

## Supreme Court Nominee Alito: Statistics Misleading?

An [article](http://www.salon.com/politics/war_room/2005/10/31/jury/index.html) ([http://www.salon.com/politics/war\\_room/2005/10/31/jury/index.html](http://www.salon.com/politics/war_room/2005/10/31/jury/index.html)) in Salon.com for October 31 discusses the case [Riley v.](#)

[Taylor](http://caselaw.lp.findlaw.com/scripts/getcase.pl?court=3rd&navby=case&no=989009v3&exact=1) (<http://caselaw.lp.findlaw.com/scripts/getcase.pl?court=3rd&navby=case&no=989009v3&exact=1>).

The plaintiff Riley, convicted at trial of first-degree murder, was African-American; at the trial, the prosecution used its peremptory challenges to eliminate all three of the African-Americans on the jury panel. In the same county that year, there were three other first-degree murder trials, and in every one of those cases all of the African-American jurors were struck.

Riley appealed his conviction. A majority of the judges on the appeals court thought that there was evidence that jurors were struck for racial reasons. According to them, a simple calculation indicates that there should have been five African-American jurors amongst the forty-eight that were empanelled in the four cases. However, there were none. To these judges, this was clear evidence of racial motivation in the striking of such jurors.

Judge Alito dissented. He called the majority's analysis simplistic, and stated that although only 10% of the U.S. population is left-handed, five of the last six people elected president of the United States were left-handed. He asked rhetorically whether this indicated bias against right-handers amongst the U.S. electorate.

The majority responded that there is no provision in the Constitution that protects persons from discrimination based on whether they are right-handed or left-handed, and that to compare these cases with the handedness of presidents ignores the history of racial discrimination in the United States.

### Questions

- 1) Assuming that Judge Alito is correct about the proportion of left-handers in the U.S. population, what is the probability that five of the last six presidents elected would be left-handed?
- 2) Is Judge Alito's comparison biased by the fact that he chose just the last six presidents? Presumably he believed that the president just before this group was right-handed, otherwise he would have included him in the sample and said "six of the last seven presidents." What is the relevant statistic?
- 3) When the decision came down in 2001, the last six people elected president were George W. Bush, Clinton, George H. W. Bush, Reagan, Carter and Nixon. Of these, Clinton and George H. W. Bush were left-handed. Ford, who was left-handed, was not elected president (or even vice-president); he became president upon the resignation of Richard Nixon. Reagan may have been left-handed as a child, but he wrote right-handed so his case isn't clear; the [Reagan Presidential Library](http://www.reagan.utexas.edu/archives/reference/facts.html) (<http://www.reagan.utexas.edu/archives/reference/facts.html>) says that he was "generally right-handed." Judge Alito may have been confused, including on his list Ford (who was not elected) and George W. Bush (who is not left-handed, although his father is), as well as Reagan. The other left-handed presidents were Truman and Garfield. Hoover is found on some lists of left-handed presidents, but according to the [Hoover Institution](http://home.comcast.net/~sharonday7/Presidents/AP060306.htm) (<http://home.comcast.net/~sharonday7/Presidents/AP060306.htm>), he was not left-handed. How does this information affect Alito's argument?
- 4) Suppose that 5/48 of the jury pool were African-American. What is the probability that no juror amongst the 48 selected would have been African-American? How does this compare with the actual statistics of left-handed presidents? Does the same objection apply to this case as might apply to Alito's example?
- 5) What is your opinion? Is there clear statistical evidence of racial bias in the use of peremptory challenges in this county?
- 6) What does it say about our judiciary that Judge Alito could get his facts as wrong as he did, and that none of the judges in the majority caught the errors?