

Ethics Knockout

<https://www.printyourbrackets.com/pdfbrackets/16-team-single.pdf>

#1: The Stanford Prison Experiment

Philip Zimbardo was curious about why prisons are such violent places. Is it because of the character of their inhabitants, or is it due to the corrosive effect of the power structure of the prisons themselves?

To find out, Zimbardo created a mock prison in the basement of the Stanford psychology department. He recruited clean-cut young men as volunteers — none had criminal records and all rated "normal" on psychological tests — and he randomly assigned half of them to play the role of prisoners and the other half to play guards. His plan was that he would step back for two weeks and observe how these model citizens interacted with each other in their new roles.

What happened next has become the stuff of legend.

Social conditions in the mock prison deteriorated with stunning rapidity. On the first night the prisoners staged a revolt, and the guards, feeling threatened by the insubordination of the prisoners, cracked down hard. They began devising creative ways to discipline the prisoners, using methods such as random strip-searches, curtailed bathroom privileges, verbal abuse, sleep deprivation, and the withholding of food.

Under this pressure, prisoners began to crack. The first one left after only thirty-six hours, screaming that he felt like he was "burning up inside." Within six days, four more prisoners had followed his lead, one of whom had broken out in a full-body stress-related rash. It was clear that for everyone involved the new roles had quickly become more than just a game.

Even Zimbardo himself felt seduced by the corrosive psychology of the situation. He began entertaining paranoid fears that his prisoners were planning a break-out, and he tried to contact the real police for help. Luckily, at this point Zimbardo realized things had gone too far. Only six days had passed, but already the happy college kids who had begun the experiment had transformed into sullen prisoners and sadistic guards.

Zimbardo called a meeting the next morning and told everyone they could go home. The remaining prisoners were relieved, but tellingly, the guards were upset. They had been quite enjoying their new-found power and had no desire to give it up.

#2: Stanley Milgram - Obedience

Imagine that you've volunteered for an experiment, but when you show up at the lab you discover the researcher wants you to murder an innocent person. You protest, but the researcher firmly states, "The experiment requires that you do it." Would you acquiesce and kill the person?

When asked what they would do in such a situation, almost everyone replies that of course they would refuse to commit murder. But Stanley Milgram's famous obedience experiment, conducted at Yale University in the early 1960s, revealed that this optimistic belief is wrong. If the request is presented in the right way, almost all of us quite obediently become killers.

Milgram told subjects they were participating in an experiment to determine the effect of punishment on learning. One volunteer (who was, in reality, an actor in cahoots with Milgram) would attempt to memorize a series of word pairs. The other volunteer (the real subject) would read out the word pairs and give the learner an electric shock every time he got an answer wrong. The shocks would increase in intensity by fifteen volts with each wrong answer.

The experiment began. The learner started getting some wrong answers, and pretty soon the shocks had reached 120 volts. At this point the learner started crying out, "Hey, this really hurts." At 150 volts the learner screamed in pain and demanded to be let out. Confused, the volunteers turned around and asked the researcher what they should do. He always calmly replied, "The experiment requires that you continue."

Milgram had no interest in the effect of punishment on learning. What he really wanted to see was how long people would keep pressing the shock button before they refused to participate any further. Would they remain obedient to the authority of the researcher up to the point of killing someone?

To Milgram's surprise, even though volunteers could plainly hear the agonized cries of the learner echoing through the walls of the lab from the neighboring room, two-thirds of them continued to press the shock button all the way up to the end of scale, 450 volts, by which time the learner had fallen into an eerie silence, apparently dead. Milgram's subjects sweated and shook, and some laughed hysterically, but they kept pressing the button. Even more disturbingly, when volunteers could neither see nor hear feedback from the learner, compliance with the order to give ever greater shocks was almost 100%.

Milgram later commented, "I would say, on the basis of having observed a thousand people in the experiment and having my own intuition shaped and informed by these experiments, that if a system of death camps were set up in the United States of the sort we had seen in Nazi Germany, one would be able to find sufficient personnel for those camps in any medium-sized American town."

#3: Monster Study

The 1939 experiment conducted in Davenport, Iowa on a group of kids at an orphanage that came to be known as the Monster Study, wasn't conducted by a psychologist. Dr. Wendell Johnson was a speech pathologist who wanted to get to the bottom of the underlying cause of stuttering. Johnson didn't subscribe to the prevailing belief that stuttering was an inborn (and thus uncorrectable) trait. Admirable enough; he wanted to help.

Johnson requisitioned 22 orphans and split them into two groups — stutterers and non stutterers. Not all of the kids (only half) in the stuttering group actually had stutters. The non stutterers received praise for their normal speech patterns, while the stuttering group received negative reinforcement. They were constantly put on edge through reminders to avoid stuttering.

The kids who didn't have stutters in the stuttering group sure did by the time the experiment was concluded. Three of the five kids who'd actually had stutters were worse than before. Having established that a negative focus on stuttering makes the condition worse, and having proven it's a developmental rather than innate trait, Johnson put his clipboard beneath his arm and drove off.

In his defense, Johnson's work helped countless stutterers who came after the experiment. There was one slight problem, though. Despite efforts to reverse the process, the kids who developed stutters couldn't shake them. So they had that going for them: no parents and a nice little lifelong struggle courtesy of Dr. Johnson.

#4: Robber's Cave

Muzafer Sherif is a famous social psychologist important to the psychological understanding of groups and its members.

His main contribution is known as Realistic Conflict Theory, and accounts for group conflict, negative prejudices, and stereotypes as being the result of competition between groups for desired resources. Sherif validated his theory in one his most famous experiments, "The Robber's Cave"

Sherif argued that intergroup conflict (i.e. conflict between groups) occurs when two groups are in competition for limited resources. This theory is supported by evidence from a famous study investigating group conflict: The Robbers Cave (Sherif, 1954, 1958, 1961).

The field experiment involved two groups of twelve-year-old boys at Robber's Cave State Park, Oklahoma, America.

The twenty-two boys in the study were unknown to each other and all from white middle-class backgrounds. They all shared a Protestant, two-parent background. None of the boys knew each other prior to the study. The boys were randomly assigned to one of two groups, although neither was aware of the other's existence. They were then, as individual groups, picked up by bus on successive days in the summer of 1954 and transported to a 200 acre Boy Scouts of America camp in the Robbers Cave State Park in Oklahoma.

At the camp the groups were kept separate from each other and were encouraged to bond as two individual groups through the pursuit of common goals that required co-operative discussion, planning and execution. During this first phase, the groups did not know of the other group's existence. The boys developed an attachment to their groups throughout the first week of the camp, quickly establishing their own cultures and group norms, by doing various activities together like hiking, swimming, etc. The boys chose names for their groups, The Eagles and The Rattlers, and stenciled them onto shirts and flags.

Sherif now arranged the 'competition stage' where friction between the groups was to occur over the next 4-6 days. In this phase it was intended to bring the two groups into competition with each other in conditions that would create frustration between them. A series of competitive activities (e.g. baseball, tug-of-war etc.) were arranged with a trophy being awarded on the basis of accumulated team score. There were also individual prizes for the winning group such as a medal and a multi-bladed pocket knife with no consolation prizes being given to the "losers."

The Rattlers' reaction to the informal announcement of a series of contests was absolute confidence in their victory! They spent the day talking about the contests and making improvements on the ball field, which they took over as their own to such an extent that they spoke of putting a "Keep Off" sign there!

They ended up putting their Rattler flag on the pitch. At this time, several Rattlers made threatening remarks about what they would do if anybody from The Eagles bothered their flag.

Situations were also devised whereby one group gained at the expense of the other. For example, one group was delayed getting to a picnic and when they arrived the other group had eaten their food.

At first, this prejudice was only verbally expressed, such as taunting or name-calling. As the competition wore on, this expression took a more direct route. The Eagles burned the Rattler's flag. Then the next day, the Rattler's ransacked The Eagle's cabin, overturned beds, and stole private property. The groups became so aggressive with each other that the researchers had to physically separate them.

During the subsequent two-day cooling off period, the boys listed features of the two groups. The boys tended to characterize their own in-group in very favorable terms, and the other out-group in very unfavorable terms.

Keep in mind that the participants in this study were well-adjusted boys, not street gang members. This study clearly shows that conflict between groups can trigger prejudice attitudes and discriminatory behavior. This experiment confirmed Sherif's realistic conflict theory.

#5: Learned Helplessness

The basic theory behind Martin Seligman's experiment was that repeated exposure to an unpleasant, inescapable situation can result in the mistaken feeling that other events are beyond one's control. To test the proposition, Seligman designed a two-part experiment. The subjects were 24 dogs divided into three groups of 8 dogs each. The "unpleasant situation" his subjects were exposed to was a mild electrical shock.

The first part of the study involved two of the three groups. It consisted of placing a pair of dogs, one from each group, into a harness. For each harnessed pair, the dog from one group could easily escape the shock by moving its head from side to side, while the dog from the other group could not escape the shock no matter what it did. (The harness was rigged so that the dog's shock ended when the other dog figured out how to stop the shock; that way, both the dogs received the same amount of shock time.)

The second part of the study included the third group, which was a control group. Seligman administered shocks to all the dogs, one at a time, in a box that was set up so that the dog could jump over a partition and avoid the shock. For each of the dogs, Seligman recorded whether it learned to escape the shock and, if so, how long it took to learn the behavior.

Seligman reasoned that if his theory was correct, then the dogs that could not escape the shock in the study's first part would be far less likely than the dogs from the other two groups to learn how to escape the avoidable shock. Seligman's statistical analysis supported that hypothesis. Between 70 percent and 80 percent of the "no-escape" dogs from the first part of the experiment failed to escape

the chock in the second part when they could have done so. Meanwhile, almost all the dogs in the other two groups – both the “escape dogs” in the first part and the third control group- escaped quickly and easily.

The results of this experiment led Seligman and others to argue that learned helplessness is one cause of mental illness. This conclusion can have a practical application in treating the depression and anxiety some people develop after natural disasters and other traumatic events beyond their control.

#6: Elephants on Acid

What happens if you give an elephant LSD? On Friday August 3, 1962, a group of Oklahoma City researchers decided to find out.

Warren Thomas, Director of the City Zoo, fired a cartridge-syringe containing 297 milligrams of LSD into Tusko the Elephant's rump. With Thomas were two scientific colleagues from the University of Oklahoma School of Medicine, Louis Jolyon West and Chester M. Pierce.

297 milligrams is a lot of LSD — about 3000 times the level of a typical human dose. In fact, it remains the largest dose of LSD ever given to a living creature. The researchers figured that, if they were going to give an elephant LSD, they better not give him too little.

Thomas, West, and Pierce later explained that the experiment was designed to find out if LSD would induce musth in an elephant — musth being a kind of temporary madness male elephants sometimes experience during which they become highly aggressive and secrete a sticky fluid from their temporal glands. But one suspects a small element of ghoulish curiosity might also have been involved.

Whatever the reason for the experiment, it almost immediately went awry. Tusko reacted to the shot as if a bee had stung him. He trumpeted around his pen for a few minutes, and then keeled over on his side. Horrified, the researchers tried to revive him, but about an hour later he was dead. The three scientists sheepishly concluded that, "It appears that the elephant is highly sensitive to the effects of LSD."

In the years that followed controversy lingered over whether it was the LSD that killed Tusko, or the drugs used to revive him. So twenty years later, Ronald Siegel of UCLA decided to settle the debate by giving two elephants a dose similar to what Tusko received. Reportedly he had to sign an agreement promising to replace the animals in the event of their deaths.

Instead of injecting the elephants with LSD, Siegel mixed the drug into their water, and when it was administered in this way, the elephants not only survived but didn't seem too upset at all. They acted sluggish, rocked back and forth, and made some strange vocalizations such as chirping and squeaking, but within a few hours they were back to normal. However, Siegel noted that the dosage Tusko received may have exceeded some threshold of toxicity, so he couldn't rule out that LSD was the cause of his death. The controversy continues.

#7: David Reimer

This is the story of David Reimer, a Canadian man who was the subject of a strange and ultimately tragic medical experiment conducted by Dr. John Money.

David was born under the name Bruce in 1965 along with his identical twin brother, Brian. At the age of 6 months, a botched circumcision resulted in Bruce's penis being amputated. The parents, concerned about their son's ability to lead a normal and happy life, took Bruce to Dr. John Money of Johns Hopkins University, a renowned psychologist in the field of sexual development and gender identity.

Money was a leading proponent of the theory of gender neutrality, now canonized in academic dogma, but still in its infancy in 1967.

The theory holds that gender identity is created as a result of social learning in early childhood rather than by genetics or biology. A somewhat extreme stance on the 'nature vs. nurture' debate, it claims that biology plays a trivial role, if any at all, in the development of gender identity. He is also credited with coining the terms 'gender identity' and 'gender role.'

To Money, the situation must have represented a rare and golden opportunity. Bruce and his brother Brian, as twins, shared the same genome and the same home environment, allowing Money to isolate the variable of whether a child was raised as a boy or girl in his experiment. Money persuaded Bruce's parents that surgically reassigning his sex and raising him as a girl was in the child's best interest.

Parental consent created a loophole that allowed Money to conduct an experiment on a human infant that would otherwise have been illegal. At 22 months, the remainder of the infant's genitals was surgically removed at Dr. Money's orders. Bruce was renamed Brenda, and his biological gender was not revealed to him until the age of 14.

The experiment – known as the 'John/Joan' case – was lauded as a great success among scientists, doctors, and gender feminists throughout the 1970s, and proof of the theory of gender neutrality. Gender reassignment for infants became standard medical practice, and thousands were later subjected to similar procedures.

However, as the twins grew into adolescence, problems began to emerge. Brenda bitterly resented being forced to wear dresses and told to play with dolls rather than engaging in games of army, cops and robbers, and fort building with her twin brother and his friends. She insisted on standing up to urinate through the hole surgeons had created on the front of her abdomen, and showed little interest in socializing with girls.

Bullied and ostracized by her peers, both male and female, she became deeply depressed. She found the visits to Dr. Money in Baltimore traumatic rather than therapeutic. When Money began pressuring the family to have a vagina surgically constructed for Brenda, she threatened to commit suicide, and the parents discontinued therapy.

In 1980, Brenda's father revealed her biological gender to her. Brenda reportedly had only one question in response: "What was my name?" Shortly after, Brenda assumed a male identity and took the name David. By 1987, at the age of 22, David had reversed the gender reassignment through

phalloplasty operations, hormone therapy, and a double mastectomy. In 1990 he married a woman, Jane Fontaine, and adopted her three children.

The case became of public interest in the 1990s, and numerous articles, documentaries, and interviews with David began to create questions about Money's initial conclusions. In 1997, John Colapinto published the book *As Nature Made Him: The Boy who was Raised as a Girl*, an extensive re-evaluation of the case. David told Colapinto that, despite surgery and hormone therapy, he had never felt like a girl, and did not identify as a girl when he was a child. Money blamed right-wing media bias for the reporting of the failure of the experiment. Groups advocating for the rights of intersex people (people with rare medical conditions that leave them without a clear biological gender) have also sharply criticized Money's approach.

David's twin brother, Brian, had developed schizophrenia, and died from an intentional overdose of antidepressants in 2002. Shortly afterwards, David lost his job and his wife requested a separation. On May 2, 2004, David Reimer killed himself. (<https://beinglibertarian.com/gender-reality-strange-case-david-reimer/>)

#8: MK Ultra

MK-Ultra was a top-secret CIA project in which the agency conducted hundreds of clandestine experiments—sometimes on unwitting U.S. citizens—to assess the potential use of LSD and other drugs for mind control, information gathering and psychological torture. Though Project MK-Ultra lasted from 1953 until about 1973, details of the illicit program didn't become public until 1975, during a congressional investigation into widespread illegal CIA activities within the United States and around the world.

In the 1950s and 1960s—the height of the Cold War—the United States government feared that Soviet, Chinese and North Korean agents were using mind control to brainwash U.S. prisoners of war in Korea. In response, Allan Dulles, director of the Central Intelligence Agency (CIA), approved Project MK-Ultra in 1953. The covert operation aimed to develop techniques that could be used against Soviet bloc enemies to control human behavior with drugs and other psychological manipulators.

The program involved more than 150 human experiments involving psychedelic drugs, paralytics and electroshock therapy. Sometimes the test subjects knew they were participating in a study—but at other times, they had no idea, even when the hallucinogens started taking effect. Many of the tests were conducted at universities, hospitals or prisons in the United States and Canada. Most of these took place between 1953 and 1964, but it's not clear how many people were involved in the tests—

the agency kept notoriously poor records and destroyed most MK-Ultra documents when the program was officially halted in 1973.

The CIA began to experiment with LSD (lysergic acid diethylamide) under the direction of agency chemist and poison expert Sidney Gottlieb. He believed the agency could harness the drug's mind-altering properties for brainwashing or psychological torture.

Under the auspices of Project MK-Ultra, the CIA began to fund studies at Columbia University, Stanford University and other colleges on the effects of the drug. After a series of tests, the drug was deemed too unpredictable for use in counterintelligence.

#9: Brown Eyed vs. Blue Eyed

Jane Elliott was not a psychologist, but she developed one of the most famously controversial exercises in 1968 by dividing students into a blue-eyed group and a brown-eyed group. Elliott was an elementary school teacher in Iowa, who was trying to give her students hands-on experience with discrimination the day after Martin Luther King Jr. was shot, but this exercise still has significance to psychology today. The famous exercise even transformed Elliott's career into one centered around diversity training.

After dividing the class into groups, Elliott would cite phony scientific research claiming that one group was superior to the other. Throughout the day, the group would be treated as such. Elliott learned that it only took a day for the "superior" group to turn crueler and the "inferior" group to become more insecure. The blue eyed and brown eyed groups then switched so that all students endured the same prejudices.

#10: Rats!

In 1924 Carney Landis, a graduate student in psychology at the University of Minnesota, designed an experiment to study whether emotions evoke characteristic facial expressions. For instance, is there one expression everyone uses to convey shock, and another commonly used to display disgust?

Most of Landis's subjects were fellow graduate students. He brought them into his lab and painted lines on their faces so that he could more easily see the movement of their muscles. He then exposed them to a variety of stimuli designed to provoke a strong psychological reaction. As they reacted, he snapped pictures of their faces. He made them smell ammonia, look at pornographic pictures, and reach their hand into a bucket containing slimy frogs. But the climax of the experiment arrived when he carried out a live white rat on a tray and asked them to decapitate it.

Most people initially resisted his request, but eventually two-thirds did as he ordered. Landis noted that most of them performed the task quite clumsily: "The effort and attempt to hurry usually resulted in a rather awkward and prolonged job of decapitation." For the one-third that refused, Landis eventually picked up the knife and decapitated the rat for them.

Landis's experiment presented a stunning display of the willingness of people to obey the demands of experimenters, no matter how bizarre those demands might be. It anticipated the results of Milgram's obedience experiment by almost forty years. However, Landis never realized that the compliance of his subjects was far more interesting than their facial expressions. Landis remained single-mindedly focused on his initial research topic, even though he never was able to match up emotions and expressions. It turns out that people use a wide variety of expressions to convey the same emotion — even an emotion such as disgust at having to decapitate a rat.

#11: Little Albert

John B. Watson, the experiment's main author, sought to find out if he could teach a human infant to fear things that the child had previously viewed as benign. His subject was a baby boy known as "Little Albert." Watson began by identifying several things that did not scare Baby Albert. These neutral stimuli (so called because they do not provoke a reaction) included a white rat, a white rabbit, a fake white beard, and white cotton. Albert expressed interest in these objects and even reached for them. Why they were similarly white and somewhat furry will become clear later.

The core of the experiment involved setting the baby next to one of the neutral stimuli, the rat, and then making a loud noise, which is known to cause instinctive fear in humans. Watson chose banging a metal bar with a hammer behind the baby. That noise is an example of an unconditioned stimulus, one for which the reaction it causes, or stimulates, does not need to be learned. After repeating this step a total of seven times over two separate sessions, Watson then moved to the experiment's next step, setting Albert next to the rat without the noise.

The baby reacted just as Watson had expected. Although there was no loud noise, Albert immediately recoiled in fear of the rat even though at the start of the experiment he had shown no such fear. Thus, Watson had demonstrated that he could teach, or condition, a human to have a particular emotions response – in this case, fear- to a particular thing or stimulus – in this case, the rat.

Watson followed up this part of the experiment by trying to transfer the newly taught fear to another object that at the experiment's start had not scared the baby. Sure enough, when a white rabbit

was placed next to Albert, he also reacted with fear. This transfer of a conditioned response to a larger set of stimuli is called generalization.

Watson's basic insight – that even emotions can be learned- has held up over time. Subsequent experiments, however, have shown that conditioning can be lost over time through a process called extinction. Watson did not use extinction to rid Little Albert of his phobia. The boy died at the age of six due to an unrelated disease.

#12: That's Shocking

Aversion therapy is used when there are stimulus situations and associated behavior patterns that are attractive to the client, but which the therapist and the client both regard as undesirable.

Aversion therapy involves associating such stimuli and behavior with a very unpleasant unconditioned stimulus, such as an electric shock.

The client thus learns to associate the undesirable behavior with the electric shock, and a link is formed between the undesirable behavior and the reflex response to an electric shock.

In the case of alcoholism, what is often done is to require the client to take a sip of alcohol while under the effect of a nausea-inducing drug. Sipping the drink is followed almost at once by vomiting. In future the smell of alcohol produces a memory of vomiting and should stop the patient wanting a drink.

More controversially, aversion therapy has been used to "cure" homosexuals by electrocuting them if they become aroused to specific stimuli.

For example, consider the painful electric shock therapy of gay students as part of a 1976 psychology experiment to literally straighten them out. The patients were students who didn't want to be gay.

BYU officials say similar studies were conducted at other universities at the time, and the experiments have not been conducted since. Still, the shock treatments and attempts to "cure" homosexuals are worth attention as part of a continuing dialogue about treatment of gays by the Church of Jesus Christ of Latter-day Saints.

More than three decades later, the experience continues to haunt John Cameron. Cameron, 58, is head of acting in the drama department at University of Iowa and was a patient in the 1976 BYU study. He was raised a devout Mormon but left the church 30 years ago. He is still gay.

Before the therapy, he and 16 other men who wanted to be straight signed papers informing them that damage to tissue or organs may occur, that they would be looking at sensitive materials (pornographic photos) that may be contrary to their values, and that BYU would be released from responsibility for any damage. Something similar to a blood-pressure cuff, called a "plethysmographic measure," was attached to each man's genitalia. If they became aroused by gay photos, their bodies were shocked by electrodes.

#13: Monkey Business

How does one study an emotion as mysterious as love? Harry Harlow set out to do just that—study the kind of love that binds infants to their mothers. Harlow used rhesus monkeys, which are biologically similar to humans, in his studies. The infant monkeys in his lab were raised by humans and protected from disease and dangers more effectively than they would have been in the wild by their mothers. He noticed that infant monkeys became very attached to the cloth pads that lined the bottoms of their cages. In fact, if the cloth pad was removed from the cage, the monkey's health declined. When the cloth was restored, the monkey improved. Harlow wondered if these pads provided some comfort that the baby monkeys needed as much as food or water.

Harlow built two types of surrogate, or stand-in mothers for the infant monkeys. Both models dispensed milk and provided heat. The first model was made of smooth wood covered with sponge rubber and soft cloth. The second was made of wire mesh. Eight infant rhesus monkeys were placed in a cage with access to both models. However, half the monkeys received milk from the cloth-covered surrogate, while the other half got milk from the wire-mesh surrogate. To learn more, at times Harlow placed an object that cause a fearful reaction (in this case, a wind-up toy bear) into the cages.

No matter which model provided milk, the infant monkeys strongly preferred to spend time with the cloth-covered surrogate. Monkeys who received milk from the wire-mesh surrogate still spent most of their time with the cloth-covered "mother." When the scary bear was in the cage, all the monkeys rushed to the cloth-covered surrogate for comfort. Harlow also discovered that when a cloth-covered surrogate was in the cage, the infants were more willing to play with new objects placed in the cage. He concluded that the comfort the monkeys received from the soft cloth fulfilled some need. It

provided them with a sense of security in the presence of danger and the confidence to explore their environment.

Harlow's experiment has implications not just for parents but for all people who care for children. It proved that physical contact with other people is important in all childcare settings, including the home, daycare centers, hospitals, and orphanages.

#14: Tony LaMadrid

Tony LaMadrid was a man with schizophrenia who was a participant/patient in an experiment conducted by the University of California (13). This experiment involved taking schizophrenic patients off of medications, in order to gain "information about the medication, its effects on [the patients], on others and on the way the brain works" (14). The experiment did vaguely list the potential negative side effects of the removal of medication, saying that the patient's condition may "improve, worsen or remain unchanged," though the exact nature of a potential relapse was unspecified (14). The results were quite disastrous and 90% of patients experienced very severe relapses over the course of the study (13). As many patients resented having to be on medication, often lied about how the experiment was affecting them to doctors. And so, experimenters never reinstated the medication, though did not delve slightly deeper into the lives of the victims to find out what was truly happening (14). Finally, after 6 years of the experiment, the patient Tony LaMadrid committed suicide by jumping off of a building due to this experiment (13). (<http://unethicalexperiments.weebly.com/>)

#15: Bad Blood

In the fall of 1932, the fliers began appearing around Macon County, Ala., promising "colored people" special treatment for "bad blood." "Free Blood Test; Free Treatment, By County Health Department and Government Doctors," the black and white signs said. "YOU MAY FEEL WELL AND STILL HAVE BAD BLOOD. COME AND BRING ALL YOUR FAMILY." Hundreds of men — all black and many of them poor — signed up. Some of the men thought they were being treated for rheumatism or bad stomachs. They were promised free meals, free physicals and free burial insurance.

What the signs never told them was they would become part of the "Tuskegee Study of Untreated Syphilis in the Negro Male," a secret experiment conducted by the U.S. Public Health Service to study the progression of the deadly venereal disease — without treatment.

The study recruited 600 black men, of which 399 were diagnosed with syphilis and 201 were a control group without the disease. The researchers never obtained informed consent from the men and never told the men with syphilis that they were not being treated but were simply being watched until they died and their bodies examined for ravages of the disease.

Initially, when the study began, treatment for syphilis was not effective, often dangerous and fatal. But even after penicillin was discovered and used as a treatment for the disease, the men in the Tuskegee study were not offered the antibiotic.

Although originally projected to last six months, the study extended for 40 years. “Local physicians asked to assist with study and not to treat men,” the Centers for Disease Control reported in a timeline of the experiment. “Decision was made to follow the men until death.”

Eunice Rivers, a local nurse, was recruited by doctors to serve as a recruiter and conduit between researchers and the men. Nurse Rivers, as she became known, kept records of the men and drove them to government doctors when they visited the community. She took them to doctors’ appointments in “a shiny station wagon with the government emblem on the front door, according to “Bad Blood.” On one occasion, she followed a man to a private doctor to make sure he did not receive treatment.

In 1945, according to the CDC timeline, penicillin was “accepted as treatment of choice for syphilis.” The U.S. Public Health Services created what they called “rapid treatment centers” to help men afflicted with syphilis — except the men in the Tuskegee study.

In 1966, a public health service investigator raised concerns about the study. Peter Buxtun wrote to the director of the U.S. division of venereal diseases about the ethics of the experiment. But the agency ignored Buxtun’s concerns.

Buxtun eventually leaked information about the study to an Associated Press reporter named Jean Heller, who years later called it “one of the grossest violations of human rights I can imagine.” On July 26, 1972, Heller’s story appeared on the front page of the New York Times, revealing that the men had deliberately been left untreated for 40 years.

The study was finally brought to a halt, and the following year, a congressional subcommittee held hearings on the Tuskegee experiment. In 1973, a class-action lawsuit was filed on behalf of the men in the study by Gray, the civil rights lawyer who had represented Rosa Parks.

A \$10 million out-of-court settlement was reached in the case. “The U.S. government promised to give lifetime medical benefits and burial services to all living participants,” the CDC reported. In 1974, Congress passed the National Research Act, which was aimed at preventing the exploitation of human subjects by researchers.

On May 16, 1997, President Bill Clinton issued an apology to the eight remaining survivors of the experiment:

“The United States government did something that was wrong — deeply, profoundly, morally wrong,” Clinton said. “It was an outrage to our commitment to integrity and equality for all our citizens. To the survivors, to the wives and family members, the children and the grandchildren, I say what you know: No power on Earth can give you back the lives lost, the pain suffered, the years of internal torment and anguish. What was done cannot be undone. But we can end the silence. We can stop turning our heads away. We can look at you in the eye and finally say on behalf of the American people, what the United States government did was shameful, and I am sorry.”

(https://www.washingtonpost.com/news/retropolis/wp/2017/05/16/youve-got-bad-blood-the-horror-of-the-tuskegee-syphilis-experiment/?utm_term=.1c2d37b7e0da)

#16: Willowbrook

Little was known about hepatitis in the 1950s, so when a school for disabled children in New York had a hepatitis epidemic, the New York School of Medicine led by Dr. Saul Krugman, decided to conduct studies involving the children. Much of what was done would be considered unethical today, but did the means justify the ends? Let's take a closer look at the experiments that were conducted, as well as the ethical issues.

Hepatitis is a term used to describe inflammation of the liver. There are different causes, many of which are viral. The Willowbrook experiments resulted in the discovery of two of the viral strains: hepatitis A and B. Hepatitis A is caused from ingesting food contaminated by feces or from close

contact with an infected person. Hepatitis B transmission is primarily through sexual contact or exposure to infected blood, such as from the sharing of needles.

Willowbrook School, located in Staten Island, housed children with mental disabilities. Hepatitis was a huge problem for students (and staff) at Willowbrook with 30-50% of student becoming infected (although this percentage has been contested). Because of the high rates of infection, Dr. Krugman decided to involve the children at Willowbrook in his studies.

Before the studies, it was thought that there were two types of viral hepatitis. There were some ideas on how each was transmitted; however, doctors were very limited on how to diagnose the disease.

The studies began in the 1950s and lasted for 15 years. Children aged 3 to 10 being housed at Willowbrook were the subjects of the study. Dr. Krugman noticed that students who were infected with hepatitis recovered, and then appeared to be immune to future outbreaks of the disease. He decided to take antibodies (from the blood of infected children) and use them to try to create immunity, or protection, from hepatitis.

Antibodies are produced by the body in response to an infection, and they are part of the immune system's response to rid the body of diseases, like hepatitis. Dr. Krugman deduced that injecting uninfected students with the antibodies would jumpstart their immune system, resulting in a milder case of hepatitis once they were exposed. In addition, the antibodies would protect the children from future outbreaks.

Dr. Krugman's research involved 700 students that were divided into two groups:

- Group 1: Involved students that were already housed at Willowbrook. Some of this group was given the protective antibodies and some were not.
- Group 2: Involved students that were new to Willowbrook. All of these students were given the protective antibodies. Some students in this group were intentionally infected with hepatitis (obtained from sick students) and some were not.

Since some of the symptoms varied, Dr. Krugman learned that there were two forms of hepatitis (A and B). The students who had the protective antibodies and were purposely infected with hepatitis had mild symptoms compared to students who acquired hepatitis naturally (and did not have the protective antibodies). This understanding paved the way for vaccinations for hepatitis A and B (that are used today).

(<http://study.com/academy/lesson/willowbrook-hepatitis-experiments-bioethics-case-study.html>)