Research ethics & academic ethics

This aspect of language research includes the following:

1. Proper and ethical treatment of subjects
2. Honest procedures in conducting and reporting experiments
3. Ethical practices in writing, including proper use of sources, and proper citation of sources

Proper treatment of people participating in experiments is a concern for researchers. At universities and other entities, any research involving human subjects must first be approved by an IRB committee. Thus, universities and other entities conducting such research must establish IRBs, and any researcher must submit experiment or study proposals first to an IRB for approval. Government agencies that fund research, and universities, try to make sure that all persons involved with conducting research – including graduate student researchers and even undergraduate lab workers – have had proper training in ethical principles and procedures for dealing with human subjects. These principles are summarized below. A lot of attention is paid to this, and issues of academic ethics, due to notorious cases of academic dishonesty that have happened, and notorious experiments in which subjects were mistreated.

Ethical treatment of subjects

Various ethical principles have been established by American and international entities, such as these.

Proper treatment of subjects

Safeguarding subjects’ rights & safety, e.g.,

- Right to informed consent
- Right to feel and be safe, physically and emotionally
- Right to privacy
- Right to withdraw from experiment
- Right to adequate compensation (pay or course credit)

Famous cases of abuse

- Stanford prison experiment (see Appendix)
- Milgram electroshock experiment (see Appendix)
- Iowa stuttering experiment (see Appendix)
- Secret radiation experiments by U.S Dept. of Energy
- War crimes - torture & fatal experiments by Japanese & German military in WWII
- cases of accidental deaths in medical studies
Results

Nürnberg Code (1947): ethical principles of human subjects research

- Voluntary, informed consent
- All potential physical and mental harm must be avoided or minimized
- Must always be humane; experiments causing harm cannot be justified
- Experiment have scientific merit & justifiable results
- Must be conducted by properly qualified researchers
- Subject has right to withdraw from experiment before its completion
- Researcher must terminate experiment if it will cause harm or distress

Other organizations and commissions have established relevant ethical principles and guidelines, which later became codified into laws or regulations.

- Declaration of Geneva, 1948 (World Medical Association, ethical goals of medicine)
- Declaration of Helsinki, 2003 (World Medical Association, regarding human medical experiments)
- 1974 National Research Act

The National Research Act and Belmont Reports are particularly important in the U.S., where they led to the establishment of Institutional Review Boards.

Some current difficulties:

1. Recently the IRB process at American universities has come under criticism for excessive bureaucracy and delays, which only hinder researchers (and don’t provide any more protection for subjects that’s needed).
2. Applicability to harmless social science research – even the most harmless studies such as observational studies can be delayed for weeks or more as the researcher awaits IRB approval.

Research ethics: Misrepresenting or fabricating experimental data or results

Ethical problems sometimes arise as researchers cheat or stretch the truth.

- Outright fabrication of data; even reporting experiments which were never conducted (sometimes referred to as “drylabbing”).
- "Fudging", "massaging", or outright manufacture of experimental data.
- Inappropriate and statistically invalid “culling” of experimental data, such as the intentional exclusion of data which contradict the researcher’s hypothesis.
- Intentional portrayal of interdependent events as independent.
- Ordering subordinates or research assistants to participate in any of the above.

[http://en.wikipedia.org/wiki/Fabrication_%28science%29]

Famous examples:

- Cyril Burt, a well-known mid-20th century researcher in education and psychology, who was exposed for fabricating some of his research data
• Hwang Woo-suk, the dog cloner from Seoul National University

• Jan Hendrik Schön, a Swiss physicist who was exposed several years ago for fabricating research and data. He earned a doctorate from Univ. Konstanz and worked at Bell Labs. In 2001 authored a published scientific paper on average of every 8 days. He claimed discoveries that were later found to be dubious; other researchers tried to replicate his findings and could not. It became apparent that he had fabricated data, and also committed “self-plagiarism” - copying the same research and publishing it in more than one journal. He was fired and stripped of Ph.D. At least 21 papers had to be retracted by scientific journals.

• See also: http://en.wikipedia.org/wiki/Scientific_misconduct

Consequences for such behavior include: dismissal; revocation of degrees; loss of tenure track jobs; and being academically “blacklisted” - no hope of getting an academic job again.

Other ethical issues

• mistreatment of students by professors
• proselitism (cf. “prosyletizing”) for religious or political causes, as well as for field-specific causes or controversial views in the field
• sabotage
• unprofessional behavior
• cheating
• plagiarism

Appendix: Famous cases of mistreatment of subjects

The first two are adapted from an article entitled “The top 20 most bizarre experiments of all time”.

1. Milgram electroshock experiment

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."

1 http://www.museumofhoaxes.com/hoax/top/experiments
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."

2. 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.

3. The Monster Study (Iowa stuttering experiment)²

The Monster Study is the name given to a stuttering experiment performed on 22 orphan children in Davenport, Iowa in 1939. It was conducted by Wendell Johnson at the University of Iowa. Johnson chose one of his graduate students, Mary Tudor, to conduct the experiment and he supervised her research. After placing the children in control and experimental groups, Tudor gave positive

² Adapted from http://en.wikipedia.org/wiki/The_Monster_Study. Johnson was a well known speech researcher at the time. His experiment was motivated by a common belief then that stuttering was caused by affective psychological factors like problems with confidence or esteem. Today stuttering is known to be primarily a neurological problem, though its causes are still poorly understood.
speech therapy to half of the children, praising the fluency of their speech, and negative speech therapy to the other half, belittling the children for every speech imperfection and telling them they were stutterers. Many of the normal speaking orphan children who received negative therapy in the experiment suffered negative psychological effects and some retained speech problems for the rest of their lives. Dubbed "The Monster Study" by some of Johnson's peers, who were horrified that he would experiment on orphan children to prove a hypothesis, the experiment was kept hidden for fear Johnson's reputation would be tarnished in the wake of human experiments conducted by the Nazis during World War II. The University of Iowa publicly apologized for the Monster Study in 2001. A university spokesman called the experiment "regrettable" and added: "This is a study that should never be considered defensible in any era...In no way would I ever think of defending this study. In no way. It's more than unfortunate." Before her death, Mary Tudor expressed deep regret about her role in the Monster Study and maintained that Wendell Johnson should have done more to reverse the negative effects on the orphan children's speech. In spite of Wendell Johnson's role in the creation of the Monster Study, Tudor still felt she had made many positive contributions to speech pathology and stuttering research.

On 17 August 2007, six of the orphan children were awarded $925,000 by the State of Iowa for life-long psychological and emotional scars caused by six months of torment during the Iowa University experiment. The study learned that although none of the children became stutterers, some became self-conscious and reluctant to speak.