considered to be in line with a theoretical analysis provided for this phenomenon as well as to shed light on possible therapy procedures for humans who have experienced traumatic events and who then show passive responding to future aversive events. It is suggested that pathological behavior resulting from inescapable trauma may be alleviated by exposing individuals to situations wherein their behavior can be seen as instrumental in obtaining successful avoidance of aversive events.


The usefulness of pain in modifying the behavior of two 5-year-old identical twins diagnosed as childhood schizophrenics were explored in this study. The twins has shown no improvement with conventional psychiatric therapy and were largely unresponsive to daily interpersonal events. They showed no social responsiveness, nor did they speak or play appropriately with objects. They showed considerable self-stimulatory behavior (rocking, repeated moving of hands and arms) and a fair amount of tantrum behavior (screaming, throwing objects, and hitting themselves). Several studies were conducted using electric shock to modify the social responsiveness of the twins’ behavior. It was noted that, at the time the studies began, the future of the children was certain to be institutionalization. They had already been under observation and treatment in a residential setting. In one study the children were placed in a room the floor of which had been covered with metal tape and from which shock can be delivered. The shock level was such that the three experimenters standing barefooted on the floor considered it painful and frightening. When the children were placed in the room, they were shocked immediately whenever pathological behaviors were observed. Shock was turned off when the children approached an adult who was present. In this way the adult represented a “safe” object in an otherwise painful environment. In a second study, the children were shocked by means of a portable apparatus strapped to their backs that could be signaled electronically to deliver shock via electrodes strapped to their buttocks. In this study the behavior to be modified was a refusal to hug and kiss the experimenter. Children were shocked when they failed to respond to the
experimenter’s request to “hug me” or “kiss me.” In a third study the children were trained to press a lever to obtain M & Ms candy and simultaneously to see the experimenter’s face. The children were then trained to come to the experimenter to avoid shock. Finally, the reinforcing power of the experimenter was tested by phasing out the candy reward and letting the children see the experimenter’s face only as a consequence of lever pressing. The studies compared behavior following shock with control or baseline periods of no shock and also tested for generalization of effects to other situations. Results showed that shock was effective in increasing the children’s approach to adults and eliminating certain pathological behaviors. It also affected other social behaviors exhibited toward adults. Generalization of the shock procedure was observed, although not in all instances, and some effects were shortlived. The children actually appeared happier during successful shock therapy and did not show fearful behaviors, except at the onset of training. The researchers suggest that the successfulness of shock in modifying behavior will not come in the suppression of specific responses but in the establishment of social reinforcers through shock reduction. The question of the necessity of using electric shock was raised. However, it was pointed out that previous attempts to modify social behaviors through the use of food delivery had been unsuccessful and were both time-consuming and laborious compared to the use of electric shock.