Replicating Milgram

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Last month, we featured IRB best practices ("IRBs: Navigating the Maze" November 2007 Observer), and got the ball rolling with strategies and tips that psychological scientists have found to work. Here, we continue the dissemination effort with the second of three articles by researchers who share their experiences with getting their research through IRB hoops. Jerry Burger from Santa Clara University managed to do the seemingly impossible — he conducted a partial replication of the infamous Milgram experiment. Read on for valuable advice, and look for similar coverage in upcoming Observers.

"It can't be done."

These are the first words I said to Muriel Pearson, producer for ABC News' *Primetime*, when she approached me with the idea of replicating Stanley Milgram's famous obedience studies. Milgram's work was conducted in the early 1960s before the current system of professional guidelines and IRBs was in place. It is often held up as the prototypic example of why we need policies to protect the welfare of research participants. Milgram's participants were placed in an emotionally excruciating situation in which an experimenter instructed them to continue administering electric shocks to another individual despite hearing that person's agonizing screams of protest. The studies ignited a debate about the ethical treatment of participants. And the research became, as I often told my students, the study that can never be replicated.

Nonetheless, I was intrigued. Although more than four decades have passed since Milgram conducted his research, his obedience studies continue to occupy an important place in social psychology textbooks and classes. The haunting black-and-white images of ordinary citizens delivering what appear to be dangerous, if not deadly, electric shocks and the implications of the findings for atrocities like the Holocaust and Abu Ghraib are not easily dismissed. Yet because Milgram's procedures are clearly out-of-bounds by today's ethical standards, many questions about the research have gone unanswered. Chief among these is one that inevitably surfaces when I present Milgram's findings to students: Would people still act that way today?

The challenge was to develop a variation of Milgram's procedures that would allow useful comparisons with the original investigations while protecting the well-being of the participants. But meeting this challenge would raise another: I would also need to assuage the apprehension my IRB would naturally experience when presented with a proposal to replicate the study that can never be replicated.

I went to great lengths to recreate Milgram's procedures (Experiment Five), including such details as the words used in the memory test and the experimenter's lab coat. But I also made several substantial changes. First, we stopped the procedures at the 150-volt mark. This is the first time participants heard the learner's protests through the wall and his demands to be released. When we look at Milgram's data, we find that this point in the procedure is something of a "point of no return." Of the participants who continued past 150 volts, 79 percent went all the way to the highest level of the shock generator

(450 volts). Knowing how people respond up to this point allowed us to make a reasonable estimate of what they would do if allowed to continue to the end.

Stopping the study at this juncture also avoided exposing participants to the intense stress Milgram's participants often experienced in the subsequent parts of the procedure.

Second, we used a two-step screening process for potential participants to exclude any individuals who might have a negative reaction to the experience. Potential participants were asked in an initial phone interview if they had ever been diagnosed with a psychiatric disorder; if they were currently receiving psychotherapy; if they were currently taking any medications for emotional difficulties; if they had any medical conditions that might be affected by stress; if they ever had any problems with alcohol or drug use; and if they had ever experienced serious trauma, such as child abuse, domestic violence, or combat. Individuals who responded "yes" to any of these questions (about 30 percent) were excluded from the study. During the second step in the screening process, participants completed measures of anxiety and depression and were interviewed in person by a licensed clinical psychologist. The clinicians were shown the anxiety and depression data and were allowed to interview participants for as long as needed (about 30 minutes on average). The clinicians were instructed to err on the side of caution and to exclude anyone who they judged might have a negative reaction to the experiment procedures. More than 38 percent of the interviewed participants were excluded at this point.

Third, participants were told at least three times (twice in writing) that they could withdraw from the study at any time and still receive their \$50 for participation. Fourth, like Milgram, we administered a sample shock to our participants (with their consent). However, we administered a very mild 15-volt shock rather than the 45-volt shock Milgram gave his participants. Fifth, we allowed virtually no time to elapse between ending the session and informing participants that the learner had received no shocks. Within a few seconds after ending the study, the learner entered the room to reassure the participant he was fine. Sixth, the experimenter who ran the study also was a clinical psychologist who was instructed to end the session immediately if he saw any signs of excessive stress. Although each of these safeguards came with a methodological price (e.g., the potential effect of screening out certain individuals, the effect of emphasizing that participants could leave at any time), I wanted to take every reasonable measure to ensure that our participants were treated in a humane and ethical manner.

Of course, I also needed IRB approval. I knew from my own participation on the IRB that the proposal would be met with concern and perhaps a little fear by the board's members. I work at a relatively small university, and our IRB consists of individuals from a variety of academic backgrounds. I knew that few members would be comfortable or confident when assessing a potentially controversial proposal from another discipline. Given the possibility of a highly visible mistake, the easy response would have been to say "no." To address these concerns, I created a list of individuals who were experts on Milgram's studies and the ethical questions surrounding this research. I offered to make this list available to the IRB. More important, Steven Breckler, a social psychologist who currently serves as the executive director for science at the American Psychological Association, graciously provided an assessment of the proposal's ethical issues that I shared with the IRB.

In the end, all the extra steps and precautions paid off. The IRB carefully reviewed and then approved the procedures. More than a year after collecting the data, I have no indication that any participant was harmed by his or her participation in the study. On the contrary, I was constantly surprised by

participants' enthusiasm for the research both during the debriefing and in subsequent communications. We also produced some interesting findings. Among other things, we found that today people obey the experimenter in this situation at about the same rate they did 45 years ago. ABC devoted an entire 60-minute *Primetime* broadcast to the research and its implications. Finally, it is my hope that other investigators will use the 150-volt procedure and thereby jump-start research on some of the important questions that motivated Stanley Milgram nearly half a century ago. ?