Reality TV show recreates famed social study

David Adam, London

Final proof that scientists can work with the media, or an unfortunate clash of peer pressure and peer review? Television viewers in Britain can make up their own minds this week when a unique combination of science and reality TV gets its first screening.

Billed as both entertainment and serious research, the BBC programme *The Experiment* attempts to recreate aspects of a 1971 psychology study by Stanford University researcher Philip Zimbardo. In the original study, volunteers were asked to assume the role of either prisoner or prison guard, and were placed together in a simulated jail. Those acting as guards were so brutal to the prisoners that a shocked Zimbardo abandoned the experiment and said that it should never be repeated. It is now seen as an important demonstration of how social circumstances can make people conform to particular roles.

But whereas the Stanford guards bullied the prisoners and forced them to clean toilets with their bare hands, their British counterparts tried to befriend the prisoners and even agreed to reorganize the prison as a commune. An edited version of the 10-day trial, held last December at a London television studio, will be shown in four one-hour programmes beginning this week. "This has been a ground-breaking collaboration between academia and the media," says Alex Haslam, a psychologist at Exeter University who planned the experiment with Steve Reicher, a researcher at the University of St Andrews and joint editor of the *British Journal of Social Psychology.* "It is not a media creation on which psychologists were invited to comment. The guiding principle for us and the BBC was always the science."

Others warn, however, that it is difficult to compare the two studies directly, as behavioural trials are hard to replicate. The television cameras will also have had "an immediate constraint on what people do", says Donald Laming, a psychologist at the University of Cambridge. Zimbardo, still at Stanford University, could not be reached for comment.

For *The Experiment*, 15 male volunteers were recruited through newspaper adverts, and divided into 6 guards and 9 prisoners. The prisoners shared cramped cells and carried out chores, whereas the guards enjoyed better food and separate rooms and were given limited powers over their charges. As well as observing and recording the behaviour of the volunteers, Haslam and Reicher asked them to complete psychometric tests and analysed their saliva for the stress hormone cortisol.

It soon became clear that the guards were



Broadcasting behind bars: *The Experiment* aims to explore how people conform to set roles.

unable to organize themselves. "There was a lack of a common social identity, no leader-ship and they didn't even develop a simple shift pattern," says Reicher. The guards showed more psychological stress than the prisoners.

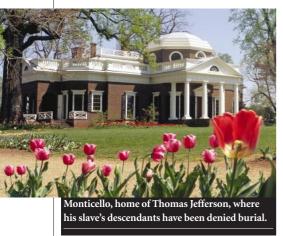
Haslam says that he welcomed the chance to challenge the Stanford results, and claims that the guards who behaved as tyrants in the original experiment did so only because they were encouraged to.

Jefferson's descendants continue to deny slave link

Erika Check, Washington

Thomas Jefferson's descendants have decided that the ancestors of one of his slaves cannot join their family club, despite DNA evidence published in *Nature* suggesting that he fathered at least one of her children.

The Monticello Association, a group of nearly 800 descendants of Jefferson's daughters, voted on 5 May to keep Sally Hemings's descendants out of their group. This means that Hemings's relatives cannot



be buried in the graveyard at Monticello, Jefferson's home in Charlottesville, Virginia.

Their vote is the latest twist in a racially charged controversy that has raged since Jefferson's own day, when it was noted that Sally Hemings's children bore a likeness to the third president. That and other evidence fuelled speculation that the author of the Declaration of Independence fathered six children by Hemings, who was a slave at Monticello. She only became pregnant during times when Jefferson stayed there.

Jefferson's descendants have always disputed this speculation. Jefferson's grand-children claimed that one of his maternal nephews, Samuel or Peter Carr, fathered Hemings's children. But genetic tests published in November 1998 (see *Nature* 396, 27–28; 1998) eliminated that possibility. The tests compared the Y chromosomes of men descended from Sally Hemings's son Eston with those from the Jefferson and Carr family lines. Eston's Y chromosome was found to be virtually identical to Jefferson's and dissimilar to the Carr chromosome.

The study caused an outcry because it was published in the midst of then-President Bill Clinton's impeachment process. Clinton's

supporters seized on it as proof that previous presidents — even the most celebrated ones — had also engaged in sexual indiscretion.

The findings prompted the Thomas Jefferson Foundation, which owns and operates Monticello, to investigate the Hemings connection. In January 2000, it concluded that the DNA study, combined with other evidence, indicated a "high probability that Thomas Jefferson fathered Eston Hemings, and that he most likely was the father of all six of Sally Hemings's children".

But Jefferson's descendants remain unswayed, and now say that Thomas's brother Randolph was probably Eston's father. "They have not provided conclusive evidence that Thomas Jefferson had a relationship with Sally Hemings," says Nathaniel Abeles, the Monticello Association's president.

The association's position cuts no ice with the academic community. "This decision is scientifically unsound, historically unsound and morally bankrupt," says Annette Gordon-Reed of the New York Law School. "The issue is pretty much settled and the fact that the family association chooses to tell a story about itself doesn't affect what scientists or historians think."